THE NATIONAL QUALITY FORUM

MEASURE SUBMISSION FORM VERSION 3.0
August 2008

The measure information you submit will be shared with NQF's Steering Committees and Technical Advisory Panels to evaluate measures against the NQF criteria of importance to measure and report, scientific acceptability of measure properties, usability, and feasibility. Four conditions (as indicated below) must be met before proposed measures may be considered and evaluated for suitability as voluntary consensus standards. Not all acceptable measures will be strong—or equally strong—among each set of criteria. The assessment of each criterion is a matter of degree; however, all measures must be judged to have met the first criterion, importance to measure and report, in order to be evaluated against the remaining criteria. References to the specific measure evaluation criteria are provided in parentheses following the item numbers. Please refer to the *Measure Evaluation Criteria* for more information at ***www.qualityforum.org*** under Core Documents. Additional guidance is being developed and when available will be posted on the NQF website.

Use the tab or arrow (↓→) keys to move the cursor to the next field (or back ←↑). There are three types of response fields:

- drop-down menus - select one response;
- check boxes – check as many as apply; and
- text fields – you can copy and paste text into these fields or enter text; these fields are not limited in size, but in most cases, we ask that you summarize the requested information.

Please note that URL hyperlinks do not work in the form; you will need to type them into your web browser.

Be sure to answer all questions. Fields that are left blank will be interpreted as no or none. Information must be provided in this form. Attachments are not allowed except when specifically requested or to provide additional detail or source documents for information that is summarized in this form. If you have important information that is not addressed by the questions, they can be entered into item #48 near the end of the form.

For questions about this form, please contact the NQF Project Director listed in the corresponding call for measures.

	CONDITIONS FOR CONSIDERATION BY NQF
	Four conditions must be met before proposed measures may be considered and evaluated for suitability as voluntary consensus standards.
A (A)	***Public domain or Intellectual Property Agreement signed:*** *IP Agreement signed and submitted (If no, do not submit)* *Template for the Intellectual Property Agreement is available at* ***www.qualityforum.org*** *under Core Documents.*
B (B)	***Measure steward/maintenance:*** *Is there an identified responsible entity and process to maintain and update the measure on a schedule commensurate with clinical innovation, but at least every 3 years?* *Yes, information provided in contact section (If no, do not submit)*
C (C)	***Intended use:*** *Does the intended use of the measure include BOTH public reporting AND quality improvement? Yes (If no, do not submit)*
D ***(D)***	***Fully developed and tested:*** *Is the measure fully developed AND tested? Yes, fully developed and tested (If not tested and no plans for testing within 24 months, do not submit)*

THE NATIONAL QUALITY FORUM

MEASURE SUBMISSION FORM VERSION 3.0
August 2008

	(for NQF staff use) ***NQF Review #:*** *EC-049-08* ***NQF Project:*** *National Voluntary Consensus Standards for Ambulatory Care Using Clinically Enriched Administrative Data*
	MEASURE SPECIFICATIONS & DESCRIPTIVE INFORMATION
1	***Information current as of*** *(date- MM/DD/YY):* *9/18/2009*
2	***Title of Measure:*** *Hydroxychloroquine annual eye exam*
3	**Brief description of measure [1]:** This measure identifies the percentage of patients with Rheumatoid Arthritis who received hydroxychloroquine during the measurement year and had a fundoscopic examination during the measurement year or in the year prior to the measurement year
4 (2a)	**Numerator Statement:** Patients in the denominator who have undergone a retinal eye exam or who have an E&M visit with an eye care professional during the measurement year **Time Window:** See below **Numerator Details** (Definitions, codes with description): - >=1 claim for ' Eye exam' or 'Eye exam_D' during the measurement year; - OR >=1 claim for 'Eye care E&M visit' during the measurement year from an ophthalmologist or optometrist. **Eye Exam (Procedure)** ==========

Type	Code	Description
CPT4	2019F	DILATED MACUL EXAM DONE
CPT4	2020F	DILATED FUNDUS EVAL DONE
CPT4	2022F	DIL RETINA EXAM INTERP REV
CPT4	2024F	7 FIELD PHOTO INTERP DOC REV
CPT4	2026F	EYE IMAGE VALID TO DX REV
CPT4	67028	INTRAVITREAL INJ PHARMACOLOGIC AGT
CPT4	67030	DISCISSION VITREOUS STRANDS
CPT4	67031	SEVERING VITREOUS STRANDS-LASER
CPT4	67036	VITRECTOMY MECH PARS PLANA APPRCH;
CPT4	67038	VITRECTOMY MECH; W/MEMBRANE STRIP
CPT4	67039	VITRECTOMY MECH; W/FOCAL ENDOLASER
CPT4	67040	VITRECTOMY MECH; W/PANRETINAL PHOTO
CPT4	67041	VIT FOR MACULAR PUCKER
CPT4	67042	VIT FOR MACULAR HOLE
CPT4	67043	VIT FOR MEMBRANE DISSECT
CPT4	67101	REPR RETINAL DETACH; CRYOTHERAPY
CPT4	67105	REPR RETINAL DETACH; PHOTOCOAGULAT
CPT4	67107	REPR RETINAL DETACH; SCLERAL BUCKL
CPT4	67108	REPR RETINAL DETACH; W/VITRECTOMY
CPT4	67110	REPR RET DETACH; INJ AIR/OTH GAS
CPT4	67112	REPR RETINAL DETACH; PREV RET REPR
CPT4	67113	REPAIR RETINAL DETACH, CPLX
CPT4	67115	RELEASE OF ENCIRCLING MATERIAL
CPT4	67121	REMV IMPLNT MATL POST SEGMT; IO
CPT4	67141	PROPHYLAXIS RETINAL DETACH; CRYOTX
CPT4	67145	PROPHYLAXIS RET DETACH; PHOTOCOAG
CPT4	67208	DESTRCT LES RETINA; CRYOTHERAPY
CPT4	67210	DESTRCT LES RETINA; PHOTOCOAGULAT
CPT4	67218	DESTRCT LES RETINA; RADIATION-IMPLT

[1] Example of measure description: Percentage of adult patients with diabetes aged 18-75 years receiving one or more A1c test(s) per year.

CPT4	67220	DESTRUC LES CHOROID; 1/>SESSION	
CPT4	67221	DESTRUC LES CHOROID; PHOTODYNAMC TX	
CPT4	67227	TREATMENT OF RETINAL LESION	
CPT4	67228	TREATMENT OF RETINAL LESION	
CPT4	92015	DETERMINATION OF REFRACTIVE STATE	
CPT4	92020	GONIOSCOPY	
CPT4	92025	CORNEAL TOPOGRAPHY	
CPT4	92060	SENSIMOTOR EX W/MSR OCULAR DEV-SP	
CPT4	92065	ORTHOPTIC&/PLEOPTIC TRAIN W/MED DIR	
CPT4	92070	FIT CNTC LENS TX DZ INCL SPL LENS	
CPT4	92081	VISL FIELD EXAM UNI/BIL W/I&R; LTD	
CPT4	92082	VISUAL FIELD EXAM W/I&R; INTERMED	
CPT4	92083	VISUAL FIELD EXAMINATION(S)	
CPT4	92100	SERIAL TONOMETRY-SEP PROC W/I&R	
CPT4	92120	TONOGRAPHY W/I&R-RECORD INDEN TONOM	
CPT4	92130	TONOGRAPHY WITH WATER PROVOCATION	
CPT4	92135	OPHTH DX IMAGING POST SEG	
CPT4	92136	OPHTH BIOMET PART COHERNC INTRFROMT	
CPT4	92140	PROVOC TESTS-GLAU W/I&R NO TONOGRPH	
CPT4	92225	OPHTH EXT W/RET DRAWING W/I&R; INIT	
CPT4	92226	OPHTH EXTEN W/RET DRAW W/I&R; SUBSQ	
CPT4	92230	FLUORESCEIN ANGIOSCOPY W/I&R	
CPT4	92235	FLUORESCEIN ANGIOGRAPHY W/I&R	
CPT4	92240	INDOCYANINE-GREEN ANGIOGRAPHY W/I&R	
CPT4	92250	FUNDUS PHOTOGRAPHY W/I&R	
CPT4	92260	OPHTHALMODYNAMOMETRY	
CPT4	92265	EYE MUSCLE EVALUATION	
CPT4	92270	ELECTRO-OCULOGRAPHY W/I&R	
CPT4	92275	ELECTRORETINOGRAPHY W/I&R	
CPT4	92283	COLOR VISION EXAM EXTEN	
CPT4	92284	DARK ADAPTATION EXAMINATION W/I&R	
CPT4	92285	EXT OCULAR PHOTO W/I&R DOC MED PROG	
CPT4	92286	SPEC ANT SEGMT PHOTO; W/MICRO/CNT	
CPT4	92287	SPECIAL ANT SEGMT PHOTO W/FLUOROESC	
CPT4	92310	PRSC & FIT CONTACT LENS;NOT APHAKIA	
CPT4	92311	CONTACT LENS FITTING	
CPT4	92312	PRSC CONTACT LENS; APHAKIA-BOTH	
CPT4	92313	PRSC CONTACT LENS; CORNEOSCLERAL	
CPT4	92314	PRSC W/FIT BY TECH; LENS-NOT APHAK	
CPT4	92315	PRESCRIPTION OF CONTACT LENS	
CPT4	92316	PRSC W/FIT BY TECH; APHAKIA-BOTH	
CPT4	92317	PRSC W/FIT BY TECH; CORNEOSCLERAL	
CPT4	92325	MOD CNTC LENS W/MED SUPERVIS ADPT	
CPT4	92326	REPLACEMENT OF CONTACT LENS	
CPT4	92330	PRSC FIT & SUPPLY OCULAR PROSTH	
CPT4	92335	PRSC OCULAR PROSTH & SUPPLY-TECH	
CPT4	92340	FIT SPECTACLES NO APHAKIA; MONOFOCL	
CPT4	92341	FIT SPECTACLES NO APHAKIA; BIFOCAL	
CPT4	92342	FIT SPECTACLE EX APHAKIA; MULTIFOCL	
CPT4	92352	FIT SPECTACL PROSTH-APHAK; MONOFOCL	
CPT4	92353	FIT SPECTACL PROSTH-APHAK; MULTIFOC	
CPT4	92354	FIT LO VISION AID; 1 ELEMENT SYS	
CPT4	92355	FIT LO VISION AID; TELESCOP/OTHER	
CPT4	92358	PROSTH SERVICE APHAKIA TEMPORARY	
CPT4	92370	REPAIR&REFIT SPECTACLES; NO APHAKIA	
CPT4	92371	REPR & REFIT; SPECTACL PROSTH-APHAK	
CPT4	92390	SUPPLY SPECT NO PROSTH-APHAK & AID	
CPT4	92391	SPL CNTC LENSES NO PROSTH APHAKIA	
CPT4	92392	SUPPLY OF LOW VISION AIDS	
CPT4	92393	SUPPLY OF OCULAR PROSTHESIS	
CPT4	92395	SPL PERM PROSTH APHAKIA; SPECTACLES	
CPT4	92396	SUPPLY PERM PROSTH APHAKIA; CONTACT	
CPT4	92499	UNLIST OPHTH SERVICE/PROC	
HCPCS	S0625	RET TELSCR DIGTL IMAG MX FUND AREAS	
ICD9P	1411	DIAGNOSTIC ASPIRATION OF VITREOUS	
ICD9P	1419	OTH RETINA-CHOROID-VIT-POST CHAMBR	

ICD9P	1421	DESTRUC CHORIORETINAL LES DIATHERMY
ICD9P	1422	DESTRUC CHORIORETINAL LES CRYOTHAPY
ICD9P	1423	DEST CHORIORETIN LES-XENON ARC
ICD9P	1424	DEST CHORIORETIN LES-LASER PHOTO
ICD9P	1425	DEST CHORIORETIN LES-PHOTOCOAG-UNS
ICD9P	1426	DESTRUC CHORIORETINAL LESION RAD TX
ICD9P	1427	DESTRUC CHORIORET LES IMPL RAD SRC
ICD9P	1429	OTH DESTRUC CHORIORETINAL LESION
ICD9P	1431	REPAIR OF RETINAL TEAR BY DIATHERMY
ICD9P	1432	REPAIR OF RETINAL TEAR CRYOTHERAPY
ICD9P	1433	REPR RET TEAR XENON ARC PHOTOCOAG
ICD9P	1434	REPAIR RETINAL TEAR LASER PHOTOCOAG
ICD9P	1435	REPR RET TEAR PHOTOCOAG UNSPEC TYPE
ICD9P	1439	OTHER REPAIR OF RETINAL TEAR
ICD9P	144	REPR RET DETACH-SCLER BUCKL&IMPLNT
ICD9P	1441	SCLERAL BUCKLING WITH IMPLANT
ICD9P	1449	OTHER SCLERAL BUCKLING
ICD9P	145	OTHER REPAIR OF RETINAL DETACHMENT
ICD9P	1451	REPAIR RET DETACH W/DIATHERMY
ICD9P	1452	REPAIR RET DETACH W/CRYOTHERAPY
ICD9P	1453	REPR RETINAL DETACH-XENON ARC
ICD9P	1454	REPAIR RET DETACH W/LASER PHOTOCOAG
ICD9P	1455	REP RET DETACH W/PHOTOCOAG UNS TYPE
ICD9P	1459	OTHER REPAIR OF RETINAL DETACHMENT
ICD9P	9502	COMPREHENSIVE EYE EXAMINATION
ICD9P	9503	EXTENDED OPHTHALMOLOGIC WORK-UP
ICD9P	9504	EYE EXAMINATION UNDER ANESTHESIA
ICD9P	9511	FUNDUS PHOTOGRAPHY
ICD9P	9512	FLUORESCEIN ANGIO/ANGIOSCOPY EYE
ICD9P	9516	P32 AND OTHER TRACER STUDIES OF EYE
ICD9P	9521	ELECTRORETINOGRAM

Eye exam_D (Diagnosis)

Type	Code	Description
ICD9	V720	examination of eyes and vision

Eye care E&M visit (Procedure)

Type	Code	Description
CPT4	92002	OPHTH SERV: EXAM-EVAL; INTERMED NEW
CPT4	92004	EYE EXAM, NEW PATIENT
CPT4	92012	OPHTH SERV: MED EXAM; INTERM ESTAB
CPT4	92014	EYE EXAM & TREATMENT
CPT4	92018	OPHTH EXAM & EVAL-GEN ANES; CMPL
CPT4	92019	OPHTH EXAM & EVAL-GEN ANES; LTD
CPT4	99201	OFFICE/OUTPATIENT VISIT, NEW
CPT4	99202	OFFICE/OUTPATIENT VISIT, NEW
CPT4	99203	OFFICE/OUTPATIENT VISIT, NEW
CPT4	99204	OFFICE/OUTPATIENT VISIT, NEW
CPT4	99205	OFFICE/OUTPATIENT VISIT, NEW
CPT4	99211	OFC/OUTPT E&M ESTAB 5 MIN
CPT4	99212	OFC/OUTPT E&M ESTAB MINOR 10 MIN
CPT4	99213	OFC/OUTPT E&M ESTAB LOW-MOD 15 MIN
CPT4	99214	OFC/OUTPT E&M ESTAB MOD-HI 25 MIN
CPT4	99215	OFC/OUTPT E&M ESTAB MOD-HI 40 MIN
CPT4	99217	OBSERVATION CARE D/C DAY MANAGEMENT
CPT4	99218	OBSERVATION CARE
CPT4	99219	INIT OBSRV CARE-DAY E&M MOD SEVRITY
CPT4	99220	INIT OBSRV CARE-DAY E&M HI SEVERITY
CPT4	99221	INITIAL HOSPITAL CARE
CPT4	99222	INIT HOSP-DAY E&M MOD SEVER 50 MIN
CPT4	99223	INIT HOSP-DAY E&M HI SEVRITY 70 MIN

CPT4	99231	SUBSQT HOSP-DAY E&M STABLE 15 MIN
CPT4	99232	SUBSQT HSP-DAY E&M MINR CMPL 25 MIN
CPT4	99233	SUBSQT HOSP-DAY E&M SIG CMPL 35 MIN
CPT4	99234	OBSRV/INPT HOSP CARE E&M LOW SEVER
CPT4	99235	OBSRV/INPT HOSP CARE E&M MOD SEVER
CPT4	99236	OBSRV/INPT HOSP CARE E&M HIGH SEVER
CPT4	99238	HOSPITAL D/C DAY MGMT; 30 MIN/LESS
CPT4	99239	HOSPITAL D/C DAY MGMT; > 30 MINUTES
CPT4	99241	OFFICE CNSLT NEW/ESTAB MINOR 15 MIN
CPT4	99242	OFC CNSLT NEW/EST LOW SEVER 30 MIN
CPT4	99243	OFFICE CNSLT NEW/ESTAB MOD 40 MIN
CPT4	99244	OFC CNSLT NEW/ESTAB MOD-HI 60 MIN
CPT4	99245	OFC CNSLT NEW/ESTAB MOD-HI 80 MIN
CPT4	99251	INPATIENT CONSULTATION
CPT4	99252	INPATIENT CONSULTATION
CPT4	99253	INPATIENT CONSULTATION
CPT4	99254	INPATIENT CONSULTATION
CPT4	99255	INPATIENT CONSULTATION
CPT4	99261	F/U INPT CNSLT EST STABLE 10 MIN
CPT4	99262	F/U INPT CNSLT EST MINR CMPL 20 MIN
CPT4	99263	F/U INPT CNSLT EST SIG CMPL 30 MIN
CPT4	99271	CONFIRM CNSLT NEW/ESTAB MINOR
CPT4	99272	CONFIRM CNSLT NEW/EST LOW SEVERITY
CPT4	99273	CONFIRM CNSLT NEW/EST MOD SEVERITY
CPT4	99274	CONFIRM CNSLT MED DECIS MOD CMPLX
CPT4	99275	CONFIRM CNSLT MED DECISION HI CMPLX
CPT4	99281	EMERG DEPT VISIT E&M LIMITED/MINOR
CPT4	99282	EMERG DEPT VISIT E&M LOW-MOD SEVER
CPT4	99283	EMERG DEPT VISIT E&M MODERATE SEVER
CPT4	99284	ER VISIT E&M HIGH SEVER URGENT EVAL
CPT4	99285	ER VISIT E&M HIGH-SEVER SIG THREAT
CPT4	99301	E&M ANNUAL NRS FACL ASSESS 30 MIN
CPT4	99302	E&M NRS FACL SIG CMPL 40 MIN
CPT4	99303	E&M NRS FACL ADMIT/READMIT 50 MIN
CPT4	99304	NURSING FACILITY CARE, INIT
CPT4	99305	NURSING FACILITY CARE, INIT
CPT4	99306	NURSING FACILITY CARE, INIT
CPT4	99307	NURSING FAC CARE, SUBSEQ
CPT4	99308	NURSING FAC CARE, SUBSEQ
CPT4	99309	NURSING FAC CARE, SUBSEQ
CPT4	99310	NURSING FAC CARE, SUBSEQ
CPT4	99311	SUBSQT NRS FACL DAY E&M STBL 15 MIN
CPT4	99312	SUBSQT NRS FACL DAY E&M MINR 25 MIN
CPT4	99313	SUBSQT NRS FACL DAY E&M SIG 35 MIN
CPT4	99315	NRS FACL D/C DAY MGMT; 30 MIN/LESS
CPT4	99316	NURSING FACL D/C DAY MGMT; > 30 MIN
CPT4	99318	ANNUAL NURSING FAC ASSESSMNT
CPT4	99321	DOMICILARY E&M NEW PT LOW SEVERITY
CPT4	99322	DOMICILARY E&M NEW PT MOD SEVERITY
CPT4	99323	DOMICILARY E&M NEW PT HI COMPLX
CPT4	99324	DOMICIL/R-HOME VISIT NEW PAT
CPT4	99325	DOMICIL/R-HOME VISIT NEW PAT
CPT4	99326	DOMICIL/R-HOME VISIT NEW PAT
CPT4	99327	DOMICIL/R-HOME VISIT NEW PAT
CPT4	99328	DOMICIL/R-HOME VISIT NEW PAT
CPT4	99331	DOMICILARY E&M EST PT STABLE/RECOVR
CPT4	99332	DOMICILARY E&M EST PT MINOR CMPL
CPT4	99333	DOMICILARY E&M EST PT SIG CMPL
CPT4	99334	DOMICIL/R-HOME VISIT EST PAT
CPT4	99335	DOMICIL/R-HOME VISIT EST PAT
CPT4	99336	DOMICIL/R-HOME VISIT EST PAT
CPT4	99337	DOMICIL/R-HOME VISIT EST PAT
CPT4	99339	DOMICIL/R-HOME CARE SUPERVIS
CPT4	99340	DOMICIL/R-HOME CARE SUPERVIS
CPT4	99341	HOME VISIT E&M NEW PT LO SEV-20 MIN
CPT4	99342	HOME VISIT E&M NEW PT MOD SEV-30 MN

	CPT4 99343 HOME VISIT E&M NEW PT MOD-HI-45 MIN CPT4 99344 HOME VISIT E&M NEW PT HI SEV-60 MIN CPT4 99345 HOME VISIT, NEW PATIENT CPT4 99347 HOME VISIT E&M ESTAB MINOR-15 MIN CPT4 99348 HOME VISIT E&M ESTAB LOW-MOD 25 MIN CPT4 99349 HOME VISIT E&M ESTAB MOD-HI 40 MIN CPT4 99350 HOME VISIT E&M ESTAB MOD-HI 60 MIN CPT4 99385 PREV VISIT, NEW, AGE 18-39 CPT4 99386 PREV VISIT, NEW, AGE 40-64 CPT4 99387 INIT PM E/M, NEW PAT 65+ YRS CPT4 99395 PREV VISIT, EST, AGE 18-39 CPT4 99396 PREV VISIT, EST, AGE 40-64 CPT4 99397 PER PM REEVAL EST PAT 65+ YR HCPCS S0620 ROUTINE OPHTH EX W/REFRAC; NEW PT HCPCS S0621 ROUTINE OPHTH EX W/REFRAC; EST PT HCPCS S3000 DIAB IND; RET EYE EX DILAT BIL
5 (2a)	**Denominator Statement:** Patients with a diagnosis of rheumatoid arthritis who are at high risk for hydroxychloroquine ocular complications and were prescribed at least a 292-day supply of hydroxychloroquine during the measurement year, excluding those with a prior history of blindness **Time Window:** See below **Denominator Details** (Definitions, codes with description): - Age >=18 years old - AND meets criteria for Rheumatoid Arthritis defined by {>=2 outpatient claims for 'RA' in claims history - OR >=1 inpatient claims for 'RA' in claims history - OR >=1 emergency room claims for 'RA' in claims history} - AND meets one of the following 4 high-risk criteria: {- >= 1 claim for 'Retinal eye disease' in the year prior to the measurement year or earlier - OR >= 1 claim for 'Chronic Kidney Disease' in the year prior to the measurement year or earlier - OR >= 1 claim for 'Chronic Liver Disease' in the year prior to the measurement year or earlier - OR Age >=61} - AND has continuous use of 'Hydroxychloroquine' for at least 292 of the last 365 days (>=80%) - AND has service eligibility during the measurement year **Chronic Liver Disease (Diagnosis)** ========== Type Code Description --- ICD9 07022 VIRL HEP B W/COMA CHRN W/O HEP DLTA ICD9 07023 VIRL HEP B W/COMA CHRN W/HEP DLTA ICD9 07032 VIRL HEP B W/O COMA CHRN W/O DLTA ICD9 07033 VIRL HEP B W/O COMA CHRN W/DLTA ICD9 07044 CHRONIC HEPATITIS C W/HEPATIC COMA ICD9 07054 CHRONIC HEP C W/O MENTION HEP COMA ICD9 571 CHRONIC LIVER DISEASE AND CIRRHOSIS ICD9 5710 ALCOHOLIC FATTY LIVER ICD9 5712 ALCOHOLIC CIRRHOSIS OF LIVER ICD9 5713 UNSPECIFIED ALCOHOLIC LIVER DAMAGE ICD9 5714 CHRONIC HEPATITIS ICD9 57140 UNSPECIFIED CHRONIC HEPATITIS ICD9 57141 CHRONIC PERSISTENT HEPATITIS ICD9 57149 OTHER CHRONIC HEPATITIS ICD9 5715 CIRRHOSIS LIVER W/O MENTION ALCOHOL ICD9 5716 BILIARY CIRRHOSIS ICD9 5718 OTH CHRON NONALCOHLIC LIVR DISEASE ICD9 5719 UNS CHRN LIVR DZ W/O MENTION ALCOHL ICD9 5722 HEPATIC COMA

ICD9	5723	PORTAL HYPERTENSION
ICD9	5724	HEPATORENAL SYNDROME
ICD9	5728	OTH SEQUELAE CHRONIC LIVER DISEASE

Chronic Kidney Disease (Diagnosis)

==========

Type	Code	Description
ICD9	2494	SECONDARY DM W/RENAL MANIFESTATIONS
ICD9	24940	SEC DM W/RENAL MANIFEST NOT UNCNTRL
ICD9	24941	SEC DM W/RENAL MANIFEST UNCONTROL
ICD9	2504	DIABETES WITH RENAL MANIFESTATIONS
ICD9	25040	DB W/RENAL TYPE II/UNS NOT UNCNTRL
ICD9	25041	DB W/RENAL TYPE I [JUV] NOT UNCNTRL
ICD9	25042	DB W/RENAL TYPE II/UNS UNCNTRL
ICD9	25043	DB W/RENAL TYPE I [JUV] UNCNTRL
ICD9	403	HYPERTENSIVE CHRONIC KIDNEY DISEASE
ICD9	4030	HYPERTENSIVE CHRNIC KIDNEY DZ MALIG
ICD9	40300	HTN CHR KID DZ MAL KID DZ I-IV/UNS
ICD9	40301	HTN CHR KID DZ MAL KID DZ ST V/ESRD
ICD9	4031	HTN CHRONIC KIDNEY DISEASE BENIGN
ICD9	40310	HTN CKD BEN CKD STAGE I THRU IV/UNS
ICD9	40311	HTN CKD BEN W/CKD STAGE V/ESRD
ICD9	4039	HTN CHRONIC KIDNEY DISEASE UNS
ICD9	40390	HTN CKD UNS CKD STAGE I THRU IV/UNS
ICD9	40391	HTN CKD UNSPEC W/CKD STAGE V/ESRD
ICD9	404	HTN HEART & CHRONIC KIDNEY DISEASE
ICD9	4040	HYPERTENSIVE HEART & CKD MALIGNANT
ICD9	40400	HTN H & CKD MAL W/CKD ST I-IV/UNS
ICD9	40401	HTN H & CKD MAL HF&CKD ST 1-IV/UNS
ICD9	40402	HTN H&CKD MAL W/O HF&CKD ST V/ESRD
ICD9	40403	HTN HRT & CKD MAL HF&CKD ST V/ESRD
ICD9	4041	HTN HEART&CHRNIC KIDNEY DISEASE BEN
ICD9	40410	HTN H & CKD BEN W/CKD ST I-IV/UNS
ICD9	40411	HTN H & CKD BEN HF&CKD ST I-IV/UNS
ICD9	40412	HTN H & CKD BEN W/CKD ST V/ESRD
ICD9	40413	HTN H & CKD BEN HF & CKD ST V/ESRD
ICD9	4049	HTN HRT&CHRNIC KIDNEY DZ UNSPEC
ICD9	40490	HTN H & CKD UNS W/CDK ST I-IV/UNS
ICD9	40491	HTN H & CKD UNS HF&CKD ST I-IV/UNS
ICD9	40492	HTN H & CKD UNS W/CKD STAGE V/ESRD
ICD9	40493	HTN H & CKD UNS HF & CKD ST V/ESRD
ICD9	585	CHRONIC KIDNEY DISEASE
ICD9	5851	CHRONIC KIDNEY DISEASE STAGE I
ICD9	5852	CHRONIC KIDNEY DZ STAGE II (MILD)
ICD9	5853	CHRONIC KIDNEY DZ STAGE III (MOD)
ICD9	5854	CHRONIC KIDNEY DZ STAGE IV (SEVERE)
ICD9	5855	CHRONIC KIDNEY DISEASE STAGE V
ICD9	5856	END STAGE RENAL DISEASE

hydroxychloroquine (Medispan Drug)

==========

Type	GPI Code	Description
GPI	13000020100305	Hydroxychloroquine Sulfate Tab 200 MG

RA (Diagnosis)

==========

Type	Code	Description

ICD9	7140	RHEUMATOID ARTHRITIS
ICD9	7141	FELTYS SYNDROME
ICD9	7142	OTH RA W/VISCERAL/SYSTEMIC INVLV
ICD9	71481	RHEUMATOID LUNG

Retinal eye disease (Diagnosis)

Type	Code	Description
ICD9	09151	ERLY SYPH SYPHLIT CHORIORETINITIS
ICD9	09483	SYPHLIT DISSEMIN RETINOCHOROIDITIS
ICD9	11502	HISTOPLASMA CAPSULATUM RETINITIS
ICD9	11512	HISTOPLASMA DUBOISII RETINITIS
ICD9	11592	UNSPEC HISTOPLASMOSIS RETINITIS
ICD9	1302	CHORIORETINITIS DUE TOXOPLASMOSIS
ICD9	36002	PANOPHTHALMITIS
ICD9	36100	RET DETACH W/RETINAL DEFECT UNSPEC
ICD9	36101	RECENT RET DETACH PART W/1 DEFEC
ICD9	36102	RECENT RET DETACH PART W/MX DEFEC
ICD9	36103	RECENT RET DETACH PART W/GIANT TEAR
ICD9	36104	RECNT RET DTACH PRTL W/RETINL DIALY
ICD9	36105	RECENT RET DETACH TOTAL/SUBTOTAL
ICD9	36106	OLD RETINAL DETACHMENT, PARTIAL
ICD9	36107	OLD RET DETACH TOTAL/SUBTOTAL
ICD9	36110	UNSPECIFIED RETINOSCHISIS
ICD9	36111	FLAT RETINOSCHISIS
ICD9	36112	BULLOUS RETINOSCHISIS
ICD9	36113	PRIMARY RETINAL CYSTS
ICD9	36114	SECONDARY RETINAL CYSTS
ICD9	36119	OTHER RETINOSCHISIS&RETINAL CYSTS
ICD9	3612	SEROUS RETINAL DETACHMENT
ICD9	36130	UNSPECIFIED RETINAL DEFECT
ICD9	36131	ROUND HOLE RETINA W/O DETACHMENT
ICD9	36132	HORSESHOE TEAR RETINA W/O DETACHMNT
ICD9	36133	MX DEFEC RETINA WITHOUT DETACHMENT
ICD9	36181	TRACTION DETACHMENT OF RETINA
ICD9	36189	OTHER FORMS OF RETINAL DETACHMENT
ICD9	3619	UNSPECIFIED RETINAL DETACHMENT
ICD9	36201	BACKGROUND DIABETIC RETINOPATHY
ICD9	36202	PROLIFERATIVE DIABETIC RETINOPATHY
ICD9	36203	NONPROLIF DIABETIC RETINOPATHY NOS
ICD9	36204	MILD NONPROLIF DIABETIC RETINOPATHY
ICD9	36205	MOD NONPROLIF DIABETIC RETINOPATHY
ICD9	36206	SEV NONPROLIF DIABETIC RETINOPATHY
ICD9	36207	DIABETIC MACULAR EDEMA
ICD9	36210	UNSPECIFIED BACKGROUND RETINOPATHY
ICD9	36211	HYPERTENSIVE RETINOPATHY
ICD9	36212	EXUDATIVE RETINOPATHY
ICD9	36213	CHANGES VASCULAR APPEARANCE RETINA
ICD9	36214	RETINAL MICROANEURYSMS NOS
ICD9	36215	RETINAL TELANGIECTASIA
ICD9	36216	RETINAL NEOVASCULARIZATION NOS
ICD9	36217	OTH INTRARETINAL MICVASC ABNORM
ICD9	36218	RETINAL VASCULITIS
ICD9	36221	RETROLENTAL FIBROPLASIA
ICD9	36229	OTH NONDIAB PROLIFERAT RETINOPATHY
ICD9	36230	UNSPEC RETINAL VASCULAR OCCLUSION
ICD9	36231	CENTRAL ARTERY OCCLUSION OF RETINA
ICD9	36232	ARTERIAL BRANCH OCCLUSION OF RETINA
ICD9	36233	PARTIAL ARTERIAL OCCLUSION RETINA
ICD9	36234	TRANSIENT ARTERIAL OCCLUSION RETINA
ICD9	36235	CENTRAL VEIN OCCLUSION OF RETINA
ICD9	36236	VENOUS TRIBUTARY OCCLUSION RETINA
ICD9	36237	VENOUS ENGORGEMENT OF RETINA
ICD9	36240	UNSPEC RETINAL LAYER SEPARATION
ICD9	36241	CENTRAL SEROUS RETINOPATHY

	ICD9 36242 SEROUS DETACHMNT RET PIG EPITHEL ICD9 36243 HEMORR DETACH RETINL PIGMNT EPITHEL ICD9 36250 MACULAR DEGENERATION RETINA UNSPEC ICD9 36251 NONXUDATV SENIL MACULR DEGENRAT RET ICD9 36252 XUDATV SENL MACULR DEGENRAT-RET ICD9 36253 CYSTOID MACULAR DEGENERATION RETINA ICD9 36254 MACULAR CYST HOLE/PSEUDOHOLE RETINA ICD9 36255 TOXIC MACULOPATHY OF RETINA ICD9 36256 MACULAR PUCKERING OF RETINA ICD9 36257 DRUSEN OF RETINA ICD9 36260 UNSPEC PERIPHERAL RETINAL DEGEN ICD9 36261 PAVING STONE DEGEN PERIPH RETINA ICD9 36262 MICROCYSTOID DEGEN PERIPH RETINA ICD9 36263 LATTICE DEGEN PERIPHERAL RETINA ICD9 36264 SENILE RETICULR DEGEN PERIPH RETINA ICD9 36265 SEC PIGMENTARY DEGEN PERIPH RETINA ICD9 36266 SEC VITREORET DEGENS PERIPH RETINA ICD9 36270 UNSPEC HEREDITARY RETINAL DYSTROPHY ICD9 36271 RETINAL DYSTROPHY-LIPIDOSES ICD9 36272 RETINAL DYSTROPHY OTH SYS D/O&SYNDS ICD9 36273 VITREORETINAL DYSTROPHIES ICD9 36274 PIGMENTARY RETINAL DYSTROPHY ICD9 36275 OTH DYSTROPH PRIM INVOLV SENSRY RET ICD9 36276 DYSTROPH PRIM-RETNL PIGMNT EPITHL ICD9 36277 RETNL DYSTROPH PRIM-BRUCHS MEMB ICD9 36281 RETINAL HEMORRHAGE ICD9 36282 RETINAL EXUDATES AND DEPOSITS ICD9 36283 RETINAL EDEMA ICD9 36284 RETINAL ISCHEMIA ICD9 36285 RETINAL NERVE FIBER BUNDLE DEFECTS ICD9 36289 OTHER RETINAL DISORDERS ICD9 3629 UNSPECIFIED RETINAL DISORDER ICD9 36300 UNSPECIFIED FOCAL CHORIORETINITIS ICD9 36301 FOCAL CHOROIDITIS JUXTAPAPILLARY ICD9 36303 FOCAL CHOROIDITIS OTHER POST POLE ICD9 36304 FOCL CHOROIDIT&CHORIORETINIT PERIPH ICD9 36305 FOCAL RETINITIS JUXTAPAPILLARY ICD9 36306 FOCAL RETINITIS MACULAR/PARAMACULAR ICD9 36307 FOCAL RETINITIS OTHER POST POLE ICD9 36308 FOCAL RETINIT&RETINOCHOROID PERIPH ICD9 36310 UNSPEC DISSEMINATED CHORIORETINITIS ICD9 36311 DISSEMIN CHOROIDITIS POSTERIOR POLE ICD9 36312 DISSEMIN CHOROIDITIS PERIPHERAL ICD9 36313 DISSEMIN CHOROIDITIS GENERALIZED ICD9 36314 DISSEMIN RETINITIS METASTATIC ICD9 36315 DISSEMIN RETINITIS PIG EPITHLIPATH ICD9 36320 UNSPECIFIED CHORIORETINITIS ICD9 36321 PARS PLANITIS ICD9 36322 HARADAS DISEASE ICD9 36330 UNSPECIFIED CHORIORETINAL SCAR ICD9 36331 SOLAR RETINOPATHY ICD9 36332 OTHER MACULAR SCARS OF CHORIORETINA ICD9 36333 OTH SCARS POST POLE CHORIORETINA ICD9 36334 PERIPHERAL SCARS THE CHORIORETINA ICD9 36335 DISSEMINATED SCARS THE CHORIORETINA ICD9 7712 OTH CONGN INF SPECIFIC PERINTL PRD	
6 (2a, 2d)	**Denominator Exclusions:** Blindness **Denominator Exclusion Details** (Definitions, codes with description): Exclude members with - >= 1 claim for 'blindness' in claims history **Blindness (Diagnosis)** ==========	

	Type Code Description ICD9 36902 BETR EYE: NEAR-TOT; LESR EYE: NFS ICD9 36903 BETR EYE: NEAR-TOT; LESR EYE: TOT ICD9 36906 BETR EYE: PFND IMPR; LESR EYE: TOT ICD9 36905 BETR EYE: PFNDIMPAIR; LESR EYE: NFS ICD9 36908 BETR EYE: PROFND ; LESR EYE: PFND ICD9 36907 BETR EYE: PROFND; LESR EYE: NR-TOT ICD9 36912 BETR EYE: SEV IMPAIR; LESR EYE: TOT ICD9 36921 BETR EYE: SEV IMPAIR; LESR EYE; NFS ICD9 36914 BETR EYE: SEV IMPR; LESR EYE: PFND ICD9 36911 BETR EYE: SEV; LESR EYE: BLIND NFS ICD9 36922 BETR EYE: SEV; LESR EYE: SEV IMPAIR ICD9 36913 BETR EYE: SEVERE; LESR EYE: NR-TOT ICD9 36901 BETR EYE: TOT IMPAIR; LESR EYE: TOT ICD9 36904 BETR EYE:NEAR-TOT; LESR EYE: NR-TOT ICD9 36900 BLINDNESS BOTH EYES IMPAIR LEVL NFS ICD9 3694 LEGAL BLINDNESS, AS DEFINED IN USA
7 (2a, 2h)	**Stratification** Do the measure specifications require the results to be stratified? No ► If "other" describe: **Identification of stratification variable(s):** **Stratification Details** (Definitions, codes with description):
8 (2a, 2e)	**Risk Adjustment** Does the measure require risk adjustment to account for differences in patient severity before the onset of care? No ► **If yes,** (select one) ► Is there a separate proprietary owner of the risk model? No **Identify Risk Adjustment Variables:** **Detailed risk model:** attached ☐ **OR** Web page URL:
9 (2a)	**Type of Score:** Rate/proportion **Calculation Algorithm:** attached ☒ **OR** Web page URL: **Interpretation of Score** (*Classifies interpretation of score according to whether better quality is associated with a higher score, a lower score, a score falling within a defined interval, or a passing score*) Better quality = Higher score ► If "Other", please describe:
10 (2a. 4a, 4b)	**Identify the required data elements**(e.g., primary diagnosis, lab values, vital signs)**:** Diagnosis, Procedure, Pharmacy claims **Data dictionary/code table** attached ☐ see numerator and denominator detail **OR** Web page URL: **Data Quality** (2a) *Check all that apply* ☐ Data are captured from an authoritative/accurate source (e.g., lab values from laboratory personnel) ☒ Data are coded using recognized data standards ☐ Method of capturing data electronically fits the workflow of the authoritative source ☐ Data are available in EHRs ☒ Data are auditable
11 (2a, 4b)	**Data Source and Data Collection Methods** *Identifies the data source(s) necessary to implement the measure specifications. Check all that apply* ☐ Electronic Health/Medical Record ☐ Electronic Clinical Database, Name: ☐ Electronic Clinical Registry, Name: ☒ Electronic Claims ☒ Electronic Pharmacy data ☐ Electronic Lab data ☐ Electronic source – other, Describe: ☐ Paper Medical Record ☐ Standardized clinical instrument, Name: ☐ Standardized patient survey, Name: ☐ Standardized clinician survey, Name: ☒ Other, Describe: It is reasonable to allow physicians to submit definitive evidence that a particular service was provided to a patient. For example, a lab result from a testing facility would indicate that that lab test was performed. A notation in a patient chart that the test was ordered, in

	contrast, would not provide definitive evidence that the test was performed. Instrument/survey attached ☐ **OR** Web page URL:
12 (2a)	**Sampling** *If measure is based on a sample, provide instructions and guidance on sample size.* **Minimum sample size:** 10 **Instructions:** We have developed a hierarchical logistic regression model with expert biostatisticians at the Johns Hopkins School of Public Health that enables one to produce a probability distribution around a point estimate of the "quality score" for a given physician. This model has shown that there is no minimum sample size that is required to produce a quality score which has a comparatively "tight" probability distribution. Rather, the number of required observations depends on how a given physician performs on particular measures compared to how all other MDs perform on those measures. We recommend that a minimum of 10 observations be required, however, because of the normality assumptions that underlies the model and for public "face validity". Alternatively, to satisfy current NCQA standards, a minimum of 30 observations could be required.
13 (2a)	**Type of Measure:** Process ► If "Other", please describe: ► If part of a composite or paired with another measure, please identify composite or paired measure
14 (2a)	**Unit of Measurement/Analysis** (*Who or what is being measured*) *Check all that apply.* ☐ Can be measured at all levels ☒ Individual clinician (e.g., physician, nurse) ☒ Group of clinicians (e.g., facility department/unit, group practice) ☐ Facility (e.g., hospital, nursing home) ☒ Integrated delivery system ☒ Health plan ☒ Community/Population ☐ Other (*Please describe*):
15 (2a)	**Applicable Care Settings** *Check all that apply* ☐ Can be used in all healthcare settings ☒ Ambulatory Care (office/clinic) ☐ Behavioral Healthcare ☒ Community Healthcare ☐ Dialysis Facility ☐ Emergency Department ☐ EMS emergency medical services ☒ Health Plan ☐ Home Health ☐ Hospice ☐ Hospital ☐ Long term acute care hospital ☐ Nursing home/ Skilled Nursing Facility (SNF) ☐ Prescription Drug Plan ☐ Rehabilitation Facility ☐ Substance Use Treatment Program/Center ☐ Other (*Please describe*):
	IMPORTANCE TO MEASURE AND REPORT
	Note: This is a threshold criterion. If a measure is not judged to be sufficiently important to measure and report, it will not be evaluated against the remaining criteria.
16 (1a)	**Addresses a Specific National Priority Partners Goal** *Enter the numbers of the specific goals related to this measure (see list of goals on last page)*: 5.4,6.1
17 (1a)	**If not related to NPP goal, identify high impact aspect of healthcare** (select one) **Summary of Evidence:** **Citations[2] for Evidence:**
18	**Opportunity for Improvement** *Provide evidence that demonstrates considerable variation, or overall poor performance, across providers.*

[2] Citations can include, but are not limited to journal articles, reports, web pages (URLs).

(1b)

Summary of Evidence: Current use produced results that varied as follows:

Num	Denom	Measure
3	3	100.0%
14	14	100.0%
15	16	93.8%
27	36	75.0%
47	56	83.9%
47	57	82.5%

Citations for Evidence: RHI Client experience

19

(1b)

Disparities *Provide evidence that demonstrates disparity in care/outcomes related to the measure focus among populations.*

Summary of Evidence: Not applicable

Citations for evidence:

20

(1c)

If measuring an Outcome Describe relevance to the national health goal/priority, condition, population, and/or care being addressed:

If not measuring an outcome, provide evidence supporting this measure topic and grade the strength of the evidence

Summarize the evidence (including citations to source) supporting the focus of the measure as follows:

- Intermediate outcome – evidence that the measured intermediate outcome (e.g., blood pressure, Hba1c) leads to improved health/avoidance of harm or cost/benefit.
- Process – evidence that the measured clinical or administrative process leads to improved health/avoidance of harm and
  if the measure focus is on one step in a multi-step care process, it measures the step that has the greatest effect on improving the specified desired outcome(s).
- Structure – evidence that the measured structure supports the consistent delivery of effective processes or access that lead to improved health/avoidance of harm or cost/benefit.
- Patient experience – evidence that an association exists between the measure of patient experience of health care and the outcomes, values and preferences of individuals/ the public.
- Access – evidence that an association exists between access to a health service and the outcomes of, or experience with, care.
- Efficiency– demonstration of an association between the measured resource use and level of performance with respect to one or more of the other five IOM aims of quality.

Type of Evidence *Check all that apply*

☐ Evidence-based guideline
☐ Meta-analysis
☐ Systematic synthesis of research
☐ Quantitative research studies
☐ Qualitative research studies
☒ Other (*Please describe*): Consensus guideline

Overall Grade for Strength of the Evidence[3] (*Use the USPSTF system, or if different, also describe how it relates to the USPSTF system)*:

Summary of Evidence (*provide guideline information below*)**:**

[3]The strength of the body of evidence for the specific measure focus should be systematically assessed and rated, e.g., USPSTF grading system **www.ahrq.gov/clinic/uspstmeth.htm**: **A -** The USPSTF recommends the service. There is high certainty that the net benefit is substantial. **B -** The USPSTF recommends the service. There is high certainty that the net benefit is moderate or there is moderate certainty that the net benefit is moderate to substantial. **C -** The USPSTF recommends against routinely providing the service. There may be considerations that support providing the service in an individual patient. There is at least moderate certainty that the net benefit is small. Offer or provide this service only if other considerations support the offering or providing the service in an individual patient. **D -** The USPSTF recommends against the service. There is moderate or high certainty that the service has no net benefit or that the harms outweigh the benefits. **I -** The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of the service. Evidence is lacking, of poor quality, or conflicting, and the balance of benefits and harms cannot be determined.

	Citations for Evidence: See question #21 below
21 (1c)	**Clinical Practice Guideline** *Cite the guideline reference; quote the specific guideline recommendation related to the measure and the guideline author's assessment of the strength of the evidence; and summarize the rationale for using this guideline over others.* **Guideline Citation:** Saag KG, Teng GG, Patkar NM, et al. American College of Rheumatology Subcommittee on Rheumatoid Arthritis Guidelines. American College of Rheumatology 2008 recommeendations for the use of nonbiologic an biologic disease-modifying antirheumatic drugs in rheumatiod athritis: Arthritis Rheum. 2008; 59(6):762-84. Marmor MF, Carr RE, Easterbrook M. Recommendations on Screening for Chloroquine and Hydroxychloroquine Retinopathy. American Academy of Ophthalmology, Information Statement 905, San Francisco, 2002, 7 pp. **Specific guideline recommendation:** From Saag et al., "If the patient is in the low-risk category (e.g. no liver disease, no concomitant retinal disease, and age <60 years) and these examination results are normal, the American Academy of Ophthalmology recommendation is that no further special ophthalmologic testing is needed for the next 5 years. For patients in the higher-risk category, an annual eye examination is recommended by the American Academy of Ophthalmology." From Marmor et al., " Annual screening is recommended for everyone in the higher risk category, whether that status is achieved by daily dosage, length of usage, or medical status." Table 1 lists under "Higher Risk" "Renal/liverd disease present, Concomitan retinal disease present, Age >60 years" **Guideline author's rating of strength of evidence** (*If different from USPSTF, also describe it and how it relates to USPSTF)*: Neither ACR nor AAO provided an evidence rating. It seems to be a consensus guideline and would therefore correspond to a USPSTF certainty of net benefit rating of low. **Rationale for using this guideline over others:** There is agreement between the main specialty societies involved - ACR and AAO.
22 (1c)	**Controversy/Contradictory Evidence** *Summarize any areas of controversy, contradictory evidence, or contradictory guidelines and provide citations.* **Summary:** **Citations:**
23 (1)	**Briefly describe how this measure (as specified) will facilitate significant gains in healthcare quality related to the specific priority goals and quality problems identified above:** By identifying specific patients in whom care is not consistent with the clinical practice guideline underlying the measure, the measure will facilitate improvement in the care for those patients by highlighting the patient-specific QI opportunity for the patient's physician(s). In addition, the feedback physicians will receive on their overall performance on this measure will help focus their attention on the underlying care issue and improve their performance on that issue across all of their patients. If performance measurement is combined with some sort of financial incentive, such as in a pay for performance program, the QI impact may be increased.
	SCIENTIFIC ACCEPTABILITY OF MEASURE PROPERTIES
	Note: Testing and results should be summarized in this form. However, additional detail and reports may be submitted as supplemental information or provided as a web page URL. If a measure has not been tested, it is only potentially eligible for time-limited endorsement.
24	**Supplemental Testing Information:** attached ☐ **OR** Web page URL:
25 (2b)	**Reliability Testing** **Data/sample:** We have tested this measure on several patient populations, including, in total, more than 30 million people enrolled in 18 different health plans. In addition, we have used analogous computer

	algorithms to identify patient-specific QI opportunities in more than 5 million health plan members and have sent messages regarding those opportunities to either the member or the member's physician or both. **Analytic Method:** The validity of a physician quality score describes how accurately it estimates the true value. Reliability is the stability or consistency of an estimator from one data set to the next. Both are important in assessing the performance of the quality score. We have used the following measure as an indication of the reliability of each of our measures: 1 minus [(the variance of the posterior distribution of the physician quality score) divided by (the variance of the true physician quality score)], which is the reduction in the variance of a doctor's performance score (posterior distribution) obtained by using his or her performance data, expressed as a fraction of the total variance before any data is collected. **Testing Results:** The reliability of a physician quality score depends on the number of observations available for a given physician, how the physician performs relative to all other physician, and the overall variance in physician quality scores. As a result, reliability varies with the population of MDs in whom the measure is used. In our experience, reliability is in the range of 0.5 to >0.7.
26 (2c)	**Validity Testing** **Data/sample:** We have tested this measure on several patient populations, including, in total, more than 30 million people enrolled in 18 different health plans. In addition, we have used analogous computer algorithms to identify patient-specific QI opportunities in more than 5 million health plan members and have sent messages regarding those opportunities to either the member or the member's physician or both. **Analytic Method:** We have employed several approaches to ensure the validity of this measure: 1) we've ensured that the technical specifications for this measure are valid reflections of the underlying clinical practice guideline; 2) we have obtained feedback on the validity of the measure from several physician panels that were assembled by either Care Focused Purchasing or the Massachusetts Group Insurance Commission Clinical Performance Improvement Initiative, or both, and 3) we have systematically collected feedback from physicians and health plan members to whom we have sent messages regarding this measure. **Testing Results:** This measure is considered to be valid by the physician panels that have reviewed it. (More information regarding the panels is provided elsewhere in this document.) In addition, the measure has been considered to be valid by the medical directors of 17 different health plans. In addition, the fact that thousands of physicians have received results based on this measure without indicating that they don't believe the measure is valid attests to its validity.
27 (2d)	**Measure Exclusions** *Provide evidence to justify exclusion(s) and analysis of impact on measure results during testing.* **Summary of Evidence supporting exclusion(s):** Retinal exam screening to prevent blindness in an individual who is already blind has limited benefit. **Citations for Evidence:** **Data/sample:** **Analytic Method:** **Testing Results:**
28 (2e)	**Risk Adjustment Testing** *Summarize the testing used to determine the need (or no need) for risk adjustment and the statistical performance of the risk adjustment method.* **Data/sample:** **Analytic Method:**

	Testing Results: ►►**If outcome or resource use measure not risk adjusted, provide rationale:** There is no need to risk adjust results from this measure. To the extent that the measure applies only to patients in a particular risk category, that has been taken into account in the specifications for the denominator or exclusions for this measure.
29 (2g)	**Testing comparability of results when more than 1 data method is specified** (*e.g., administrative claims or chart abstraction*) **Data/sample:** **Analytic Method:** **Results:**
30 (2f)	**Provide Measure Results from Testing or Current Use** Results from current use **Data/sample:** **Group Insurance Commission (GIC):** In 2003, the Massachusetts Group Insurance Commission GIC launched the Clinical Performance Improvement initiative, requiring health plans under contract with the GIC to incorporate provider "tiering"—differential payments based on value—into their GIC product. For this initiative, RHI evaluates physician performance on a set of quality measures using administrative claims data from approximately 2.2 million health plan members. **Methods to identify statistically significant and practically/meaningfully differences in performance:** We have developed a hierarchical logistic regression model with expert biostatisticians at the Johns Hopkins School of Public Health that enables one to produce a probability distribution around a point estimate of the "quality score" for a given physician. This model has shown that there is no minimum sample size that is required to produce a quality score which has a comparatively "tight" probability distribution. Rather, the number of required observations depends on how a given physician performs on particular measures compared to how all other MDs perform on those measures. We recommend that a minimum of 10 observations be required, however, because of the normality assumption that underlies the model and for public "face validity". We have employed this statistical approach in the MD quality profiling we performed on the experience of more than 2 million members of 6 health plans participating in the Massachusetts Group Insurance Commission Clinical Performance Improvement Initiative in 2008. **Results:** Numerator 153 Denominator 182 Measure 84.07%
31 (2h)	**Identification of Disparities** ►If measure is stratified by factors related to disparities (i.e. race/ethnicity, primary language, gender, SES, health literacy), **provide stratified results:** ►If disparities have been reported/identified, but measure is not specified to detect disparities, provide rationale:
	USABILITY
32 (3)	***Current Use*** *In use* ***If in use, how widely used*** *Nationally* ► *If "other," please describe:* ☒ *Used in a public reporting initiative, name of initiative: Group Insurance Commission of Massachusetts, Clinical Performance Improvement Initiative* *Sample report attached* ☐ ***OR*** *Web page URL:*
33 (3a)	**Testing of Interpretability** (*Testing that demonstrates the results are understood by the potential users for public reporting and quality improvement*) **Data/sample:**

	Methods: **Results:**
34 (3b, 3c)	**Relation to other NQF-endorsed™ measures** ►Is this measure similar or related to measure(s) already endorsed by NQF (on the same topic or the same target population)? *Measures can be found at **www.qualityforum.org** under Core Documents.* *Check all that apply* ☐ Have not looked at other NQF measures ☒ Other measure(s) on same topic ☐ Other measure(s) for same target population ☐ No similar or related measures **Name of similar or related NQF-endorsed™ measure(s):** **Are the measure specifications harmonized with existing NQF-endorsed™ measures?** Partially harmonized ►If not fully harmonized, provide rationale: **Describe the distinctive, improved, or additive value this measure provides to existing NQF-endorsed measures:** This measure can be used exclusively with enriched administrative data
	FEASIBILITY
35 (4a)	***How are the required data elements generated?*** *Check all that apply* ☐ *Data elements are generated concurrent with and as a byproduct of care processes during care delivery (e.g., blood pressure or other assessment recorded by personnel conducting the assessment)* ☐ *Data elements are generated from a patient survey (e.g., CAHPS)* ☒ *Data elements are generated through coding performed by someone other than the person who obtained the original information (e.g., DRG or ICD-9 coding on claims)* ☐ *Other, Please describe:*
36 (4b)	***Electronic Sources*** *All data elements* ►***If all data elements are not in electronic sources, specify the near-term path to electronic collection by most providers:*** ►***Specify the data elements for the electronic health record:***
37 (4c)	***Do the specified exclusions require additional data sources beyond what is required for the other specifications?*** *No* ►***If yes, provide justification:***
38 (4d)	***Identify susceptibility to inaccuracies, errors, or unintended consequences of the measure:*** *As with any type of clinical performance measure, and with any source of data used to operationalize the measure, there will be some instances in which the data used to compute the measure are incomplete or inaccurate. We try to minimize the impact of such errors or omissions through the way we have constructed the technical specifications for the measure. There is no data source for performance measurement that is completely accurate. Two studies have shown that physician performance tends to be better when assessed using claims data compared to via chart abstraction.* ***Describe how could these potential problems be audited:*** *Potential data errors of omission or commission could be audited through chart abstraction, or feedback from physicians and patients. However, as mentioned above, each of these alternative sources of information also are susceptible to error and thus are not true gold standards.* ***Did you audit for these potential problems during testing?*** *Yes* ***If yes, provide results:*** *Through feedback from physicians whose performance has been evaluated*
39	***Testing feasibility*** *Describe what have you learned/modified as a result of testing and/or operational use of the measure regarding data collection, availability of data/missing data, timing/frequency of data*

(4e)	*collection, patient confidentiality, time/cost of data collection, other feasibility/ implementation issues:*
	CONTACT INFORMATION
40	***Web Page URL for Measure Information*** *Describe where users (implementers) should go for more details on specifications of measures, or assistance in implementing the measure.* ***Web page URL:*** *www.resolutionhealth.com*
41	**Measure Intellectual Property Agreement Owner Point of Contact** **First Name:** Alan **MI:** **Last Name:** Lefkowitz **Credentials (MD, MPH, etc.):** **Organization:** Resolution Health **Street Address:** 10490 Little Patuxent Parkway **City:** Columbia **State:** MD **ZIP:** 21044 **Email:** alefkowitz@resolutionhealth.com **Telephone:** 240-295-5834 ext:
42	**Measure Submission Point of Contact** **If different than IP Owner Contact** **First Name:** Darren **MI:** M **Last Name:** Schulte **Credentials (MD, MPH, etc.):** MD, MPP **Organization:** Resolution Health **Street Address:** 10490 Little Patuxent Parkway **City:** Columbia **State:** MD **ZIP:** 21044 **Email:** dschulte@resolutionhealth.com **Telephone:** 650-773-3308 ext:
43	**Measure Developer Point of Contact** **If different than IP Owner Contact** **First Name:** Darren **MI:** M **Last Name:** Schulte **Credentials (MD, MPH, etc.):** MD, MPP **Organization:** Resolution Health **Street Address:** 10490 Little Patuxent Parkway **City:** Columbia **State:** MD **ZIP:** 21044 **Email:** dschulte@resolutionhealth.com **Telephone:** 650-773-3308 ext:
44	**Measure Steward Point of Contact** **If different than IP Owner Contact** *Identifies the organization that will take responsibility for updating the measure and assuring it is consistent with the scientific evidence and current coding schema; the steward of the measure may be different than the developer.* **First Name:** Darren **MI:** M **Last Name:** Schulte **Credentials (MD, MPH, etc.):** MD, MPP **Organization:** Resolution Health **Street Address:** 10490 Little Patuxent Parkway **City:** Columbia **State:** MD **ZIP:** 21044 **Email:** dschulte@resolutionhealth.com **Telephone:** 650-773-3308 ext:
	ADDITIONAL INFORMATION
45	**Workgroup/Expert Panel involved in measure development** Workgroup/panel used ►If workgroup used, describe the members' role in measure development: Over the past several years, two formal workgroups -- one organized by the Care Focused Purchasing initiative and one organized by the Massachusetts Group Insurance Commission Clinical Performance Improvement Initiative -- and several ad hoc experts have provided useful input to our measure development and refinement processes. In each case, we have provided the Work Group Members with details regarding each of our performance measures and members of the work group (not always all members) have provided feedback on the validity of the clinical practice guideline underlying the measure and suggestions regarding potential ways to improve the technical specifications for the measure. In some instances, we have eliminated measures based on feedback from the work groups. In other instances, work group members have proposed new measures. We try to get feedback from work group members and selected clinical experts on an annual basis. ►Provide a list of workgroup/panel members' names and organizations: **Care Focused Purchasing Clinical Advisory Panel** Bobbie Berg -BCBS -IL Dow Briggs - BCBS- AL Joe Calderella - Cigna Carl Cameron - Preferred Care Steven Goldberg – Humana Tom James – Humana

	Don Liss – Aetna Catherine MacLean – WellPoint Zak Ramadan-Jradi – Regence Fred Volkman – Avidyn Health Constance Hwang – Resolution Health Darren Schulte - Resolution Health Earl Steinberg – Resolution Health **Massachusetts Group Insurance Commission Physician Advisory Panel** Jim Glauber – Neighborhood Health Plan Lyn Laurenco - Neighborhood Health Plan Anton Dodek - Tufts Barbara Chase - Fallon Jonathan Scott Coblyn – Brigham and Women's Hospital Tom Ebert - Health New England Elaine Wilson - Harvard Pilgrim Health Care Jennifer St. Thomas – Tufts Jennifer Lavigne – Fallon Michael O'Shea - Baycare Health Neil Minkoff - Harvard Pilgrim Health Care Paul Mendis- Neighborhood Health Plan Bob Jordan - Neighborhood Health Plan Bob Sorrenti – Unicare Constance Williams – Unicare Laura Syron - Neighborhood Health Plan Susan Tiffany – Unicare Constance Hwang – Resolution Health Darren Schulte - Resolution Health Earl Steinberg – Resolution Health David Gregg – Mercer Russ Robinson - Mercer
46	***Measure Developer/Steward Updates and Ongoing Maintenance*** *Year the measure was first released: 2007* *Month and Year of most recent revision: October 2008* *What is the frequency for review/update of this measure? Annual Review* *When is the next scheduled review/update for this measure? Summer 2009*
47	**Copyright statement/disclaimers:** Copyright © 2008 – Resolution Health, Inc. All rights reserved. The material submitted is confidential and proprietary. No use of this material is permitted other than in accordance with the Agreement with Measure Stewards between National Quality Forum and Resolution Health, Inc.
48	**Additional Information:** None
49	**I have checked that the submission is complete and any blank fields indicate that no information is provided.** ☒
50	**Date of Submission** (*MM/DD/YY*)**:** 11/20/2008

PATIENT & FAMILY ENGAGEMENT

PRIORITY STATEMENT: Engage Patients and Their Families in Managing Their Health and Making Decisions About Their Care

1.1. All providers will routinely solicit and publicly report on their patients' perspectives of care

1.2. All providers will work collaboratively with their patients to assist them in making informed decisions about treatment options consistent with their values and preferences

POPULATION HEALTH

PRIORITY STATEMENT: IMPROVE THE HEALTH OF THE U.S. POPULATION

2.1. The population will be up to date on all high-priority age- and gender-appropriate evidence-based clinical preventive services

2.2. The population will receive recommended evidence-based interventions to improve targeted healthy lifestyle behaviors

2.3. All communities will demonstrate a 10% improvement in their community index of health

2.4. Americans will have all recommended high priority healthy lifestyle behaviors under control

SAFETY

PRIORITY STATEMENT: IMPROVE THE SAFETY OF THE U.S. HEALTH CARE SYSTEM

3.1. All providers will drive all preventable healthcare-associated infections (HAI) to zero

3.2. All providers will drive the incidence of preventable NQF Serious Reportable Events (SRE) to zero

3.3. All hospitals will reduce preventable and premature mortality rates to best-in-class

3.4. All hospitals and their community partners will reduce 30-day mortality rates following hospitalization for select conditions to best-in-class

PALLIATIVE CARE

PRIORITY STATEMENT: GUARANTEE APPROPRIATE AND COMPASSIONATE CARE FOR PATIENTS WITH LIFE-LIMITING ILLNESSES

4.1. All providers will identify, document, and effectively treat physical symptoms (e.g. pain, shortness of breath, constipation, others) at levels acceptable to patients with a life-limiting illness

4.2. All providers will effectively address the psychosocial and spiritual needs of patients with life-limiting illnesses and their families according to their preferences

4.3. All eligible patients will receive high quality palliative care and hospice services

CARE COORDINATION

PRIORITY STATEMENT: ENSURE PATIENTS RECEIVE WELL-COORDINATED CARE ACROSS ALL PROVIDERS, SETTINGS, AND LEVELS OF CARE

5.1. All providers will accurately and completely reconcile medications across the continuum of care (i.e. admission, transfer within and between care providers, discharge, and outpatient appointments) and ensure communication with the next provider of services

5.2. All inpatient and outpatient providers will assess the patient's perspective of the coordination of their care using a validated care coordination survey tool

5.3. All providers will reduce 30-day all-cause readmission rates resulting from poorly coordinated care to best-in-class

5.4. All providers will reduce preventable emergency department (i.e. those that could be avoided with timely access to primary care) visits resulting from poorly coordinated care by 50%

PATIENT-FOCUSED CARE

PRIORITY STATEMENT: GUARANTEE HIGH VALUE CARE ACROSS ACUTE AND CHRONIC EPISODES

6.1. All patients will receive high-value care over the course of their acute or chronic illness

OVERUSE

PRIORITY STATEMENT: ELIMINATE WASTE WHILE ENSURING THE DELIVERY OF APPROPRIATE CARE

7.1. Reduce wasteful and inappropriate care for the top ten targeted areas by 50%

THE NATIONAL QUALITY FORUM

MEASURE SUBMISSION FORM VERSION 3.0
August 2008

The measure information you submit will be shared with NQF's Steering Committees and Technical Advisory Panels to evaluate measures against the NQF criteria of importance to measure and report, scientific acceptability of measure properties, usability, and feasibility. Four conditions (as indicated below) must be met before proposed measures may be considered and evaluated for suitability as voluntary consensus standards. Not all acceptable measures will be strong—or equally strong—among each set of criteria. The assessment of each criterion is a matter of degree; however, all measures must be judged to have met the first criterion, importance to measure and report, in order to be evaluated against the remaining criteria. References to the specific measure evaluation criteria are provided in parentheses following the item numbers. Please refer to the *Measure Evaluation Criteria* for more information at ***www.qualityforum.org*** under Core Documents. Additional guidance is being developed and when available will be posted on the NQF website.

Use the tab or arrow (↓→) keys to move the cursor to the next field (or back ←↑). There are three types of response fields:

- drop-down menus - select one response;
- check boxes – check as many as apply; and
- text fields – you can copy and paste text into these fields or enter text; these fields are not limited in size, but in most cases, we ask that you summarize the requested information.

Please note that URL hyperlinks do not work in the form; you will need to type them into your web browser.

Be sure to answer all questions. Fields that are left blank will be interpreted as no or none. Information must be provided in this form. Attachments are not allowed except when specifically requested or to provide additional detail or source documents for information that is summarized in this form. If you have important information that is not addressed by the questions, they can be entered into item #48 near the end of the form.

For questions about this form, please contact the NQF Project Director listed in the corresponding call for measures.

	CONDITIONS FOR CONSIDERATION BY NQF
	Four conditions must be met before proposed measures may be considered and evaluated for suitability as voluntary consensus standards.
A (A)	**Public domain or Intellectual Property Agreement signed:** IP Agreement signed and submitted (If no, do not submit) *Template for the Intellectual Property Agreement is available at* **www.qualityforum.org** *under Core Documents.*
B (B)	**Measure steward/maintenance:** Is there an identified responsible entity and process to maintain and update the measure on a schedule commensurate with clinical innovation, but at least every 3 years? Yes, information provided in contact section (If no, do not submit)
C (C)	**Intended use:** Does the intended use of the measure include BOTH public reporting AND quality improvement? Yes (If no, do not submit)
D (D)	**Fully developed and tested:** Is the measure fully developed AND tested? Yes, fully developed and tested (If not tested and no plans for testing within 24 months, do not submit)

THE NATIONAL QUALITY FORUM

MEASURE SUBMISSION FORM VERSION 3.0
August 2008

	(for NQF staff use) **NQF Review #:** EC-056-08 **NQF Project:** National Voluntary Consensus Standards for Ambulatory Care Using Clinically Enriched Administrative Data
	MEASURE SPECIFICATIONS & DESCRIPTIVE INFORMATION
1	**Information current as of** *(date- MM/DD/YY)*: 10/31/2008
2	**Title of Measure:** Rheumatoid Arthritis New DMARD Baseline Serum Creatinine
3	**Brief description of measure** [1]**:** This measure identifies adult patients with a diagnosis of rheumatoid arthritis who received appropriate baseline serum creatinine testing within 90 days before to 14 days after the new start of methotrexate, leflunomide, azathioprine, D-Penicillamine, intramuscular gold, cyclosporine, or cyclophosphamide during the measurement year.
4 (2a)	**Numerator Statement:** Patients in the denominator who received serum creatinine testing within 90 days before to 14 days after the new start of methotrexate, leflunomide, azathioprine, D-Penicillamine, intramuscular gold, cyclosporine, or cyclophosphamide during the measurement year. **Time Window:** **Numerator Details** (Definitions, codes with description): >=1 claim for 'serum creatinine' occurring within 90 days before to 14 days after new start of methotrexate, leflunomide, azathioprine, D-Penicillamine, intramuscular gold, cyclosporine, or cyclophosphamide during the measurement year. **serum creatinine (Procedure)** ========== Type Code Description ---------- ---------- ---------- CPT4 80048 BASIC METABOLIC PANEL CPT4 80053 COMPREHENSIVE METABOLIC PANEL CPT4 82565 CREATININE; BLOOD CPT4 82575 CREATININE; CLEARANCE CPT4 80050 GENERAL HEALTH PANEL CPT4 80047 METABOLIC PANEL IONIZED CA CPT4 80048 METABOLIC PANEL TOTAL CA CPT4 80069 RENAL FUNCTION PANEL CPT4 84520 UREA NITROGEN; QUANTITATIVE CPT4 84525 UREA NITROGEN; SEMIQUANTITATIVE
5 (2a)	**Denominator Statement:** Patients >=18 years old with a history of rheumatoid arthritis and a new start of methotrexate, leflunomide, azathioprine, D-Penicillamine, intramuscular gold, cyclosporine, or cyclophosphamide anytime from the beginning of the measurement year to 14 days prior to the end of the measurement year. (This list of DMARDs will hereafter be refered to as 'DMARD needing baseline SCr') **Time Window:** **Denominator Details** (Definitions, codes with description): - Age >=18 years as of the end of the measurement year - AND meets criteria for rheumatoid arthritis based on RHI's Rheumatoid Arthritis criteria, which requires: >=2 office visits with a diagnosis code for 'rheumatoid arthritis' or >=1 inpatient or emergency room claim for 'rheumatoid arthritis' anytime in the past

[1] Example of measure description: Percentage of adult patients with diabetes aged 18-75 years receiving one or more A1c test(s) per year.

- AND >=1 Rx claim for ‘DMARD needing baseline SCr’ prescribed anytime from the start of the measurement year to 14 days prior to the end of the measurement year
- AND has Rx eligbility for the entire year prior to the earliest observed 'DMARD needing baseline SCr'
- AND no Rx claims for ‘DMARD needing baseline SCr’ in the 365 days prior to the earliest ‘DMARD needing baseline SCr’ prescription identified during the measurement year
- AND eligible for medical benefits for 90 days before to 14 days after the initial ‘DMARD needing baseline SCr’ Rx claim
- AND no claims for inpatient hospitalization during the 90 days prior to 14 days after the initial ‘DMARD needing baseline SCr’ Rx claim

Rheumatoid Arthritis (Diagnosis)

Type	Code	Description
ICD9	7141	FELTYS SYNDROME
ICD9	7142	OTH RA W/VISCERAL/SYSTEMIC INVLV
ICD9	7140	RHEUMATOID ARTHRITIS
ICD9	71481	RHEUMATOID LUNG

oral methothrexate (Medispan Drug)

Type	GPI Code	Description
GPI	21300050100340	Methotrexate Sodium Tab 10 MG (Base Equiv)
GPI	21300050100350	Methotrexate Sodium Tab 15 MG (Base Equiv)
GPI	66250050100320	Methotrexate Sodium Tab 2.5 MG (Antirheumatic)
GPI	21300050100310	Methotrexate Sodium Tab 2.5 MG (Base Equiv)
GPI	21300050100320	Methotrexate Sodium Tab 5 MG (Base Equiv)
GPI	21300050100330	Methotrexate Sodium Tab 7.5 MG (Base Equiv)

Leflunomide_Rx (Medispan Drug)

Type	GPI Code	Description
GPI	66280050000310	Leflunomide Tab 10 MG
GPI	66280050000320	Leflunomide Tab 20 MG

Azathioprine (Medispan Drug)

Type	GPI Code	Description
GPI	99406010002900	Azathioprine Powder
GPI	99406010102110	Azathioprine Sodium For Inj 100 MG
GPI	99406010000325	Azathioprine Tab 100 MG
GPI	99406010000305	Azathioprine Tab 50 MG
GPI	99406010000315	Azathioprine Tab 75 MG

Penicillamine (Medispan Drug)

Type	GPI Code	Description
GPI	99200030000105	Penicillamine Cap 125 MG
GPI	99200030000110	Penicillamine Cap 250 MG
GPI	99200030002900	Penicillamine Powder
GPI	99200030000305	Penicillamine Tab 250 MG

Gold_IM (Medispan Drug)

Type	GPI Code	Description
GPI	66200020002005	Aurothioglucose Inj 50 MG/ML
GPI	66200030002015	Gold Sodium Thiomalate Inj 50 MG/ML

	Cyclophosphamide_Oral (Medispan Drug) ========== Type GPI Code Description ----- ---------- ---------- GPI 21101020000305 Cyclophosphamide Tab 25 MG GPI 21101020000310 Cyclophosphamide Tab 50 MG **Cyclosporine Analogs (Medispan Drug)** ========== Type GPI Code Description ----- ---------- ---------- GPI 99402020000140 Cyclosporine Cap 100 MG GPI 99402020000110 Cyclosporine Cap 25 MG GPI 99402020002005 Cyclosporine IV Soln 50 MG/ML GPI 99402020300150 Cyclosporine Modified Cap 100 MG GPI 99402020300120 Cyclosporine Modified Cap 25 MG GPI 99402020300130 Cyclosporine Modified Cap 50 MG GPI 99402020302020 Cyclosporine Modified Oral Soln 100 MG/ML GPI 99402020002010 Cyclosporine Oral Soln 100 MG/ML
6 (2a, 2d)	**Denominator Exclusions:** The measure excludes patients who have had an inpatient hospitalization during the measurement year because UB04 claims do not document individual lab tests ordered during an inpatient stay. **Denominator Exclusion Details** (Definitions, codes with description): Patient cannot have claims for inpatient hospitalization during the measurement year
7 (2a, 2h)	**Stratification** Do the measure specifications require the results to be stratified? No ► If "other" describe: **Identification of stratification variable(s):** **Stratification Details** (Definitions, codes with description):
8 (2a, 2e)	**Risk Adjustment** Does the measure require risk adjustment to account for differences in patient severity before the onset of care? No ► **If yes,** (select one) ► Is there a separate proprietary owner of the risk model? (select one) **Identify Risk Adjustment Variables:** **Detailed risk model:** attached ☐ **OR** Web page URL:
9 (2a)	**Type of Score:** Rate/proportion **Calculation Algorithm:** attached ☐ **OR** Web page URL: **Interpretation of Score** (*Classifies interpretation of score according to whether better quality is associated with a higher score, a lower score, a score falling within a defined interval, or a passing score*) Better quality = Higher score ► If "Other", please describe:
10 (2a. 4a, 4b)	**Identify the required data elements**(e.g., primary diagnosis, lab values, vital signs)**:** pharmacy claims diagnosis, procedure **Data dictionary/code table** attached ☒ **OR** Web page URL: **Data Quality** (2a) *Check all that apply* ☐ Data are captured from an authoritative/accurate source (e.g., lab values from laboratory personnel) ☒ Data are coded using recognized data standards ☐ Method of capturing data electronically fits the workflow of the authoritative source ☐ Data are available in EHRs ☒ Data are auditable
11	**Data Source and Data Collection Methods** *Identifies the data source(s) necessary to implement the*

	measure specifications. Check all that apply
(2a, 4b)	☐ Electronic Health/Medical Record ☐ Electronic Clinical Database, Name: ☐ Electronic Clinical Registry, Name: ☒ Electronic Claims ☒ Electronic Pharmacy data ☐ Electronic Lab data ☐ Electronic source – other, Describe: ☐ Paper Medical Record ☐ Standardized clinical instrument, Name: ☐ Standardized patient survey, Name: ☐ Standardized clinician survey, Name: ☐ Other, Describe: It is reasonable to allow physicians to submit definitive evidence that a particular service was provided to a patient. For example, a lab result from a testing facility would indicate that that lab test was performed. A notation in a patient chart that the test was ordered, in contrast, would not provide definitive evidence that the test was performed. Instrument/survey attached ☐ **OR** Web page URL:
12 (2a)	**Sampling** *If measure is based on a sample, provide instructions and guidance on sample size.* **Minimum sample size:** 10 **Instructions:** We have developed a hierarchical logistic regression model with expert biostatisticians at the Johns Hopkins School of Public Health that enables one to produce a probability distribution around a point estimate of the "quality score" for a given physician. This model has shown that there is no minimum sample size that is required to produce a quality score which has a comparatively "tight" probability distribution. Rather, the number of required observations depends on how a given physician performs on particular measures compared to how all other MDs perform on those measures. We recommend that a minimum of 10 observations be required, however, because of the normality assumptions that underlies the model and for public "face validity".
13 (2a)	**Type of Measure:** Process ► If "Other", please describe: ► If part of a composite or paired with another measure, please identify composite or paired measure
14 (2a)	**Unit of Measurement/Analysis** (*Who or what is being measured*) *Check all that apply.* ☐ Can be measured at all levels ☒ Individual clinician (e.g., physician, nurse) ☒ Group of clinicians (e.g., facility department/unit, group practice) ☐ Facility (e.g., hospital, nursing home) ☒ Integrated delivery system ☒ Health plan ☒ Community/Population ☐ Other (*Please describe*):
15 (2a)	**Applicable Care Settings** *Check all that apply* ☐ Can be used in all healthcare settings ☒ Ambulatory Care (office/clinic) ☐ Behavioral Healthcare ☒ Community Healthcare ☐ Dialysis Facility ☐ Emergency Department ☐ EMS emergency medical services ☒ Health Plan ☐ Home Health ☐ Hospice ☐ Hospital ☐ Long term acute care hospital ☐ Nursing home/ Skilled Nursing Facility (SNF) ☐ Prescription Drug Plan ☐ Rehabilitation Facility ☐ Substance Use Treatment Program/Center ☐ Other (*Please describe*):
	IMPORTANCE TO MEASURE AND REPORT
	Note: This is a threshold criterion. If a measure is not judged to be sufficiently important to measure and report, it will not be evaluated against the remaining criteria.
16 (1a)	**Addresses a Specific National Priority Partners Goal** *Enter the numbers of the specific goals related to this measure (see list of goals on last page)*: 2.1, 2.2, 2.3, 2.4, 3.4 5.3, 5.4, 6.1
17	**If not related to NPP goal, identify high impact aspect of healthcare** (select one)

(1a) **Summary of Evidence:**

Citations[2] for Evidence:

18 **Opportunity for Improvement** *Provide evidence that demonstrates considerable variation, or overall poor performance, across providers.*

(1b) **Summary of Evidence:**

Numerator	denominator	proportion
3	6	50.00%
21	31	67.74%
104	143	72.73%
81	109	74.31%
28	34	82.35%
55	64	85.94%

Citations for Evidence: RHI client experience

19 **Disparities** *Provide evidence that demonstrates disparity in care/outcomes related to the measure focus among populations.*

(1b) **Summary of Evidence:** Not applicable

Citations for evidence:

20 **If measuring an Outcome** Describe relevance to the national health goal/priority, condition, population, and/or care being addressed:

(1c)

If not measuring an outcome, provide evidence supporting this measure topic and grade the strength of the evidence

Summarize the evidence (including citations to source) supporting the focus of the measure as follows:

- Intermediate outcome – evidence that the measured intermediate outcome (e.g., blood pressure, Hba1c) leads to improved health/avoidance of harm or cost/benefit.
- Process – evidence that the measured clinical or administrative process leads to improved health/avoidance of harm and
  if the measure focus is on one step in a multi-step care process, it measures the step that has the greatest effect on improving the specified desired outcome(s).
- Structure – evidence that the measured structure supports the consistent delivery of effective processes or access that lead to improved health/avoidance of harm or cost/benefit.
- Patient experience – evidence that an association exists between the measure of patient experience of health care and the outcomes, values and preferences of individuals/ the public.
- Access – evidence that an association exists between access to a health service and the outcomes of, or experience with, care.
- Efficiency– demonstration of an association between the measured resource use and level of performance with respect to one or more of the other five IOM aims of quality.

Type of Evidence *Check all that apply*

- ☒ Evidence-based guideline
- ☐ Meta-analysis
- ☐ Systematic synthesis of research
- ☐ Quantitative research studies
- ☐ Qualitative research studies
- ☐ Other (*Please describe*):

Overall Grade for Strength of the Evidence[3] (*Use the USPSTF system, or if different, also describe how it relates to the USPSTF system)*: B

[2] Citations can include, but are not limited to journal articles, reports, web pages (URLs).

[3]The strength of the body of evidence for the specific measure focus should be systematically assessed and rated, e.g., USPSTF grading system **www.ahrq.gov/clinic/uspstmeth.htm**: **A -** The USPSTF recommends the service. There is high certainty that the net benefit is substantial. **B -** The USPSTF recommends the service. There is high certainty that the net benefit is moderate or there is moderate certainty that the net benefit is moderate to substantial. **C -** The USPSTF recommends against routinely providing the service. There may be considerations that support providing the service in an individual patient. There is at least moderate certainty that the net benefit is small. Offer or provide this service only if

	Summary of Evidence (*provide guideline information below*)**:** ACR, AFQuIP **Citations for Evidence:** American College of Rheumatology's Starter Set of Measures for Quality in the Care for Rheumatic and Musculoskeletal Diseases, February 2006. American College of Rheumatology. Arthritis Foundation Quality Indicator Project (AFQuIP) Khanna D, Arnold E, Pencharz JN, Grossman JM, Traina SB, Lal A, MacLean CH. Measuring Process of Arthritis Care: The Arthritis Foundation's Quality Indicator Set for Rheumatoid Arthritis. Semin Arthritis Rheum. 2006;35:211-37. American College of Rheumatology 2008 recommendations for the use of nonbiologic and biologic disease-modifying antirheumatic drugs in rheumatoid arthritis. Arthritis Rheum. 2008 Jun 15;59(6):762-84.
21 (1c)	**Clinical Practice Guideline** *Cite the guideline reference; quote the specific guideline recommendation related to the measure and the guideline author's assessment of the strength of the evidence; and summarize the rationale for using this guideline over others.* **Guideline Citation:** American College of Rheumatology's Starter Set of Measures for Quality in the Care for Rheumatic and Musculoskeletal Diseases, February 2006. American College of Rheumatology. **Specific guideline recommendation:** IF a patient with rheumatoid arthritis is newly prescribed a DMARD, THEN appropriate baseline studies should be documented within an appropriate period of time from the original prescription. (See Table 1 of guideline). Table 1 indicates that a baseline serum creatinine test should be performed for initiation of methotrexate, leflunomide, azathioprine, D-Penicillamine, intramuscular gold, cyclosporine, or cyclophosphamide. **Guideline author's rating of strength of evidence** (*If different from USPSTF, also describe it and how it relates to USPSTF)***:*** B **Rationale for using this guideline over others:** This measure is based on Rheumatoid Arthritis Quality Measures from the American College of Rheumatology and the Arthritis Foundation.
22 (1c)	**Controversy/Contradictory Evidence** *Summarize any areas of controversy, contradictory evidence, or contradictory guidelines and provide citations.* **Summary:** **Citations:**
23 (1)	**Briefly describe how this measure (as specified) will facilitate significant gains in healthcare quality related to the specific priority goals and quality problems identified above:** ACR Guidelines for the Management of Rheumatoid Arthritis recommends baseline laboratory testing for certain DMARDs, given the potential for significant side effects. This measure captures whether baseline lab testing for serum creatinine was appropriately ordered when initiating a 'DMARD needing baseline SCr,' specifically methotrexate, leflunomide, azathioprine, D-Penicillamine, intramuscular gold, cyclosporine, or cyclophosphamide.
	SCIENTIFIC ACCEPTABILITY OF MEASURE PROPERTIES
	Note: Testing and results should be summarized in this form. However, additional detail and reports may be submitted as supplemental information or provided as a web page URL. If a measure has not been tested, it is only potentially eligible for time-limited endorsement.

other considerations support the offering or providing the service in an individual patient. **D -** The USPSTF recommends against the service. There is moderate or high certainty that the service has no net benefit or that the harms outweigh the benefits. **I -** The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of the service. Evidence is lacking, of poor quality, or conflicting, and the balance of benefits and harms cannot be determined.

24	**Supplemental Testing Information:** attached ☒ **OR** Web page URL:
25 (2b)	**Reliability Testing** **Data/sample:** We have tested this measure on several patient populations, including, in total, more than 30 million people enrolled in 18 different health plans. In addition, we have used analogous computer algorithms to identify patient-specific QI opportunities in more than 5 million health plan members and have sent messages regarding those opportunities to either the member or the member's physician or both. **Analytic Method:** The validity of a physician quality score describes how accurately it estimates the true value. Reliability is the stability or consistency of an estimator from one data set to the next. Both are important in assessing the performance of the quality score. We have used the following measure as an indication of the reliability of each of our measures: 1 minus [(the variance of the posterior distribution of the physician quality score) divided by (the variance of the true physician quality score)], which is the reduction in the variance of a doctor's performance score (posterior distribution) obtained by using his or her performance data, expressed as a fraction of the total variance before any data is collected." **Testing Results:** The reliability of a physician quality score depends on the number of observations available for a given physician, how the physician performs relative to all other physicians, and the overall variance in physician quality scores. As a result, reliability varies with the population of MDs in whom the measure is used. In our experience, reliability is in the range of 0.5 to >0.7.
26 (2c)	**Validity Testing** **Data/sample:** We have tested this measure on several patient populations, including, in total, more than 30 million people enrolled in 18 different health plans. In addition, we have used analogous computer algorithms to identify patient-specific QI opportunities in more than 5 million health plan members and have sent messages regarding those opportunities to either the member or the member's physician or both. **Analytic Method:** We have employed several approaches to ensure the validity of this measure: 1) we've ensured that the technical specifications for this measure are valid reflections of the underlying clinical practice guideline; 2) we have obtained feedback on the validity of the measure from several physician panels that were assembled by either Care Focused Purchasing or the Massachusetts Group Insurance Commission Clinical Performance Improvement Initiative, or both, and 3) we have systematically collected feedback from physicians and health plan members to whom we have sent messages regarding this measure. **Testing Results:** This measure is considered to be valid by the physician panels that have reviewed it. (More information regarding the panels is provided elsewhere in this document.) In addition, the measure has been considered to be valid by the medical directors of 17 different health plans. In addition, the fact that thousands of physicians have received results based on this measure without indicating that they don't believe the measure is valid attests to its validity.
27 (2d)	**Measure Exclusions** *Provide evidence to justify exclusion(s) and analysis of impact on measure results during testing.* **Summary of Evidence supporting exclusion(s):** UB04 claims do not document individual lab tests ordered during an inpatient stay. Therefore, RHI's proposed measure "Rheumatoid Arthritis New DMARD Baseline Serum Creatinine" excludes patients who have had an inpatient hospitalization during the four months prior to or after the new 'DMARD needing baseline SCr' prescription date, with the assumption that a serum creatinine test may have been ordered during the hospitalization. **Citations for Evidence:** **Data/sample:** **Analytic Method:**

	Testing Results:
28 (2e)	**Risk Adjustment Testing** *Summarize the testing used to determine the need (or no need) for risk adjustment and the statistical performance of the risk adjustment method.* **Data/sample:** **Analytic Method:** **Testing Results:** ►**If outcome or resource use measure not risk adjusted, provide rationale:** There is no need to risk adjust results from this measure. To the extent that the measure applies only to patients in a particular risk category, that has been taken into account in the specifications for the denominator or exclusions for this measure.
29 (2g)	**Testing comparability of results when more than 1 data method is specified** (*e.g., administrative claims or chart abstraction*) **Data/sample:** **Analytic Method:** **Results:**
30 (2f)	**Provide Measure Results from Testing or Current Use** Results from current use **Data/sample:** Group Insurance Commission (GIC): In 2003, the Massachusetts Group Insurance Commission GIC launched the Clinical Performance Improvement initiative, requiring health plans under contract with the GIC to incorporate provider "tiering"—differential payments based on value—into their GIC product. For this initiative, RHI evaluates physician performance on a set of quality measures using administrative claims data from approximately 2.2 million health plan members. **Methods to identify statistically significant and practically/meaningfully differences in performance:** We have developed a hierarchical logistic regression model with expert biostatisticians at the Johns Hopkins School of Public Health that enables one to produce a probability distribution around a point estimate of the "quality score" for a given physician. This model has shown that there is no minimum sample size that is required to produce a quality score which has a comparatively "tight" probability distribution. Rather, the number of required observations depends on how a given physician performs on particular measures compared to how all other MDs perform on those measures. We recommend that a minimum of 10 observations be required, however, because of the normality assumption that underlies the model and for public "face validity". We have employed this statistical approach in the MD quality profiling we performed on the experience of more than 2 million members of 6 health plans participating in the Massachusetts Group Insurance Commission Clinical Performance Improvement Initiative in 2008. **Results:** numerator denominator proportion --- 292 387 75.45%
31 (2h)	**Identification of Disparities** ►If measure is stratified by factors related to disparities (i.e. race/ethnicity, primary language, gender, SES, health literacy), **provide stratified results:** ►If disparities have been reported/identified, but measure is not specified to detect disparities, provide rationale:
	USABILITY
32	**Current Use** In use **If in use, how widely used** State ► If "other," please describe:

(3)	☒ Used in a public reporting initiative, name of initiative: Group Insurance Commission of Massachusetts Clinical Practice Improvement Initiative Sample report attached ☐ **OR** Web page URL: http://www.mass.gov/gic/annualreportb.htm
33 (3a)	**Testing of Interpretability** (*Testing that demonstrates the results are understood by the potential users for public reporting and quality improvement*) **Data/sample:** We have tested this measure on several patient populations, including, in total, more than 30 million people enrolled in 18 different health plans. **Methods:** The results have been provided to the medical directors of the 18 health plans, all of whom have indicated that they understand the particular aspect of care that the measure addresses and how to interpret the result for a physician. In addition, results have been presented to HR directors from >60 national employers. **Results:** Both the health plan medical directors and the HR personnel from the employers have indicated that they understand the particular aspect of care that the measure addresses and how to interpret the result for a physician. We do not have data on the extent to which individual physicians understand the measure result, but we presume that, since health plan medical directors and non-medical personnel from employers understand the result, that physicians and lay people will also so long that adequate explanation is provided.
34 (3b, 3c)	**Relation to other NQF-endorsed™ measures** ►Is this measure similar or related to measure(s) already endorsed by NQF (on the same topic or the same target population)? *Measures can be found at **www.qualityforum.org** under Core Documents.* *Check all that apply* ☐ Have not looked at other NQF measures ☐ Other measure(s) on same topic ☐ Other measure(s) for same target population ☒ No similar or related measures **Name of similar or related NQF-endorsed™ measure(s):** **Are the measure specifications harmonized with existing NQF-endorsed™ measures?** (select one) ►If not fully harmonized, provide rationale: **Describe the distinctive, improved, or additive value this measure provides to existing NQF-endorsed measures:**
	FEASIBILITY
35 (4a)	**How are the required data elements generated?** *Check all that apply* ☐ Data elements are generated concurrent with and as a byproduct of care processes during care delivery (e.g., blood pressure or other assessment recorded by personnel conducting the assessment) ☐ Data elements are generated from a patient survey (e.g., CAHPS) ☒ Data elements are generated through coding performed by someone other than the person who obtained the original information (e.g., DRG or ICD-9 coding on claims) ☐ Other, Please describe:
36 (4b)	**Electronic Sources** All data elements ►**If all data elements are not in electronic sources, specify the near-term path to electronic collection by most providers:** ►**Specify the data elements for the electronic health record:**
37 (4c)	**Do the specified exclusions require additional data sources beyond what is required for the other specifications?** No ►**If yes, provide justification:**
38	**Identify susceptibility to inaccuracies, errors, or unintended consequences of the measure:** As with any type of clinical performance measure, and with any source of data used to operationalize the

(4d)	measure, there will be some instances in which the data used to compute the measure are incomplete or inaccurate. We try to minimize the impact of such errors or omissions through the way we have constructed the technical specifications for the measure. There is no data source for performance measurement that is completely accurate. Two studies have shown that physician performance tends to be better when assessed using claims data compared to via chart abstraction. **Describe how could these potential problems be audited:** Potential data errors of omission or commission could be audited through chart abstraction, or feedback from physicians and patients. However, as mentioned above, each of these alternative sources of information also are susceptible to error and thus are not true gold standards. **Did you audit for these potential problems during testing?** Yes **If yes, provide results:** Through feedback from physicians whose performance has been evaluated
39 (4e)	**Testing feasibility** Describe what have you learned/modified as a result of testing and/or operational use of the measure regarding data collection, availability of data/missing data, timing/frequency of data collection, patient confidentiality, time/cost of data collection, other feasibility/ implementation issues: The technical specifications for all of our measures have been reviewed over time by numerous physicians and have been adjusted when feedback has indicated a way to improve the measure. Our experience suggests that the only practical and affordable approach for evaluation of the performance of individual MDs on a large scale is through use of claims data. We have found there to be benefit from determining whether a particular health plan has capitated arrangements with physicians or other types of providers (e.g. labs and radiology facilities) in a particular geographic area and, in those instances, to only include observations if encounter data are available. We routinely require at least 4 months of "claims runout" after the end of a measurement year in order to take account of claim lag.
	CONTACT INFORMATION
40	**Web Page URL for Measure Information** *Describe where users (implementers) should go for more details on specifications of measures, or assistance in implementing the measure.* **Web page URL:** *www.resolutionhealth.com*
41	**Measure Intellectual Property Agreement Owner Point of Contact** **First Name:** Alan **MI:** **Last Name:** Lefkowitz **Credentials (MD, MPH, etc.):** **Organization:** Resolution Health **Street Address:** 10490 Little Patuxent Parkway **City:** Columbia **State:** MD **ZIP:** 21044 **Email:** alefkowitz@resolutionhealth.com **Telephone:** 240-295-5834 ext:
42	**Measure Submission Point of Contact** **If different than IP Owner Contact** **First Name:** Darren **MI:** M **Last Name:** Schulte **Credentials (MD, MPH, etc.):** MD, MPP **Organization:** Resolution Health **Street Address:** 10490 Little Patuxent Parkway **City:** Columbia **State:** MD **ZIP:** 21044 **Email:** dschulte@resolutionhealth.com **Telephone:** 650-773-3308 ext:
43	**Measure Developer Point of Contact** **If different than IP Owner Contact** **First Name:** Darren **MI:** M **Last Name:** Schulte **Credentials (MD, MPH, etc.):** MD, MPP **Organization:** Resolution Health **Street Address:** 10490 Little Patuxent Parkway **City:** Columbia **State:** MD **ZIP:** 21044 **Email:** dschulte@resolutionhealth.com **Telephone:** 650-773-3308 ext:
44	**Measure Steward Point of Contact** **If different than IP Owner Contact** *Identifies the organization that will take responsibility for updating the measure and assuring it is consistent with the scientific evidence and current coding schema; the steward of the measure may be different than the developer.* **First Name:** Darren **MI:** M **Last Name:** Schulte **Credentials (MD, MPH, etc.):** MD, MPP **Organization:** Resolution Health **Street Address:** 10490 Little Patuxent Parkway **City:** Columbia **State:** MD **ZIP:** 21044

	Email: dschulte@resolutionhealth.com **Telephone:** 650-773-3308 ext:
	ADDITIONAL INFORMATION
45	**Workgroup/Expert Panel involved in measure development** Workgroup/panel used ►If workgroup used, describe the members' role in measure development: Over the past several years, two formal workgroups -- one organized by the Care Focused Purchasing initiative and one organized by the Massachusetts Group Insurance Commission Clinical Performance Improvement Initiative -- and several ad hoc experts have provided useful input to our measure development and refinement processes. In each case, we have provided the Work Group Members with details regarding each of our performance measures and members of the work group (not always all members) have provided feedback on the validity of the clinical practice guideline underlying the measure and suggestions regarding potential ways to improve the technical specifications for the measure. In some instances, we have eliminated measures based on feedback from the work groups. In other instances, work group members have proposed new measures. We try to get feedback from work group members and selected clinical experts on an annual basis. ►Provide a list of workgroup/panel members' names and organizations: Care Focused Purchasing Clinical Advisory Panel: Bobbie Berg -BCBS -IL Dow Briggs - BCBS- AL Joe Calderella - Cigna Carl Cameron - Preferred Care Steven Goldberg – Humana Tom James – Humana Don Liss – Aetna Catherine MacLean – WellPoint Zak Ramadan-Jradi – Regence Fred Volkman – Avidyn Health Connie Hwang – Resolution Health Darren Schulte - Resolution Health Massachusetts Group Insurance Commission Physician Advisory Panel: Jim Glauber – Neighborhood Health Plan Lyn Laurenco - Neighborhood Health Plan Anton Dodek - Tufts Barbara Chase - Fallon Jonathan Scott Coblyn – Brigham and Women's Hospital Tom Ebert - Health New England Elaine Wilson - Harvard Pilgrim Health Care Jennifer St. Thomas – Tufts Jennifer Lavigne – Fallon Michael O'Shea - Baycare Health Neil Minkoff - Harvard Pilgrim Health Care Paul Mendis- Neighborhood Health Plan Bob Jordan - Neighborhood Health Plan Bob Sorrenti – Unicare Constance Williams – Unicare Laura Syron - Neighborhood Health Plan Susan Tiffany – Unicare Connie Hwang – Resolution Health Darren Schulte - Resolution Health David Gregg – Mercer Russ Robinson - Mercer
46	**Measure Developer/Steward Updates and Ongoing Maintenance** Year the measure was first released: 2008 Month and Year of most recent revision: September 2008 What is the frequency for review/update of this measure? Annual Review

	When is the next scheduled review/update for this measure? Summer 2009
47	**Copyright statement/disclaimers:** Copyright © 2008 – Resolution Health, Inc. All rights reserved. The material submitted is confidential and proprietary. No use of this material is permitted other than in accordance with the Agreement with Measure Stewards between National Quality Forum and Resolution Health, Inc.
48	**Additional Information:** None
49	**I have checked that the submission is complete and any blank fields indicate that no information is provided.** ☒
50	**Date of Submission** (*MM/DD/YY*)**:** 11/20/08

PATIENT & FAMILY ENGAGEMENT

PRIORITY STATEMENT: Engage Patients and Their Families in Managing Their Health and Making Decisions About Their Care

1.1. All providers will routinely solicit and publicly report on their patients' perspectives of care

1.2. All providers will work collaboratively with their patients to assist them in making informed decisions about treatment options consistent with their values and preferences

POPULATION HEALTH

PRIORITY STATEMENT: IMPROVE THE HEALTH OF THE U.S. POPULATION

2.1. The population will be up to date on all high-priority age- and gender-appropriate evidence-based clinical preventive services

2.2. The population will receive recommended evidence-based interventions to improve targeted healthy lifestyle behaviors

2.3. All communities will demonstrate a 10% improvement in their community index of health

2.4. Americans will have all recommended high priority healthy lifestyle behaviors under control

SAFETY

PRIORITY STATEMENT: IMPROVE THE SAFETY OF THE U.S. HEALTH CARE SYSTEM

3.1. All providers will drive all preventable healthcare-associated infections (HAI) to zero

3.2. All providers will drive the incidence of preventable NQF Serious Reportable Events (SRE) to zero

3.3. All hospitals will reduce preventable and premature mortality rates to best-in-class

3.4. All hospitals and their community partners will reduce 30-day mortality rates following hospitalization for select conditions to best-in-class

PALLIATIVE CARE

PRIORITY STATEMENT: GUARANTEE APPROPRIATE AND COMPASSIONATE CARE FOR PATIENTS WITH LIFE-LIMITING ILLNESSES

4.1. All providers will identify, document, and effectively treat physical symptoms (e.g. pain, shortness of breath, constipation, others) at levels acceptable to patients with a life-limiting illness

4.2. All providers will effectively address the psychosocial and spiritual needs of patients with life-limiting illnesses and their families according to their preferences

4.3. All eligible patients will receive high quality palliative care and hospice services

CARE COORDINATION

PRIORITY STATEMENT: ENSURE PATIENTS RECEIVE WELL-COORDINATED CARE ACROSS ALL PROVIDERS, SETTINGS, AND LEVELS OF CARE

5.1. All providers will accurately and completely reconcile medications across the continuum of care (i.e. admission, transfer within and between care providers, discharge, and outpatient appointments) and ensure communication with the next provider of services

5.2. All inpatient and outpatient providers will assess the patient's perspective of the coordination of their care using a validated care coordination survey tool

5.3. All providers will reduce 30-day all-cause readmission rates resulting from poorly coordinated care to best-in-class

5.4. All providers will reduce preventable emergency department (i.e. those that could be avoided with timely access to primary care) visits resulting from poorly coordinated care by 50%

PATIENT-FOCUSED CARE

PRIORITY STATEMENT: GUARANTEE HIGH VALUE CARE ACROSS ACUTE AND CHRONIC EPISODES

6.1. All patients will receive high-value care over the course of their acute or chronic illness

OVERUSE

PRIORITY STATEMENT: ELIMINATE WASTE WHILE ENSURING THE DELIVERY OF APPROPRIATE CARE

7.1. Reduce wasteful and inappropriate care for the top ten targeted areas by 50%

THE NATIONAL QUALITY FORUM

MEASURE SUBMISSION FORM VERSION 3.0
August 2008

The measure information you submit will be shared with NQF's Steering Committees and Technical Advisory Panels to evaluate measures against the NQF criteria of importance to measure and report, scientific acceptability of measure properties, usability, and feasibility. Four conditions (as indicated below) must be met before proposed measures may be considered and evaluated for suitability as voluntary consensus standards. Not all acceptable measures will be strong—or equally strong—among each set of criteria. The assessment of each criterion is a matter of degree; however, all measures must be judged to have met the first criterion, importance to measure and report, in order to be evaluated against the remaining criteria. References to the specific measure evaluation criteria are provided in parentheses following the item numbers. Please refer to the *Measure Evaluation Criteria* for more information at ***www.qualityforum.org*** under Core Documents. Additional guidance is being developed and when available will be posted on the NQF website.

Use the tab or arrow (↓→) keys to move the cursor to the next field (or back ←↑). There are three types of response fields:

- drop-down menus - select one response;
- check boxes – check as many as apply; and
- text fields – you can copy and paste text into these fields or enter text; these fields are not limited in size, but in most cases, we ask that you summarize the requested information.

Please note that URL hyperlinks do not work in the form; you will need to type them into your web browser.

Be sure to answer all questions. Fields that are left blank will be interpreted as no or none. Information must be provided in this form. Attachments are not allowed except when specifically requested or to provide additional detail or source documents for information that is summarized in this form. If you have important information that is not addressed by the questions, they can be entered into item #48 near the end of the form.

For questions about this form, please contact the NQF Project Director listed in the corresponding call for measures.

	CONDITIONS FOR CONSIDERATION BY NQF
	Four conditions must be met before proposed measures may be considered and evaluated for suitability as voluntary consensus standards.
A (A)	**Public domain or Intellectual Property Agreement signed:** IP Agreement signed and submitted (If no, do not submit) *Template for the Intellectual Property Agreement is available at* **www.qualityforum.org** *under Core Documents.*
B (B)	**Measure steward/maintenance:** Is there an identified responsible entity and process to maintain and update the measure on a schedule commensurate with clinical innovation, but at least every 3 years? Yes, information provided in contact section (If no, do not submit)
C (C)	**Intended use:** Does the intended use of the measure include BOTH public reporting AND quality improvement? Yes (If no, do not submit)
D (D)	**Fully developed and tested:** Is the measure fully developed AND tested? Yes, fully developed and tested (If not tested and no plans for testing within 24 months, do not submit)

THE NATIONAL QUALITY FORUM

MEASURE SUBMISSION FORM VERSION 3.0
August 2008

	(for NQF staff use) **NQF Review #:** EC-057-08 **NQF Project:** National Voluntary Consensus Standards for Ambulatory Care Using Clinically Enriched Administrative Data
	MEASURE SPECIFICATIONS & DESCRIPTIVE INFORMATION
1	**Information current as of** *(date- MM/DD/YY)*: 10/31/2008
2	**Title of Measure:** Rheumatoid Arthritis New DMARD Baseline Liver Function Test
3	**Brief description of measure** [1]**:** This measure identifies adult patients with a diagnosis of rheumatoid arthritis who received appropriate baseline liver function testing (AST or ALT) within 90 days before to 14 days after the new start of sulfasalazine, methotrexate, leflunomide, azathioprine, cyclosporine or cyclophosphamide during the measurement year.
4 (2a)	**Numerator Statement:** Patients in the denominator who received liver function testing within 90 days before to 14 days after the new start of sulfasalazine, methotrexate, leflunomide, azathioprine, cyclosporine or cyclophosphamide during the measurement year. **Time Window:** **Numerator Details** (Definitions, codes with description): >=1 claim for 'LFT' (AST or ALT) occurring within 90 days before to 14 days after new start of sulfasalazine, methotrexate, leflunomide, azathioprine, cyclosporine or cyclophosphamide during the measurement year LFT (Procedure) Type Code Description CPT4 80050 GENERAL HEALTH PANEL CPT4 80053 COMPREHENSIVE METABOLIC PANEL CPT4 80076 HEPATIC FUNCTION PANEL CPT4 84450 TRANSFERASE; ASPARTATE AMINO CPT4 84460 TRANSFERASE; ALANINE AMINO
5 (2a)	**Denominator Statement:** Patients >=18 years old with a history of rheumatoid arthritis and a new start of sulfasalazine, methotrexate, leflunomide, azathioprine, cyclosporine or cyclophosphamide anytime from the beginning of the measurement year to 14 days prior to the end of the measurement year. (This list of DMARDs will hereafter be refered to as 'DMARD needing baseline LFT') **Time Window:** **Denominator Details** (Definitions, codes with description): - Age >=18 years as of the end of the measurement year - AND meets criteria for rheumatoid arthritis based on RHI's Rheumatoid Arthritis criteria, which requires: >=2 office visits with a diagnosis code for 'rheumatoid arthritis' or >=1 inpatient or emergency room claim for 'rheumatoid arthritis' anytime in the past - AND >=1 Rx claim for 'DMARD needing baseline LFT' prescribed anytime from the start of the measurement year to 14 days prior to the end of the measurement year - AND has Rx eligbility for the entire year prior to the earliest observed 'DMARD needing baseline LFT'

[1] Example of measure description: Percentage of adult patients with diabetes aged 18-75 years receiving one or more A1c test(s) per year.

- AND no Rx claims for 'DMARD needing baseline LFT' in the 365 days prior to the earliest 'DMARD needing baseline LFT' prescription identified during the measurement year
- AND eligible for medical benefits for 90 days before to 14 days after the initial 'DMARD needing baseline LFT' Rx claim
- AND no claims for inpatient hospitalization during the 90 days prior to 14 days after the initial 'DMARD needing baseline LFT' Rx claim

Rheumatoid Arthritis (Diagnosis)

Type	Code	Description
ICD9	7140	RHEUMATOID ARTHRITIS
ICD9	7141	FELTYS SYNDROME
ICD9	7142	OTH RA W/VISCERAL/SYSTEMIC INVLV
ICD9	71481	RHEUMATOID LUNG

Azathioprine (Medispan Drug)

Type	GPI Code	Description
GPI	99406010000305	Azathioprine Tab 50 MG
GPI	99406010000315	Azathioprine Tab 75 MG
GPI	99406010000325	Azathioprine Tab 100 MG
GPI	99406010002900	Azathioprine Powder
GPI	99406010102110	Azathioprine Sodium For Inj 100 MG

Cyclophosphamide_Oral (Medispan Drug)

Type	GPI Code	Description
GPI	21101020000305	Cyclophosphamide Tab 25 MG
GPI	21101020000310	Cyclophosphamide Tab 50 MG

Cyclosporine Analogs (Medispan Drug)

Type	GPI Code	Description
GPI	99402020000110	Cyclosporine Cap 25 MG
GPI	99402020000140	Cyclosporine Cap 100 MG
GPI	99402020002005	Cyclosporine IV Soln 50 MG/ML
GPI	99402020002010	Cyclosporine Oral Soln 100 MG/ML
GPI	99402020300120	Cyclosporine Modified Cap 25 MG
GPI	99402020300130	Cyclosporine Modified Cap 50 MG
GPI	99402020300150	Cyclosporine Modified Cap 100 MG
GPI	99402020302020	Cyclosporine Modified Oral Soln 100 MG/ML

Leflunomide_Rx (Medispan Drug)

Type	GPI Code	Description
GPI	66280050000310	Leflunomide Tab 10 MG
GPI	66280050000320	Leflunomide Tab 20 MG

oral methothrexate (Medispan Drug)

Type	GPI Code	Description

	----- ---------- ---------- GPI 21300050100310 Methotrexate Sodium Tab 2.5 MG (Base Equiv) GPI 21300050100320 Methotrexate Sodium Tab 5 MG (Base Equiv) GPI 21300050100330 Methotrexate Sodium Tab 7.5 MG (Base Equiv) GPI 21300050100340 Methotrexate Sodium Tab 10 MG (Base Equiv) GPI 21300050100350 Methotrexate Sodium Tab 15 MG (Base Equiv) GPI 66250050100320 Methotrexate Sodium Tab 2.5 MG (Antirheumatic) Sulfasalazine (Medispan Drug) ========== Type GPI Code Description ----- ---------- ---------- GPI 52500060000310 Sulfasalazine Tab 500 MG GPI 52500060000610 Sulfasalazine Tab Delayed Release 500 MG GPI 52500060002900 Sulfasalazine Powder
6 (2a, 2d)	**Denominator Exclusions:** The measure excludes patients who have had an inpatient hospitalization during the measurement year because UB04 claims do not document individual lab tests ordered during an inpatient stay. **Denominator Exclusion Details** (Definitions, codes with description): Patient cannot have claims for inpatient hospitalization during the measurement year
7 (2a, 2h)	**Stratification** Do the measure specifications require the results to be stratified? No ► If "other" describe: **Identification of stratification variable(s):** **Stratification Details** (Definitions, codes with description):
8 (2a, 2e)	**Risk Adjustment** Does the measure require risk adjustment to account for differences in patient severity before the onset of care? No ► **If yes,** (select one) ► Is there a separate proprietary owner of the risk model? (select one) **Identify Risk Adjustment Variables:** **Detailed risk model:** attached ☐ **OR** Web page URL:
9 (2a)	**Type of Score:** Rate/proportion **Calculation Algorithm:** attached ☒ **OR** Web page URL: **Interpretation of Score** (*Classifies interpretation of score according to whether better quality is associated with a higher score, a lower score, a score falling within a defined interval, or a passing score*) Better quality = Higher score ► If "Other", please describe:
10 (2a. 4a, 4b)	**Identify the required data elements**(e.g., primary diagnosis, lab values, vital signs)**:** diagnosis, procedure, pharmacy claims **Data dictionary/code table** attached ☒ **OR** Web page URL: **Data Quality** (2a) *Check all that apply* ☐ Data are captured from an authoritative/accurate source (e.g., lab values from laboratory personnel) ☒ Data are coded using recognized data standards ☐ Method of capturing data electronically fits the workflow of the authoritative source ☐ Data are available in EHRs ☒ Data are auditable
11 (2a, 4b)	**Data Source and Data Collection Methods** *Identifies the data source(s) necessary to implement the measure specifications. Check all that apply* ☐ Electronic Health/Medical Record ☐ Electronic Clinical Database, Name: ☐ Electronic Clinical Registry, Name: ☒ Electronic Claims ☒ Electronic Pharmacy data ☐ Paper Medical Record ☐ Standardized clinical instrument, Name: ☐ Standardized patient survey, Name: ☐ Standardized clinician survey, Name: ☒ Other, Describe: It is reasonable to allow physicians

	☐ Electronic Lab data ☐ Electronic source – other, Describe: to submit definitive evidence that a particular service was provided to a patient. For example, a lab result from a testing facility would indicate that that lab test was performed. A notation in a patient chart that the test was ordered, in contrast, would not provide definitive evidence that the test was performed. Instrument/survey attached ☐ **OR** Web page URL:
12 (2a)	**Sampling** *If measure is based on a sample, provide instructions and guidance on sample size.* **Minimum sample size:** 10 **Instructions:** We have developed a hierarchical logistic regression model with expert biostatisticians at the Johns Hopkins School of Public Health that enables one to produce a probability distribution around a point estimate of the "quality score" for a given physician. This model has shown that there is no minimum sample size that is required to produce a quality score which has a comparatively "tight" probability distribution. Rather, the number of required observations depends on how a given physician performs on particular measures compared to how all other MDs perform on those measures. We recommend that a minimum of 10 observations be required, however, because of the normality assumptions that underlies the model and for public "face validity". Alternatively, to satisfy current NCQA standards, a minimum of 30 observations could be required.
13 (2a)	**Type of Measure:** Process ► If "Other", please describe: ► If part of a composite or paired with another measure, please identify composite or paired measure
14 (2a)	**Unit of Measurement/Analysis** (*Who or what is being measured*) *Check all that apply.* ☐ Can be measured at all levels ☒ Individual clinician (e.g., physician, nurse) ☒ Group of clinicians (e.g., facility department/unit, group practice) ☐ Facility (e.g., hospital, nursing home) ☒ Integrated delivery system ☒ Health plan ☒ Community/Population ☐ Other (*Please describe*):
15 (2a)	**Applicable Care Settings** *Check all that apply* ☐ Can be used in all healthcare settings ☒ Ambulatory Care (office/clinic) ☐ Behavioral Healthcare ☒ Community Healthcare ☐ Dialysis Facility ☐ Emergency Department ☐ EMS emergency medical services ☒ Health Plan ☐ Home Health ☐ Hospice ☐ Hospital ☐ Long term acute care hospital ☐ Nursing home/ Skilled Nursing Facility (SNF) ☐ Prescription Drug Plan ☐ Rehabilitation Facility ☐ Substance Use Treatment Program/Center ☐ Other (*Please describe*):
	IMPORTANCE TO MEASURE AND REPORT
	Note: This is a threshold criterion. If a measure is not judged to be sufficiently important to measure and report, it will not be evaluated against the remaining criteria.
16 (1a)	**Addresses a Specific National Priority Partners Goal** *Enter the numbers of the specific goals related to this measure (see list of goals on last page)*: 6.1
17 (1a)	**If not related to NPP goal, identify high impact aspect of healthcare** (select one) **Summary of Evidence:**

	Citations[2] for Evidence:
18 (1b)	**Opportunity for Improvement** *Provide evidence that demonstrates considerable variation, or overall poor performance, across providers.* **Summary of Evidence:** numerator denominator proportion --- 133 176 75.57% 28 36 77.78% 105 131 80.15% 33 40 82.50% 5 6 83.33% 59 69 85.51% **Citations for Evidence:** RHI client experience
19 (1b)	**Disparities** *Provide evidence that demonstrates disparity in care/outcomes related to the measure focus among populations.* **Summary of Evidence:** Not applicable **Citations for evidence:**
20 (1c)	**If measuring an Outcome** Describe relevance to the national health goal/priority, condition, population, and/or care being addressed: **If not measuring an outcome, provide evidence supporting this measure topic and grade the strength of the evidence** *Summarize the evidence (including citations to source) supporting the focus of the measure as follows:* • Intermediate outcome – evidence that the measured intermediate outcome (e.g., blood pressure, Hba1c) leads to improved health/avoidance of harm or cost/benefit. • Process – evidence that the measured clinical or administrative process leads to improved health/avoidance of harm and if the measure focus is on one step in a multi-step care process, it measures the step that has the greatest effect on improving the specified desired outcome(s). • Structure – evidence that the measured structure supports the consistent delivery of effective processes or access that lead to improved health/avoidance of harm or cost/benefit. • Patient experience – evidence that an association exists between the measure of patient experience of health care and the outcomes, values and preferences of individuals/ the public. • Access – evidence that an association exists between access to a health service and the outcomes of, or experience with, care. • Efficiency– demonstration of an association between the measured resource use and level of performance with respect to one or more of the other five IOM aims of quality. **Type of Evidence** *Check all that apply* ☒ Evidence-based guideline ☐ Quantitative research studies ☐ Meta-analysis ☐ Qualitative research studies ☐ Systematic synthesis of research ☐ Other (*Please describe*): **Overall Grade for Strength of the Evidence[3]** (*Use the USPSTF system, or if different, also describe how it relates to the USPSTF system)*: B

[2] Citations can include, but are not limited to journal articles, reports, web pages (URLs).

[3]The strength of the body of evidence for the specific measure focus should be systematically assessed and rated, e.g., USPSTF grading system **www.ahrq.gov/clinic/uspstmeth.htm**: **A -** The USPSTF recommends the service. There is high certainty that the net benefit is substantial. **B -** The USPSTF recommends the service. There is high certainty that the net benefit is moderate or there is moderate certainty that the net benefit is moderate to substantial. **C -** The USPSTF recommends against routinely providing the service. There may be considerations that support providing the service in an individual patient. There is at least moderate certainty that the net benefit is small. Offer or provide this service only if

	Summary of Evidence (*provide guideline information below*)**:** ACR, AFQuIP **Citations for Evidence:** American College of Rheumatology's Starter Set of Measures for Quality in the Care for Rheumatic and Musculoskeletal Diseases, February 2006. American College of Rheumatology. Arthritis Foundation Quality Indicator Project (AFQuIP) Khanna D, Arnold E, Pencharz JN, Grossman JM, Traina SB, Lal A, MacLean CH. Measuring Process of Arthritis Care: The Arthritis Foundation's Quality Indicator Set for Rheumatoid Arthritis. Semin Arthritis Rheum. 2006;35:211-37. American College of Rheumatology 2008 recommendations for the use of nonbiologic and biologic disease-modifying antirheumatic drugs in rheumatoid arthritis. Arthritis Rheum. 2008 Jun 15;59(6):762-84.
21 (1c)	**Clinical Practice Guideline** *Cite the guideline reference; quote the specific guideline recommendation related to the measure and the guideline author's assessment of the strength of the evidence; and summarize the rationale for using this guideline over others.* **Guideline Citation:** American College of Rheumatology's Starter Set of Measures for Quality in the Care for Rheumatic and Musculoskeletal Diseases, February 2006. American College of Rheumatology. **Specific guideline recommendation:** IF a patient with rheumatoid arthritis is newly prescribed a DMARD, THEN appropriate baseline studies should be documented within an appropriate period of time from the original prescription. (See Table 1 of guideline). Table 1 indicates that baseline liver function testing (AST or ALT) should be performed for initiation of sulfasalazine, methotrexate, leflunomide, azathioprine, cyclosporine or cyclophosphamide. **Guideline author's rating of strength of evidence** (*If different from USPSTF, also describe it and how it relates to USPSTF)***:** B **Rationale for using this guideline over others:** This measure is based on Rheumatoid Arthritis Quality Measures from the American College of Rheumatology and the Arthritis Foundation.
22 (1c)	**Controversy/Contradictory Evidence** *Summarize any areas of controversy, contradictory evidence, or contradictory guidelines and provide citations.* **Summary:** **Citations:**
23 (1)	**Briefly describe how this measure (as specified) will facilitate significant gains in healthcare quality related to the specific priority goals and quality problems identified above:** ACR Guidelines for the Management of Rheumatoid Arthritis recommends baseline laboratory testing for certain DMARDs, given the potential for significant side effects. This measure captures whether a baseline liver function test (AST or ALT) was appropriately ordered when initiating a 'DMARD needing baseline LFT,' specifically sulfasalazine, methotrexate, leflunomide, azathioprine, cyclosporine or cyclophosphamide.
	SCIENTIFIC ACCEPTABILITY OF MEASURE PROPERTIES
	Note: Testing and results should be summarized in this form. However, additional detail and reports may be submitted as supplemental information or provided as a web page URL. If a measure has not been tested, it is only potentially eligible for time-limited endorsement.
24	**Supplemental Testing Information:** attached ☐ **OR** Web page URL:

other considerations support the offering or providing the service in an individual patient. **D -** The USPSTF recommends against the service. There is moderate or high certainty that the service has no net benefit or that the harms outweigh the benefits. **I -** The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of the service. Evidence is lacking, of poor quality, or conflicting, and the balance of benefits and harms cannot be determined.

25 (2b)	**Reliability Testing** **Data/sample:** We have tested this measure on several patient populations, including, in total, more than 30 million people enrolled in 18 different health plans. In addition, we have used analogous computer algorithms to identify patient-specific QI opportunities in more than 5 million health plan members and have sent messages regarding those opportunities to either the member or the member's physician or both. **Analytic Method:** The validity of a physician quality score describes how accurately it estimates the true value. Reliability is the stability or consistency of an estimator from one data set to the next. Both are important in assessing the performance of the quality score. We have used the following measure as an indication of the reliability of each of our measures: 1 minus [(the variance of the posterior distribution of the physician quality score) divided by (the variance of the true physician quality score)], which is the reduction in the variance of a doctor's performance score (posterior distribution) obtained by using his or her performance data, expressed as a fraction of the total variance before any data is collected. **Testing Results:** The reliability of a physician quality score depends on the number of observations available for a given physician, how the physician performs relative to all other physician, and the overall variance in physician quality scores. As a result, reliability varies with the population of MDs in whom the measure is used. In our experience, reliability is in the range of 0.5 to >0.7.
26 (2c)	**Validity Testing** **Data/sample:** We have tested this measure on several patient populations, including, in total, more than 30 million people enrolled in 18 different health plans. In addition, we have used analogous computer algorithms to identify patient-specific QI opportunities in more than 5 million health plan members and have sent messages regarding those opportunities to either the member or the member's physician or both. **Analytic Method:** We have employed several approaches to ensure the validity of this measure: 1) we've ensured that the technical specifications for this measure are valid reflections of the underlying clinical practice guideline; 2) we have obtained feedback on the validity of the measure from several physician panels that were assembled by either Care Focused Purchasing or the Massachusetts Group Insurance Commission Clinical Performance Improvement Initiative, or both, and 3) we have systematically collected feedback from physicians and health plan members to whom we have sent messages regarding this measure. **Testing Results:** This measure is considered to be valid by the physician panels that have reviewed it. (More information regarding the panels is provided elsewhere in this document.) In addition, the measure has been considered to be valid by the medical directors of 17 different health plans. In addition, the fact that thousands of physicians have received results based on this measure without indicating that they don't believe the measure is valid attests to its validity.
27 (2d)	**Measure Exclusions** *Provide evidence to justify exclusion(s) and analysis of impact on measure results during testing.* **Summary of Evidence supporting exclusion(s):** UB04 claims do not document individual lab tests ordered during an inpatient stay. Therefore, RHI's proposed measure "Rheumatoid Arthritis New DMARD Baseline Liver Function Testing" excludes patients who have had an inpatient hospitalization during the four months prior to or after the new 'DMARD needing baseline LFT' prescription date, with the assumption that a liver function test (AST or ALT) may have been ordered during the hospitalization. **Citations for Evidence:** **Data/sample:** **Analytic Method:** **Testing Results:**

28 (2e)	**Risk Adjustment Testing** *Summarize the testing used to determine the need (or no need) for risk adjustment and the statistical performance of the risk adjustment method.* **Data/sample:** **Analytic Method:** **Testing Results:** ►**If outcome or resource use measure not risk adjusted, provide rationale:** There is no need to risk adjust results from this measure. To the extent that the measure applies only to patients in a particular risk category, that has been taken into account in the specifications for the denominator or exclusions for this measure.
29 (2g)	**Testing comparability of results when more than 1 data method is specified** (*e.g., administrative claims or chart abstraction*) **Data/sample:** **Analytic Method:** **Results:**
30 (2f)	**Provide Measure Results from Testing or Current Use** Results from current use **Data/sample: Group Insurance Commission (GIC):** In 2003, the Massachusetts Group Insurance Commission GIC launched the Clinical Performance Improvement initiative, requiring health plans under contract with the GIC to incorporate provider "tiering"—differential payments based on value—into their GIC product. For this initiative, RHI evaluates physician performance on a set of quality measures using administrative claims data from approximately 2.2 million health plan members. **Methods to identify statistically significant and practically/meaningfully differences in performance:** We have developed a hierarchical logistic regression model with expert biostatisticians at the Johns Hopkins School of Public Health that enables one to produce a probability distribution around a point estimate of the "quality score" for a given physician. This model has shown that there is no minimum sample size that is required to produce a quality score which has a comparatively "tight" probability distribution. Rather, the number of required observations depends on how a given physician performs on particular measures compared to how all other MDs perform on those measures. We recommend that a minimum of 10 observations be required, however, because of the normality assumption that underlies the model and for public "face validity". Alternatively, to satisfy current NCQA standards, a minimum of 30 observations could be required. We have employed this statistical approach in the MD quality profiling we performed on the experience of more than 2 million members of 6 health plans participating in the Massachusetts Group Insurance Commission Clinical Performance Improvement Initiative in 2008 **Results:** numerator denominator proportion --- 363 458 79.26%
31 (2h)	**Identification of Disparities** ►If measure is stratified by factors related to disparities (i.e. race/ethnicity, primary language, gender, SES, health literacy), **provide stratified results:** Not applicable ►If disparities have been reported/identified, but measure is not specified to detect disparities, provide rationale:
	USABILITY
32 (3)	**Current Use** In use **If in use, how widely used** State ► If "other," please describe: ☒ Used in a public reporting initiative, name of initiative: Group Insurance Commision of Masschusetts Clinical Practice Improvement Initiative

	Sample report attached ☐ **OR** Web page URL: http://www.mass.gov/gic/annualreportb.htm
33 (3a)	**Testing of Interpretability** (*Testing that demonstrates the results are understood by the potential users for public reporting and quality improvement*) **Data/sample:** We have tested this measure on several patient populations, including, in total, more than 30 million people enrolled in 18 different health plans. **Methods:** The results have been provided to the medical directors of the 18 health plans, all of whom have indicated that they understand the particular aspect of care that the measure addresses and how to interpret the result for a physician. In addition, results have been presented to HR directors from >60 national employers. **Results:** Both the health plan medical directors and the HR personnel from the employers have indicated that they understand the particular aspect of care that the measure addresses and how to interpret the result for a physician. We do not have data on the extent to which individual physicians understand the measure result, but we presume that, since health plan medical directors and non-medical personnel from employers understand the result, that physicians and lay people will also so long that adequate explanation is provided.
34 (3b, 3c)	**Relation to other NQF-endorsed™ measures** ►Is this measure similar or related to measure(s) already endorsed by NQF (on the same topic or the same target population)? *Measures can be found at **www.qualityforum.org** under Core Documents.* *Check all that apply* ☐ Have not looked at other NQF measures ☐ Other measure(s) on same topic ☐ Other measure(s) for same target population ☒ No similar or related measures **Name of similar or related NQF-endorsed™ measure(s):** **Are the measure specifications harmonized with existing NQF-endorsed™ measures?** (select one) ►If not fully harmonized, provide rationale: **Describe the distinctive, improved, or additive value this measure provides to existing NQF-endorsed measures:** This measure can be used exclusively with enriched administrative data
	FEASIBILITY
35 (4a)	**How are the required data elements generated?** *Check all that apply* ☐ Data elements are generated concurrent with and as a byproduct of care processes during care delivery (e.g., blood pressure or other assessment recorded by personnel conducting the assessment) ☐ Data elements are generated from a patient survey (e.g., CAHPS) ☒ Data elements are generated through coding performed by someone other than the person who obtained the original information (e.g., DRG or ICD-9 coding on claims) ☐ Other, Please describe:
36 (4b)	**Electronic Sources** All data elements ►**If all data elements are not in electronic sources, specify the near-term path to electronic collection by most providers:** ►**Specify the data elements for the electronic health record:**
37 (4c)	**Do the specified exclusions require additional data sources beyond what is required for the other specifications?** No ►**If yes, provide justification:**
38	**Identify susceptibility to inaccuracies, errors, or unintended consequences of the measure:** As with any type of clinical performance measure, and with any source of data used to operationalize the

(4d)	measure, there will be some instances in which the data used to compute the measure are incomplete or inaccurate. We try to minimize the impact of such errors or omissions through the way we have constructed the technical specifications for the measure. There is no data source for performance measurement that is completely accurate. Two studies have shown that physician performance tends to be better when assessed using claims data compared to via chart abstraction. **Describe how could these potential problems be audited:** Potential data errors of omission or commission could be audited through chart abstraction, or feedback from physicians and patients. However, as mentioned above, each of these alternative sources of information also are susceptible to error and thus are not true gold standards. **Did you audit for these potential problems during testing?** Yes **If yes, provide results:** Through feedback from physicians whose performance has been evaluated
39 (4e)	**Testing feasibility** Describe what have you learned/modified as a result of testing and/or operational use of the measure regarding data collection, availability of data/missing data, timing/frequency of data collection, patient confidentiality, time/cost of data collection, other feasibility/ implementation issues: The technical specifications for all of our measures have been reviewed over time by numerous physicians and have been adjusted when feedback has indicated a way to improve the measure. Our experience suggests that the only practical and affordable approach for evaluation of the performance of individual MDs on a large scale is through use of claims data. We have found there to be benefit from determining whether a particular health plan has capitated arrangements with physicians or other types of providers (e.g. labs and radiology facilities) in a particular geographic area and, in those instances, to only include observations if encounter data are available. We routinely require at least 4 months of "claims runout" after the end of a measurement year in order to take account of claim lag.
	CONTACT INFORMATION
40	**Web Page URL for Measure Information** *Describe where users (implementers) should go for more details on specifications of measures, or assistance in implementing the measure.* **Web page URL:** *www.resolutionhealth.com*
41	**Measure Intellectual Property Agreement Owner Point of Contact** **First Name:** Alan **MI:** **Last Name:** Lefkowitz **Credentials (MD, MPH, etc.):** **Organization:** Resolution Health **Street Address:** 10490 Little Patuxent Parkway **City:** Columbia **State:** MD **ZIP:** 21044 **Email:** alefkowitz@resolutionhealth.com **Telephone:** 240-295-5834 ext:
42	**Measure Submission Point of Contact** **If different than IP Owner Contact** **First Name:** Darren **MI:** M **Last Name:** Schulte **Credentials (MD, MPH, etc.):** MD, MPP **Organization:** Resolution Health **Street Address:** 10490 Little Patuxent Parkway **City:** Columbia **State:** MD **ZIP:** 21044 **Email:** dschulte@resolutionhealth.com **Telephone:** 650-773-3308 ext:
43	**Measure Developer Point of Contact** **If different than IP Owner Contact** **First Name:** Darren **MI:** M **Last Name:** Schulte **Credentials (MD, MPH, etc.):** MD, MPP **Organization:** Resolution Health **Street Address:** 10490 Little Patuxent Parkway **City:** Columbia **State:** MD **ZIP:** 21044 **Email:** dschulte@resolutionhealth.com **Telephone:** 650-773-3308 ext:
44	**Measure Steward Point of Contact** **If different than IP Owner Contact** *Identifies the organization that will take responsibility for updating the measure and assuring it is consistent with the scientific evidence and current coding schema; the steward of the measure may be different than the developer.* **First Name:** Darren **MI:** M **Last Name:** Schulte **Credentials (MD, MPH, etc.):** MD, MPP **Organization:** Resolution Health **Street Address:** 10490 Little Patuxent Parkway **City:** Columbia **State:** MD **ZIP:** 21044

	Email: dschulte@resolutionhealth.com **Telephone:** 650-773-3308 ext:
	ADDITIONAL INFORMATION
45	**Workgroup/Expert Panel involved in measure development** Workgroup/panel used ►If workgroup used, describe the members' role in measure development: Over the past several years, two formal workgroups -- one organized by the Care Focused Purchasing initiative and one organized by the Massachusetts Group Insurance Commission Clinical Performance Improvement Initiative -- and several ad hoc experts have provided useful input to our measure development and refinement processes. In each case, we have provided the Work Group Members with details regarding each of our performance measures and members of the work group (not always all members) have provided feedback on the validity of the clinical practice guideline underlying the measure and suggestions regarding potential ways to improve the technical specifications for the measure. In some instances, we have eliminated measures based on feedback from the work groups. In other instances, work group members have proposed new measures. We try to get feedback from work group members and selected clinical experts on an annual basis. ►Provide a list of workgroup/panel members' names and organizations: Care Focused Purchasing Clinical Advisory Panel: Bobbie Berg -BCBS -IL Dow Briggs - BCBS- AL Joe Calderella - Cigna Carl Cameron - Preferred Care Steven Goldberg – Humana Tom James – Humana Don Liss – Aetna Catherine MacLean – WellPoint Zak Ramadan-Jradi – Regence Fred Volkman – Avidyn Health Connie Hwang – Resolution Health Darren Schulte - Resolution Health Massachusetts Group Insurance Commission Physician Advisory Panel: Jim Glauber – Neighborhood Health Plan Lyn Laurenco - Neighborhood Health Plan Anton Dodek - Tufts Barbara Chase - Fallon Jonathan Scott Coblyn – Brigham and Women's Hospital Tom Ebert - Health New England Elaine Wilson - Harvard Pilgrim Health Care Jennifer St. Thomas – Tufts Jennifer Lavigne – Fallon Michael O'Shea - Baycare Health Neil Minkoff - Harvard Pilgrim Health Care Paul Mendis- Neighborhood Health Plan Bob Jordan - Neighborhood Health Plan Bob Sorrenti – Unicare Constance Williams – Unicare Laura Syron - Neighborhood Health Plan Susan Tiffany – Unicare Connie Hwang – Resolution Health Darren Schulte - Resolution Health David Gregg – Mercer Russ Robinson - Mercer
46	**Measure Developer/Steward Updates and Ongoing Maintenance** Year the measure was first released: 2008 Month and Year of most recent revision: October 2008 What is the frequency for review/update of this measure? Annual Review

	When is the next scheduled review/update for this measure? Summer 2009
47	**Copyright statement/disclaimers:** Copyright © 2008 – Resolution Health, Inc. All rights reserved. The material submitted is confidential and proprietary. No use of this material is permitted other than in accordance with the Agreement with Measure Stewards between National Quality Forum and Resolution Health, Inc.
48	**Additional Information:** None
49	**I have checked that the submission is complete and any blank fields indicate that no information is provided.** ☒
50	**Date of Submission** (*MM/DD/YY*)**:** 11/20/2008

PATIENT & FAMILY ENGAGEMENT

PRIORITY STATEMENT: Engage Patients and Their Families in Managing Their Health and Making Decisions About Their Care

1.1. All providers will routinely solicit and publicly report on their patients' perspectives of care

1.2. All providers will work collaboratively with their patients to assist them in making informed decisions about treatment options consistent with their values and preferences

POPULATION HEALTH

PRIORITY STATEMENT: IMPROVE THE HEALTH OF THE U.S. POPULATION

2.1. The population will be up to date on all high-priority age- and gender-appropriate evidence-based clinical preventive services

2.2. The population will receive recommended evidence-based interventions to improve targeted healthy lifestyle behaviors

2.3. All communities will demonstrate a 10% improvement in their community index of health

2.4. Americans will have all recommended high priority healthy lifestyle behaviors under control

SAFETY

PRIORITY STATEMENT: IMPROVE THE SAFETY OF THE U.S. HEALTH CARE SYSTEM

3.1. All providers will drive all preventable healthcare-associated infections (HAI) to zero

3.2. All providers will drive the incidence of preventable NQF Serious Reportable Events (SRE) to zero

3.3. All hospitals will reduce preventable and premature mortality rates to best-in-class

3.4. All hospitals and their community partners will reduce 30-day mortality rates following hospitalization for select conditions to best-in-class

PALLIATIVE CARE

PRIORITY STATEMENT: GUARANTEE APPROPRIATE AND COMPASSIONATE CARE FOR PATIENTS WITH LIFE-LIMITING ILLNESSES

4.1. All providers will identify, document, and effectively treat physical symptoms (e.g. pain, shortness of breath, constipation, others) at levels acceptable to patients with a life-limiting illness

4.2. All providers will effectively address the psychosocial and spiritual needs of patients with life-limiting illnesses and their families according to their preferences

4.3. All eligible patients will receive high quality palliative care and hospice services

CARE COORDINATION

PRIORITY STATEMENT: ENSURE PATIENTS RECEIVE WELL-COORDINATED CARE ACROSS ALL PROVIDERS, SETTINGS, AND LEVELS OF CARE

5.1. All providers will accurately and completely reconcile medications across the continuum of care (i.e. admission, transfer within and between care providers, discharge, and outpatient appointments) and ensure communication with the next provider of services

5.2. All inpatient and outpatient providers will assess the patient's perspective of the coordination of their care using a validated care coordination survey tool

5.3. All providers will reduce 30-day all-cause readmission rates resulting from poorly coordinated care to best-in-class

5.4. All providers will reduce preventable emergency department (i.e. those that could be avoided with timely access to primary care) visits resulting from poorly coordinated care by 50%

PATIENT-FOCUSED CARE

PRIORITY STATEMENT: GUARANTEE HIGH VALUE CARE ACROSS ACUTE AND CHRONIC EPISODES

6.1. All patients will receive high-value care over the course of their acute or chronic illness

OVERUSE

PRIORITY STATEMENT: ELIMINATE WASTE WHILE ENSURING THE DELIVERY OF APPROPRIATE CARE

7.1. Reduce wasteful and inappropriate care for the top ten targeted areas by 50%

THE NATIONAL QUALITY FORUM

MEASURE SUBMISSION FORM VERSION 3.0
August 2008

The measure information you submit will be shared with NQF's Steering Committees and Technical Advisory Panels to evaluate measures against the NQF criteria of importance to measure and report, scientific acceptability of measure properties, usability, and feasibility. Four conditions (as indicated below) must be met before proposed measures may be considered and evaluated for suitability as voluntary consensus standards. Not all acceptable measures will be strong—or equally strong—among each set of criteria. The assessment of each criterion is a matter of degree; however, all measures must be judged to have met the first criterion, importance to measure and report, in order to be evaluated against the remaining criteria. References to the specific measure evaluation criteria are provided in parentheses following the item numbers. Please refer to the *Measure Evaluation Criteria* for more information at ***www.qualityforum.org*** under Core Documents. Additional guidance is being developed and when available will be posted on the NQF website.

Use the tab or arrow (↓→) keys to move the cursor to the next field (or back ←↑). There are three types of response fields:

- drop-down menus - select one response;
- check boxes – check as many as apply; and
- text fields – you can copy and paste text into these fields or enter text; these fields are not limited in size, but in most cases, we ask that you summarize the requested information.

Please note that URL hyperlinks do not work in the form; you will need to type them into your web browser.

Be sure to answer all questions. Fields that are left blank will be interpreted as no or none. Information must be provided in this form. Attachments are not allowed except when specifically requested or to provide additional detail or source documents for information that is summarized in this form. If you have important information that is not addressed by the questions, they can be entered into item #48 near the end of the form.

For questions about this form, please contact the NQF Project Director listed in the corresponding call for measures.

	CONDITIONS FOR CONSIDERATION BY NQF
	Four conditions must be met before proposed measures may be considered and evaluated for suitability as voluntary consensus standards.
A (A)	**Public domain or Intellectual Property Agreement signed:** IP Agreement signed and submitted (If no, do not submit) *Template for the Intellectual Property Agreement is available at* **www.qualityforum.org** *under Core Documents.*
B (B)	**Measure steward/maintenance:** Is there an identified responsible entity and process to maintain and update the measure on a schedule commensurate with clinical innovation, but at least every 3 years? Yes, information provided in contact section (If no, do not submit)
C (C)	**Intended use:** Does the intended use of the measure include BOTH public reporting AND quality improvement? Yes (If no, do not submit)
D (D)	**Fully developed and tested:** Is the measure fully developed AND tested? Yes, fully developed and tested (If not tested and no plans for testing within 24 months, do not submit)

THE NATIONAL QUALITY FORUM

MEASURE SUBMISSION FORM VERSION 3.0
August 2008

	(for NQF staff use) **NQF Review #:** EC-058-08 **NQF Project:** National Voluntary Consensus Standards for Ambulatory Care Using Clinically Enriched Administrative Data
	MEASURE SPECIFICATIONS & DESCRIPTIVE INFORMATION
1	**Information current as of** *(date- MM/DD/YY)*: 10/31/2008
2	**Title of Measure:** Rheumatoid Arthritis New DMARD Baseline Chest X-Ray
3	**Brief description of measure** [1]**:** This measure identifies adult patients with a diagnosis of rheumatoid arthritis who received a baseline chest x-ray (CXR or Chest CT) within one year before to 14 days after the new start of selected DMARDs (methotrexate, etanercept, kineret, infliximab, or adalimumab) during the measurement year.
4 (2a)	**Numerator Statement:** Patients in the denominator who received a Chest X-ray or Chest CT within one year before to 14 days after the new start of methotrexate, etanercept, kineret, infliximab, or adalimumab during the measurement year **Time Window:** **Numerator Details** (Definitions, codes with description): >=1 claim for 'CXR' (CXR or Chest CT) occurring within one year before to 14 days after the new start of methotrexate, etanercept, kineret, infliximab, or adalimumab during the measurement year CXR (Procedure) Type Code Description CPT4 71010 RAD EX CHST; SINGLE VIEW FRNTL CPT4 71015 RADIOLOGIC EXAM CHST; STEREO FRNTL CPT4 71020 RAD EX CHST 2 VIEWS FRNTL&LAT; CPT4 71021 RAD EXAM CHEST-FRONT & LAT; W/APICL CPT4 71022 RAD EXAM CHEST; 2 VIEW W/OBLIQ PROJ CPT4 71023 RAD EXAM CHEST FRONT & LAT; W/FLUOR CPT4 71030 RAD EX CHST CMPL MINI 4 VIEWS; CPT4 71034 RAD EXAM CHEST CMPL; W/FLOUROSCPY CPT4 71035 RADIOLOGIC EXAM CHST SPECIAL VIEWS CPT4 71111 RAD EXAM RIBS BILATERAL; W/PA CHEST CPT4 71250 CMPT TOMOGRPH THORAX; W/O CONTRST CPT4 71260 CMPT TOMOGRPH THORAX; W/CONTRST CPT4 71270 CT THORAX; W/O&W/CONTRST&OTH SECT HSREV 0324 Radiology - Diagnostic
5 (2a)	**Denominator Statement:** Patients >=18 years old with a history of rheumatoid arthritis and a new start of methotrexate, etanercept, kineret, infliximab, or adalimumab anytime from the beginning of the measurement year to 14 days prior to the end of the measurement year. (This list of DMARDs will hereafter be refered to as 'DMARD needing baseline CXR') **Time Window:** **Denominator Details** (Definitions, codes with description):

[1] Example of measure description: Percentage of adult patients with diabetes aged 18-75 years receiving one or more A1c test(s) per year.

- Age >=18 years as of the end of the measurement year
- AND meets criteria for rheumatoid arthritis based on RHI's Rheumatoid Arthritis criteria, which requires:
  >=2 office visits with a diagnosis code for 'rheumatoid arthritis' or
  >=1 inpatient or emergency room claim for 'rheumatoid arthritis' anytime in the past
- AND >=1 Rx claim for 'DMARD needing baseline CXR' prescribed anytime from the start of the measurement year to 14 days prior to the end of the measurement year
- AND has Rx eligbility for the entire year prior to the earliest observed 'DMARD needing baseline CXR'
- AND no Rx claims for 'DMARD needing baseline CXR' in the 365 days prior to the earliest 'DMARD needing baseline CXR' prescription identified during the measurement year
- AND eligible for medical benefits for 365 days before to 14 days after the initial 'DMARD needing baseline CXR' Rx claim

Adalimumab (Medispan Drug)

Type	GPI Code	Description
GPI	66270015006410	Adalimumab Inj Kit 20 MG/0.4ML
GPI	66270015006420	Adalimumab Inj Kit 40 MG/0.8ML (50 MG/ML)

Anakinra (Medispan Drug)

Type	GPI Code	Description
GPI	66260010002020	Anakinra Subcutaneous Inj 100 MG/0.67ML

Etanercept (Medispan Drug)

Type	GPI Code	Description
GPI	66290030002020	Etanercept Subcutaneous Inj 50 MG/ML
GPI	66290030006420	Etanercept For Subcutaneous Inj Kit 25 MG

Infliximab (Medispan Drug)

Type	GPI Code	Description
GPI	52505040002120	Infliximab For IV Inj 100 MG

oral methothrexate (Medispan Drug)

Type	GPI Code	Description
GPI	21300050100310	Methotrexate Sodium Tab 2.5 MG (Base Equiv)
GPI	21300050100320	Methotrexate Sodium Tab 5 MG (Base Equiv)
GPI	21300050100330	Methotrexate Sodium Tab 7.5 MG (Base Equiv)
GPI	21300050100340	Methotrexate Sodium Tab 10 MG (Base Equiv)
GPI	21300050100350	Methotrexate Sodium Tab 15 MG (Base Equiv)
GPI	66250050100320	Methotrexate Sodium Tab 2.5 MG (Antirheumatic)

Rheumatoid Arthritis (Diagnosis)

Type	Code	Description
ICD9	7140	RHEUMATOID ARTHRITIS
ICD9	7141	FELTYS SYNDROME
ICD9	7142	OTH RA W/VISCERAL/SYSTEMIC INVLV
ICD9	71481	RHEUMATOID LUNG

6 (2a, 2d)	**Denominator Exclusions:** None **Denominator Exclusion Details** (Definitions, codes with description):
7 (2a, 2h)	**Stratification** Do the measure specifications require the results to be stratified? No ► If "other" describe: **Identification of stratification variable(s):** **Stratification Details** (Definitions, codes with description):
8 (2a, 2e)	**Risk Adjustment** Does the measure require risk adjustment to account for differences in patient severity before the onset of care? No ► **If yes,** (select one) ► Is there a separate proprietary owner of the risk model? (select one) **Identify Risk Adjustment Variables:** **Detailed risk model:** attached ☐ **OR** Web page URL:
9 (2a)	**Type of Score:** Rate/proportion **Calculation Algorithm:** attached ☒ **OR** Web page URL: **Interpretation of Score** (*Classifies interpretation of score according to whether better quality is associated with a higher score, a lower score, a score falling within a defined interval, or a passing score*) Better quality = Higher score ► If "Other", please describe:
10 (2a. 4a, 4b)	**Identify the required data elements**(e.g., primary diagnosis, lab values, vital signs)**:** procedure, diagnosis, pharmacy claims **Data dictionary/code table** attached ☒ **OR** Web page URL: **Data Quality** (2a) *Check all that apply* ☐ Data are captured from an authoritative/accurate source (e.g., lab values from laboratory personnel) ☒ Data are coded using recognized data standards ☐ Method of capturing data electronically fits the workflow of the authoritative source ☐ Data are available in EHRs ☒ Data are auditable
11 (2a, 4b)	**Data Source and Data Collection Methods** *Identifies the data source(s) necessary to implement the measure specifications. Check all that apply* ☐ Electronic Health/Medical Record ☐ Electronic Clinical Database, Name: ☐ Electronic Clinical Registry, Name: ☒ Electronic Claims ☒ Electronic Pharmacy data ☐ Electronic Lab data ☐ Electronic source – other, Describe: ☐ Paper Medical Record ☐ Standardized clinical instrument, Name: ☐ Standardized patient survey, Name: ☐ Standardized clinician survey, Name: ☒ Other, Describe: It is reasonable to allow physicians to submit definitive evidence that a particular service was provided to a patient. For example, a lab result from a testing facility would indicate that that lab test was performed. A notation in a patient chart that the test was ordered, in contrast, would not provide definitive evidence that the test was performed. Instrument/survey attached ☐ **OR** Web page URL:
12 (2a)	**Sampling** *If measure is based on a sample, provide instructions and guidance on sample size.* **Minimum sample size:** 10 **Instructions:** We have developed a hierarchical logistic regression model with expert biostatisticians at the Johns Hopkins School of Public Health that enables one to produce a probability distribution around a

	point estimate of the "quality score" for a given physician. This model has shown that there is no minimum sample size that is required to produce a quality score which has a comparatively "tight" probability distribution. Rather, the number of required observations depends on how a given physician performs on particular measures compared to how all other MDs perform on those measures. We recommend that a minimum of 10 observations be required, however, because of the normality assumptions that underlies the model and for public "face validity". Alternatively, to satisfy current NCQA standards, a minimum of 30 observations could be required.
13 (2a)	**Type of Measure:** Process ► If "Other", please describe: ► If part of a composite or paired with another measure, please identify composite or paired measure
14 (2a)	**Unit of Measurement/Analysis** (*Who or what is being measured*) *Check all that apply.* ☐ Can be measured at all levels ☒ Individual clinician (e.g., physician, nurse) ☒ Group of clinicians (e.g., facility department/unit, group practice) ☐ Facility (e.g., hospital, nursing home) ☒ Integrated delivery system ☒ Health plan ☒ Community/Population ☐ Other (*Please describe*):
15 (2a)	**Applicable Care Settings** *Check all that apply* ☐ Can be used in all healthcare settings ☒ Ambulatory Care (office/clinic) ☐ Behavioral Healthcare ☒ Community Healthcare ☐ Dialysis Facility ☐ Emergency Department ☐ EMS emergency medical services ☒ Health Plan ☐ Home Health ☐ Hospice ☐ Hospital ☐ Long term acute care hospital ☐ Nursing home/ Skilled Nursing Facility (SNF) ☐ Prescription Drug Plan ☐ Rehabilitation Facility ☐ Substance Use Treatment Program/Center ☐ Other (*Please describe*):
	IMPORTANCE TO MEASURE AND REPORT
	Note: This is a threshold criterion. If a measure is not judged to be sufficiently important to measure and report, it will not be evaluated against the remaining criteria.
16 (1a)	**Addresses a Specific National Priority Partners Goal** *Enter the numbers of the specific goals related to this measure (see list of goals on last page)*: 6.1
17 (1a)	**If not related to NPP goal, identify high impact aspect of healthcare** (select one) **Summary of Evidence:** **Citations[2] for Evidence:**
18 (1b)	**Opportunity for Improvement** *Provide evidence that demonstrates considerable variation, or overall poor performance, across providers.* **Summary of Evidence:**

numerator	denominator	proportion
1	6	16.67%
39	118	33.05%
45	121	37.19%
18	46	39.13%
26	55	47.27%
18	35	51.43%

[2] Citations can include, but are not limited to journal articles, reports, web pages (URLs).

	Citations for Evidence: RHI client experience
19 (1b)	**Disparities** *Provide evidence that demonstrates disparity in care/outcomes related to the measure focus among populations.* **Summary of Evidence:** not applicable **Citations for evidence:**
20 (1c)	**If measuring an Outcome** Describe relevance to the national health goal/priority, condition, population, and/or care being addressed: **If not measuring an outcome, provide evidence supporting this measure topic and grade the strength of the evidence** *Summarize the evidence (including citations to source) supporting the focus of the measure as follows:* • Intermediate outcome – evidence that the measured intermediate outcome (e.g., blood pressure, Hba1c) leads to improved health/avoidance of harm or cost/benefit. • Process – evidence that the measured clinical or administrative process leads to improved health/avoidance of harm and if the measure focus is on one step in a multi-step care process, it measures the step that has the greatest effect on improving the specified desired outcome(s). • Structure – evidence that the measured structure supports the consistent delivery of effective processes or access that lead to improved health/avoidance of harm or cost/benefit. • Patient experience – evidence that an association exists between the measure of patient experience of health care and the outcomes, values and preferences of individuals/ the public. • Access – evidence that an association exists between access to a health service and the outcomes of, or experience with, care. • Efficiency– demonstration of an association between the measured resource use and level of performance with respect to one or more of the other five IOM aims of quality. **Type of Evidence** *Check all that apply* ☒ Evidence-based guideline ☐ Quantitative research studies ☐ Meta-analysis ☐ Qualitative research studies ☐ Systematic synthesis of research ☐ Other (*Please describe*): **Overall Grade for Strength of the Evidence**[3] (*Use the USPSTF system, or if different, also describe how it relates to the USPSTF system)*: B **Summary of Evidence** (*provide guideline information below*)**:** ACR, AFQuIP **Citations for Evidence:** American College of Rheumatology's Starter Set of Measures for Quality in the Care for Rheumatic and Musculoskeletal Diseases, February 2006. American College of Rheumatology. Arthritis Foundation Quality Indicator Project (AFQuIP) Khanna D, Arnold E, Pencharz JN, Grossman JM, Traina SB, Lal A, MacLean CH. Measuring Process of Arthritis Care: The Arthritis Foundation's Quality Indicator Set for Rheumatoid Arthritis. Semin Arthritis Rheum. 2006;35:211-37. American College of Rheumatology 2008 recommendations for the use of nonbiologic and biologic disease-modifying antirheumatic drugs in rheumatoid arthritis. Arthritis Rheum. 2008 Jun 15;59(6):762-84.

[3]The strength of the body of evidence for the specific measure focus should be systematically assessed and rated, e.g., USPSTF grading system **www.ahrq.gov/clinic/uspstmeth.htm**: **A -** The USPSTF recommends the service. There is high certainty that the net benefit is substantial. **B -** The USPSTF recommends the service. There is high certainty that the net benefit is moderate or there is moderate certainty that the net benefit is moderate to substantial. **C -** The USPSTF recommends against routinely providing the service. There may be considerations that support providing the service in an individual patient. There is at least moderate certainty that the net benefit is small. Offer or provide this service only if other considerations support the offering or providing the service in an individual patient. **D -** The USPSTF recommends against the service. There is moderate or high certainty that the service has no net benefit or that the harms outweigh the benefits. **I -** The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of the service. Evidence is lacking, of poor quality, or conflicting, and the balance of benefits and harms cannot be determined.

21 (1c)	**Clinical Practice Guideline** *Cite the guideline reference; quote the specific guideline recommendation related to the measure and the guideline author's assessment of the strength of the evidence; and summarize the rationale for using this guideline over others.* **Guideline Citation:** American College of Rheumatology's Starter Set of Measures for Quality in the Care for Rheumatic and Musculoskeletal Diseases, February 2006. American College of Rheumatology. **Specific guideline recommendation:** IF a patient with rheumatoid arthritis is newly prescribed a DMARD, THEN appropriate baseline studies should be documented within an appropriate period of time from the original prescription. (See Table 1 of guideline). Table 1 indicates that a baseline Chest X-Ray should be performed for initiation of methotrexate, etanercept, kineret, infliximab, or adalimumab during the measurement year. **Guideline author's rating of strength of evidence** (*If different from USPSTF, also describe it and how it relates to USPSTF)*: B **Rationale for using this guideline over others:** This measure is based on Rheumatoid Arthritis Quality Measures from the American College of Rheumatology and the Arthritis Foundation.
22 (1c)	**Controversy/Contradictory Evidence** *Summarize any areas of controversy, contradictory evidence, or contradictory guidelines and provide citations.* **Summary:** **Citations:**
23 (1)	**Briefly describe how this measure (as specified) will facilitate significant gains in healthcare quality related to the specific priority goals and quality problems identified above:** ACR Guidelines for the Management of Rheumatoid Arthritis recommends baseline chest imaging to screen for active or latent tuberculosis for certain DMARDs, given their immunosupressive effects. This measure captures whether a baseline Chest X-Ray or Chest CT was ordered when initiating a 'DMARD needing baseline CXR,' specifically methotrexate, etanercept, kineret, infliximab, or adalimumab during the measurement year
	SCIENTIFIC ACCEPTABILITY OF MEASURE PROPERTIES
	Note: Testing and results should be summarized in this form. However, additional detail and reports may be submitted as supplemental information or provided as a web page URL. If a measure has not been tested, it is only potentially eligible for time-limited endorsement.
24	**Supplemental Testing Information:** attached ☐ **OR** Web page URL:
25 (2b)	**Reliability Testing** **Data/sample:** We have tested this measure on several patient populations, including, in total, more than 30 million people enrolled in 18 different health plans. In addition, we have used analogous computer algorithms to identify patient-specific QI opportunities in more than 5 million health plan members and have sent messages regarding those opportunities to either the member or the member's physician or both. **Analytic Method:** The validity of a physician quality score describes how accurately it estimates the true value. Reliability is the stability or consistency of an estimator from one data set to the next. Both are important in assessing the performance of the quality score. We have used the following measure as an indication of the reliability of each of our measures: 1 minus [(the variance of the posterior distribution of the physician quality score) divided by (the variance of the true physician quality score)], which is the reduction in the variance of a doctor's performance score (posterior distribution) obtained by using his or her performance data, expressed as a fraction of the total variance before any data is collected. **Testing Results:** The reliability of a physician quality score depends on the number of observations available for a given physician, how the physician performs relative to all other physician, and the overall

	variance in physician quality scores. As a result, reliability varies with the population of MDs in whom the measure is used. In our experience, reliability is in the range of 0.5 to >0.7.
26 (2c)	**Validity Testing** **Data/sample:** We have tested this measure on several patient populations, including, in total, more than 30 million people enrolled in 18 different health plans. In addition, we have used analogous computer algorithms to identify patient-specific QI opportunities in more than 5 million health plan members and have sent messages regarding those opportunities to either the member or the member's physician or both. **Analytic Method:** We have employed several approaches to ensure the validity of this measure: 1) we've ensured that the technical specifications for this measure are valid reflections of the underlying clinical practice guideline; 2) we have obtained feedback on the validity of the measure from several physician panels that were assembled by either Care Focused Purchasing or the Massachusetts Group Insurance Commission Clinical Performance Improvement Initiative, or both, and 3) we have systematically collected feedback from physicians and health plan members to whom we have sent messages regarding this measure. **Testing Results:** This measure is considered to be valid by the physician panels that have reviewed it. (More information regarding the panels is provided elsewhere in this document.) In addition, the measure has been considered to be valid by the medical directors of 17 different health plans. In addition, the fact that thousands of physicians have received results based on this measure without indicating that they don't believe the measure is valid attests to its validity.
27 (2d)	**Measure Exclusions** *Provide evidence to justify exclusion(s) and analysis of impact on measure results during testing.* **Summary of Evidence supporting exclusion(s):** **Citations for Evidence:** **Data/sample:** **Analytic Method:** **Testing Results:**
28 (2e)	**Risk Adjustment Testing** *Summarize the testing used to determine the need (or no need) for risk adjustment and the statistical performance of the risk adjustment method.* **Data/sample:** **Analytic Method:** **Testing Results:** ►**If outcome or resource use measure not risk adjusted, provide rationale:** There is no need to risk adjust results from this measure. To the extent that the measure applies only to patients in a particular risk category, that has been taken into account in the specifications for the denominator or exclusions for this measure
29 (2g)	**Testing comparability of results when more than 1 data method is specified** (*e.g., administrative claims or chart abstraction*) **Data/sample:** **Analytic Method:** **Results:**
30	**Provide Measure Results from Testing or Current Use** Results from current use

(2f) **Data/sample: Data/sample: Group Insurance Commission (GIC):**
In 2003, the Massachusetts Group Insurance Commission GIC launched the Clinical Performance Improvement initiative, requiring health plans under contract with the GIC to incorporate provider "tiering"—differential payments based on value—into their GIC product. For this initiative, RHI evaluates physician performance on a set of quality measures using administrative claims data from approximately 2.2 million health plan members.

Methods to identify statistically significant and practically/meaningfully differences in performance:
We have developed a hierarchical logistic regression model with expert biostatisticians at the Johns Hopkins School of Public Health that enables one to produce a probability distribution around a point estimate of the "quality score" for a given physician. This model has shown that there is no minimum sample size that is required to produce a quality score which has a comparatively "tight" probability distribution. Rather, the number of required observations depends on how a given physician performs on particular measures compared to how all other MDs perform on those measures. We recommend that a minimum of 10 observations be required, however, because of the normality assumption that underlies the model and for public "face validity". Alternatively, to satisfy current NCQA standards, a minimum of 30 observations could be required. We have employed this statistical approach in the MD quality profiling we performed on the experience of more than 2 million members of 6 health plans participating in the Massachusetts Group Insurance Commission Clinical Performance Improvement Initiative in 2008.

Results:

numerator	denominator	proportion
147	381	38.58%

31 (2h) **Identification of Disparities**
►If measure is stratified by factors related to disparities (i.e. race/ethnicity, primary language, gender, SES, health literacy), **provide stratified results:**

►If disparities have been reported/identified, but measure is not specified to detect disparities, provide rationale:

USABILITY

32 (3) **Current Use** In use **If in use, how widely used** State ► If "other," please describe:

☒ Used in a public reporting initiative, name of initiative: Group Insurance Commision of Masschusetts Clinical Practice Improvement Initiative
Sample report attached ☐ **OR** Web page URL: http://www.mass.gov/gic/annualreportb.htm

33 (3a) **Testing of Interpretability** (*Testing that demonstrates the results are understood by the potential users for public reporting and quality improvement*)

Data/sample: We have tested this measure on several patient populations, including, in total, more than 30 million people enrolled in 18 different health plans.

Methods: The results have been provided to the medical directors of the 18 health plans, all of whom have indicated that they understand the particular aspect of care that the measure addresses and how to interpret the result for a physician. In addition, results have been presented to HR directors from >60 national employers.

Results: Both the health plan medical directors and the HR personnel from the employers have indicated that they understand the particular aspect of care that the measure addresses and how to interpret the result for a physician. We do not have data on the extent to which individual physicians understand the measure result, but we presume that, since health plan medical directors and non-medical personnel from employers understand the result, that physicians and lay people will also so long that adequate

	explanation is provided.
34 (3b, 3c)	**Relation to other NQF-endorsed™ measures** ►Is this measure similar or related to measure(s) already endorsed by NQF (on the same topic or the same target population)? *Measures can be found at **www.qualityforum.org** under Core Documents.* *Check all that apply* ☐ Have not looked at other NQF measures ☐ Other measure(s) on same topic ☐ Other measure(s) for same target population ☒ No similar or related measures **Name of similar or related NQF-endorsed™ measure(s):** **Are the measure specifications harmonized with existing NQF-endorsed™ measures?** (select one) ►If not fully harmonized, provide rationale: **Describe the distinctive, improved, or additive value this measure provides to existing NQF-endorsed measures:**
	FEASIBILITY
35 (4a)	**How are the required data elements generated?** *Check all that apply* ☐ Data elements are generated concurrent with and as a byproduct of care processes during care delivery (e.g., blood pressure or other assessment recorded by personnel conducting the assessment) ☐ Data elements are generated from a patient survey (e.g., CAHPS) ☒ Data elements are generated through coding performed by someone other than the person who obtained the original information (e.g., DRG or ICD-9 coding on claims) ☐ Other, Please describe:
36 (4b)	**Electronic Sources** All data elements ►**If all data elements are not in electronic sources, specify the near-term path to electronic collection by most providers:** ►**Specify the data elements for the electronic health record:**
37 (4c)	**Do the specified exclusions require additional data sources beyond what is required for the other specifications?** No ►**If yes, provide justification:**
38 (4d)	**Identify susceptibility to inaccuracies, errors, or unintended consequences of the measure:** As with any type of clinical performance measure, and with any source of data used to operationalize the measure, there will be some instances in which the data used to compute the measure are incomplete or inaccurate. We try to minimize the impact of such errors or omissions through the way we have constructed the technical specifications for the measure. There is no data source for performance measurement that is completely accurate. Two studies have shown that physician performance tends to be better when assessed using claims data compared to via chart abstraction. **Describe how could these potential problems be audited:** Potential data errors of omission or commission could be audited through chart abstraction, or feedback from physicians and patients. However, as mentioned above, each of these alternative sources of information also are susceptible to error and thus are not true gold standards. **Did you audit for these potential problems during testing?** Yes **If yes, provide results:** Through feedback from physicians whose performance has been evaluated.
39	**Testing feasibility** Describe what have you learned/modified as a result of testing and/or operational use of the measure regarding data collection, availability of data/missing data, timing/frequency of data

(4e)	collection, patient confidentiality, time/cost of data collection, other feasibility/ implementation issues: The technical specifications for all of our measures have been reviewed over time by numerous physicians and have been adjusted when feedback has indicated a way to improve the measure. Our experience suggests that the only practical and affordable approach for evaluation of the performance of individual MDs on a large scale is through use of claims data. We have found there to be benefit from determining whether a particular health plan has capitated arrangements with physicians or other types of providers (e.g. labs and radiology facilities) in a particular geographic area and, in those instances, to only include observations if encounter data are available. We routinely require at least 4 months of "claims runout" after the end of a measurement year in order to take account of claim lag.
	CONTACT INFORMATION
40	**Web Page URL for Measure Information** *Describe where users (implementers) should go for more details on specifications of measures, or assistance in implementing the measure.* **Web page URL:** *www.resolutionhealth.com*
41	**Measure Intellectual Property Agreement Owner Point of Contact** **First Name:** Alan **MI:** **Last Name:** Lefkowitz **Credentials (MD, MPH, etc.):** **Organization:** Resolution Health **Street Address:** 10490 Little Patuxent Parkway **City:** Columbia **State:** MD **ZIP:** 21044 **Email:** alefkowitz@resolutionhealth.com **Telephone:** 240-295-5834 ext:
42	**Measure Submission Point of Contact** **If different than IP Owner Contact** **First Name:** Darren **MI:** M **Last Name:** Schulte **Credentials (MD, MPH, etc.):** MD, MPP **Organization:** Resolution Health **Street Address:** 10490 Little Patuxent Parkway **City:** Columbia **State:** MD **ZIP:** 21044 **Email:** dschulte@resolutionhealth.com **Telephone:** 650-773-3308 ext:
43	**Measure Developer Point of Contact** **If different than IP Owner Contact** **First Name:** Darren **MI:** M **Last Name:** Schulte **Credentials (MD, MPH, etc.):** MD, MPP **Organization:** Resolution Health **Street Address:** 10490 Little Patuxent Parkway **City:** Columbia **State:** MD **ZIP:** 21044 **Email:** dschulte@resolutionhealth.com **Telephone:** 650-773-3308 ext:
44	**Measure Steward Point of Contact** **If different than IP Owner Contact** *Identifies the organization that will take responsibility for updating the measure and assuring it is consistent with the scientific evidence and current coding schema; the steward of the measure may be different than the developer.* **First Name:** Darren **MI:** M **Last Name:** Schulte **Credentials (MD, MPH, etc.):** MD, MPP **Organization:** Resolution Health **Street Address:** 10490 Little Patuxent Parkway **City:** Columbia **State:** MD **ZIP:** 21044 **Email:** dschulte@resolutionhealth.com **Telephone:** 650-773-3308 ext:
	ADDITIONAL INFORMATION
45	**Workgroup/Expert Panel involved in measure development** Workgroup/panel used ►If workgroup used, describe the members' role in measure development: Over the past several years, two formal workgroups -- one organized by the Care Focused Purchasing initiative and one organized by the Massachusetts Group Insurance Commission Clinical Performance Improvement Initiative -- and several ad hoc experts have provided useful input to our measure development and refinement processes. In each case, we have provided the Work Group Members with details regarding each of our performance measures and members of the work group (not always all members) have provided feedback on the validity of the clinical practice guideline underlying the measure and suggestions regarding potential ways to improve the technical specifications for the measure. In some instances, we have eliminated measures based on feedback from the work groups. In other instances, work group members have proposed new measures. We try to get feedback from work group members and selected clinical experts on an annual basis. ►Provide a list of workgroup/panel members' names and organizations:

	Care Focused Purchasing Clinical Advisory Panel Bobbie Berg -BCBS -IL Dow Briggs - BCBS- AL Joe Calderella - Cigna Carl Cameron - Preferred Care Steven Goldberg – Humana Tom James – Humana Don Liss – Aetna Catherine MacLean – WellPoint Zak Ramadan-Jradi – Regence Fred Volkman – Avidyn Health Constance Hwang – Resolution Health Darren Schulte - Resolution Health Earl Steinberg – Resolution Health **Massachusetts Group Insurance Commission Physician Advisory Panel** Jim Glauber – Neighborhood Health Plan Lyn Laurenco - Neighborhood Health Plan Anton Dodek - Tufts Barbara Chase - Fallon Jonathan Scott Coblyn – Brigham and Women's Hospital Tom Ebert - Health New England Elaine Wilson - Harvard Pilgrim Health Care Jennifer St. Thomas – Tufts Jennifer Lavigne – Fallon Michael O'Shea - Baycare Health Neil Minkoff - Harvard Pilgrim Health Care Paul Mendis- Neighborhood Health Plan Bob Jordan - Neighborhood Health Plan Bob Sorrenti – Unicare Constance Williams – Unicare Laura Syron - Neighborhood Health Plan Susan Tiffany – Unicare Constance Hwang – Resolution Health Darren Schulte - Resolution Health Earl Steinberg – Resolution Health David Gregg – Mercer Russ Robinson - Mercer
46	**Measure Developer/Steward Updates and Ongoing Maintenance** Year the measure was first released: 2008 Month and Year of most recent revision: October 2008 What is the frequency for review/update of this measure? Annual Review When is the next scheduled review/update for this measure? Summer 2009
47	**Copyright statement/disclaimers:** Copyright © 2008 – Resolution Health, Inc. All rights reserved. The material submitted is confidential and proprietary. No use of this material is permitted other than in accordance with the Agreement with Measure Stewards between National Quality Forum and Resolution Health, Inc.
48	**Additional Information:** None
49	**I have checked that the submission is complete and any blank fields indicate that no information is provided.** ☒
50	**Date of Submission** (*MM/DD/YY*)**:** 11/20/2008

PATIENT & FAMILY ENGAGEMENT

PRIORITY STATEMENT: Engage Patients and Their Families in Managing Their Health and Making Decisions About Their Care

1.1. All providers will routinely solicit and publicly report on their patients' perspectives of care

1.2. All providers will work collaboratively with their patients to assist them in making informed decisions about treatment options consistent with their values and preferences

POPULATION HEALTH

PRIORITY STATEMENT: IMPROVE THE HEALTH OF THE U.S. POPULATION

2.1. The population will be up to date on all high-priority age- and gender-appropriate evidence-based clinical preventive services

2.2. The population will receive recommended evidence-based interventions to improve targeted healthy lifestyle behaviors

2.3. All communities will demonstrate a 10% improvement in their community index of health

2.4. Americans will have all recommended high priority healthy lifestyle behaviors under control

SAFETY

PRIORITY STATEMENT: IMPROVE THE SAFETY OF THE U.S. HEALTH CARE SYSTEM

3.1. All providers will drive all preventable healthcare-associated infections (HAI) to zero

3.2. All providers will drive the incidence of preventable NQF Serious Reportable Events (SRE) to zero

3.3. All hospitals will reduce preventable and premature mortality rates to best-in-class

3.4. All hospitals and their community partners will reduce 30-day mortality rates following hospitalization for select conditions to best-in-class

PALLIATIVE CARE

PRIORITY STATEMENT: GUARANTEE APPROPRIATE AND COMPASSIONATE CARE FOR PATIENTS WITH LIFE-LIMITING ILLNESSES

4.1. All providers will identify, document, and effectively treat physical symptoms (e.g. pain, shortness of breath, constipation, others) at levels acceptable to patients with a life-limiting illness

4.2. All providers will effectively address the psychosocial and spiritual needs of patients with life-limiting illnesses and their families according to their preferences

4.3. All eligible patients will receive high quality palliative care and hospice services

CARE COORDINATION

PRIORITY STATEMENT: ENSURE PATIENTS RECEIVE WELL-COORDINATED CARE ACROSS ALL PROVIDERS, SETTINGS, AND LEVELS OF CARE

5.1. All providers will accurately and completely reconcile medications across the continuum of care (i.e. admission, transfer within and between care providers, discharge, and outpatient appointments) and ensure communication with the next provider of services

5.2. All inpatient and outpatient providers will assess the patient's perspective of the coordination of their care using a validated care coordination survey tool

5.3. All providers will reduce 30-day all-cause readmission rates resulting from poorly coordinated care to best-in-class

5.4. All providers will reduce preventable emergency department (i.e. those that could be avoided with timely access to primary care) visits resulting from poorly coordinated care by 50%

PATIENT-FOCUSED CARE

PRIORITY STATEMENT: GUARANTEE HIGH VALUE CARE ACROSS ACUTE AND CHRONIC EPISODES

6.1. All patients will receive high-value care over the course of their acute or chronic illness

OVERUSE

PRIORITY STATEMENT: ELIMINATE WASTE WHILE ENSURING THE DELIVERY OF APPROPRIATE CARE

7.1. Reduce wasteful and inappropriate care for the top ten targeted areas by 50%

THE NATIONAL QUALITY FORUM

MEASURE SUBMISSION FORM VERSION 3.0
August 2008

The measure information you submit will be shared with NQF's Steering Committees and Technical Advisory Panels to evaluate measures against the NQF criteria of importance to measure and report, scientific acceptability of measure properties, usability, and feasibility. Four conditions (as indicated below) must be met before proposed measures may be considered and evaluated for suitability as voluntary consensus standards. Not all acceptable measures will be strong—or equally strong—among each set of criteria. The assessment of each criterion is a matter of degree; however, all measures must be judged to have met the first criterion, importance to measure and report, in order to be evaluated against the remaining criteria. References to the specific measure evaluation criteria are provided in parentheses following the item numbers. Please refer to the *Measure Evaluation Criteria* for more information at ***www.qualityforum.org*** under Core Documents. Additional guidance is being developed and when available will be posted on the NQF website.

Use the tab or arrow (↓→) keys to move the cursor to the next field (or back ←↑). There are three types of response fields:

- drop-down menus - select one response;
- check boxes – check as many as apply; and
- text fields – you can copy and paste text into these fields or enter text; these fields are not limited in size, but in most cases, we ask that you summarize the requested information.

Please note that URL hyperlinks do not work in the form; you will need to type them into your web browser.

Be sure to answer all questions. Fields that are left blank will be interpreted as no or none. Information must be provided in this form. Attachments are not allowed except when specifically requested or to provide additional detail or source documents for information that is summarized in this form. If you have important information that is not addressed by the questions, they can be entered into item #48 near the end of the form.

For questions about this form, please contact the NQF Project Director listed in the corresponding call for measures.

	CONDITIONS FOR CONSIDERATION BY NQF
	Four conditions must be met before proposed measures may be considered and evaluated for suitability as voluntary consensus standards.
A (A)	**Public domain or Intellectual Property Agreement signed:** IP Agreement signed and submitted (If no, do not submit) *Template for the Intellectual Property Agreement is available at* **www.qualityforum.org** *under Core Documents.*
B (B)	**Measure steward/maintenance:** Is there an identified responsible entity and process to maintain and update the measure on a schedule commensurate with clinical innovation, but at least every 3 years? Yes, information provided in contact section (If no, do not submit)
C (C)	**Intended use:** Does the intended use of the measure include BOTH public reporting AND quality improvement? Yes (If no, do not submit)
D (D)	**Fully developed and tested:** Is the measure fully developed AND tested? Yes, fully developed and tested (If not tested and no plans for testing within 24 months, do not submit)

THE NATIONAL QUALITY FORUM

MEASURE SUBMISSION FORM VERSION 3.0
August 2008

	(for NQF staff use) **NQF Review #:** EC-059-08 **NQF Project:** National Voluntary Consensus Standards for Ambulatory Care Using Clinically Enriched Administrative Data
	MEASURE SPECIFICATIONS & DESCRIPTIVE INFORMATION
1	**Information current as of** *(date- MM/DD/YY)*: 10/31/2008
2	**Title of Measure:** Rheumatoid Arthritis New DMARD Baseline CBC
3	**Brief description of measure** [1]**:** This measure identifies adult patients with a diagnosis of rheumatoid arthritis who received appropriate baseline complete blood count (CBC) testing within 90 days before to 14 days after the new start of sulfasalazine, methotrexate, leflunomide, azathioprine, D-Penicillamine, intramuscular gold, oral gold, cyclosporine, or cyclophosphamide during the measurement year.
4 (2a)	**Numerator Statement:** Patients in the denominator who received CBC testing within 90 days before to 14 days after the new start of sulfasalazine, methotrexate, leflunomide, azathioprine, D-Penicillamine, intramuscular gold, oral gold, cyclosporine, or cyclophosphamide. **Time Window:** **Numerator Details** (Definitions, codes with description): >=1 claim for 'CBC Group' (or individual test elements Hgb or Hct, WBC, and platelet count) occurring within 90 days before to 14 days after new start of sulfasalazine, methotrexate, leflunomide, azathioprine, D-Penicillamine, intramuscular gold, oral gold, cyclosporine, or cyclophosphamide. CBC Group (Procedure) ========== Type Code Description ------- ------- ---------- CPT4 80050 GENERAL HEALTH PANEL CPT4 80055 OBSTETRIC PANEL CPT4 85007 BLD CNT; SMER MIC EX MNL DIFF WBC CPT4 85008 BLD CNT;SMER MIC EX NO MNL DIFF WBC CPT4 85025 BLD CNT;CMPL AUTO&AUTO DIFF WBC CNT CPT4 85027 BLOOD COUNT; COMPLETE AUTOMATIC HCPCS G0306 CMPL CBC AUTO&AUTO WBC DIFF COUNT HCPCS G0307 COMPLETE AUTOMATED Hemoglobin or Hematocrit (Procedure) ========== Type Code Description ------- ------- ---------- CPT4 80050 GENERAL HEALTH PANEL CPT4 80055 OBSTETRIC PANEL CPT4 83020 HGB FRACTIONATION&QUAN; ELEC-PHORE CPT4 83021 HGB FRACTIONATION&QUAN; CHROMATGRPH CPT4 83026 HGB; COPPER SULFATE METHOD NON-AUTO CPT4 83051 HEMOGLOBIN; PLASMA CPT4 85013 BLOOD COUNT; SPUN MICROHEMATOCRIT CPT4 85014 BLOOD COUNT; HEMATOCRIT CPT4 85018 BLOOD COUNT; HEMOGLOBIN

[1] Example of measure description: Percentage of adult patients with diabetes aged 18-75 years receiving one or more A1c test(s) per year.

	CPT4 85025 BLD CNT;CMPL AUTO&AUTO DIFF WBC CNT CPT4 85027 BLOOD COUNT; COMPLETE AUTOMATIC HCPCS G0306 CMPL CBC AUTO&AUTO WBC DIFF COUNT HCPCS G0307 COMPLETE AUTOMATED Platelet Count (Procedure) ========== Type Code Description ------- ------- ---------- CPT4 80050 GENERAL HEALTH PANEL CPT4 80055 OBSTETRIC PANEL CPT4 85025 BLD CNT;CMPL AUTO&AUTO DIFF WBC CNT CPT4 85027 BLOOD COUNT; COMPLETE AUTOMATIC CPT4 85032 BLOOD COUNT; MANUAL CELL COUNT EA CPT4 85049 BLOOD COUNT; PLATELET AUTOMATED White Blood Cell Count - WBC (Procedure) ========== Type Code Description ------- ------- ---------- CPT4 80050 GENERAL HEALTH PANEL CPT4 80055 OBSTETRIC PANEL CPT4 85004 BLOOD COUNT; AUTO DIFF WBC COUNT CPT4 85007 BLD CNT; SMER MIC EX MNL DIFF WBC CPT4 85009 BLD CNT;MNL DIFF WBC CNT BUFFY COAT CPT4 85025 BLD CNT;CMPL AUTO&AUTO DIFF WBC CNT CPT4 85027 BLOOD COUNT; COMPLETE AUTOMATIC CPT4 85032 BLOOD COUNT; MANUAL CELL COUNT EA CPT4 85048 BLOOD COUNT; LEUKOCYTE AUTO HCPCS G0306 CMPL CBC AUTO&AUTO WBC DIFF COUNT HCPCS G0307 COMPLETE AUTOMATED
5 (2a)	**Denominator Statement:** Patients >=18 years old with a history of rheumatoid arthritis and a new start of sulfasalazine, methotrexate, leflunomide, azathioprine, D-Penicillamine, intramuscular gold, oral gold, cyclosporine, or cyclophosphamide anytime from the beginning of the measurement year to 14 days prior to the end of the measurement year. (This list of DMARDs will hereafter be referred to as 'DMARD needing baseline CBC') **Time Window:** **Denominator Details** (Definitions, codes with description): - Age >=18 years as of the end of the measurement year - AND meets criteria for rheumatoid arthritis based on RHI's Rheumatoid Arthritis criteria, which requires: >=2 office visits with a diagnosis code for 'rheumatoid arthritis' or >=1 inpatient or emergency room claim for 'rheumatoid arthritis' anytime in the past - AND >=1 Rx claim for 'DMARD needing baseline CBC' prescribed anytime from the start of the measurement year to 14 days prior to the end of the measurement year - AND has Rx eligibility for the entire year prior to the earliest observed 'DMARD needing baseline CBC' - AND no Rx claims for 'DMARD needing baseline CBC' in the 365 days prior to the earliest 'DMARD needing baseline CBC' prescription identified during the measurement year - AND eligible for medical benefits for 90 days before to 14 days after the initial 'DMARD needing baseline CBC' Rx claim - AND no claims for inpatient hospitalization during the 90 days prior to 14 days after the initial 'DMARD needing baseline CBC' Rx claim Rheumatoid Arthritis (Diagnosis) ==========

Type	Code	Description
ICD9	7140	RHEUMATOID ARTHRITIS
ICD9	7141	FELTYS SYNDROME
ICD9	7142	OTH RA W/VISCERAL/SYSTEMIC INVLV
ICD9	71481	RHEUMATOID LUNG

Azathioprine (Medispan Drug)

Type	GPI Code	Description
GPI	99406010000305	Azathioprine Tab 50 MG
GPI	99406010000315	Azathioprine Tab 75 MG
GPI	99406010000325	Azathioprine Tab 100 MG
GPI	99406010002900	Azathioprine Powder
GPI	99406010102110	Azathioprine Sodium For Inj 100 MG

Cyclophosphamide_Oral (Medispan Drug)

Type	GPI Code	Description
GPI	21101020000305	Cyclophosphamide Tab 25 MG
GPI	21101020000310	Cyclophosphamide Tab 50 MG

Cyclosporine Analogs (Medispan Drug)

Type	GPI Code	Description
GPI	99402020000110	Cyclosporine Cap 25 MG
GPI	99402020000140	Cyclosporine Cap 100 MG
GPI	99402020002005	Cyclosporine IV Soln 50 MG/ML
GPI	99402020002010	Cyclosporine Oral Soln 100 MG/ML
GPI	99402020300120	Cyclosporine Modified Cap 25 MG
GPI	99402020300130	Cyclosporine Modified Cap 50 MG
GPI	99402020300150	Cyclosporine Modified Cap 100 MG
GPI	99402020302020	Cyclosporine Modified Oral Soln 100 MG/ML

Gold_IM (Medispan Drug)

Type	GPI Code	Description
GPI	66200020002005	Aurothioglucose Inj 50 MG/ML
GPI	66200030002015	Gold Sodium Thiomalate Inj 50 MG/ML

Gold_Oral (Medispan Drug)

Type	GPI Code	Description
GPI	66200010000105	Auranofin Cap 3 MG

Leflunomide_Rx (Medispan Drug)

Type	GPI Code	Description

	GPI 66280050000310 Leflunomide Tab 10 MG GPI 66280050000320 Leflunomide Tab 20 MG oral methothrexate (Medispan Drug) ========== Type GPI Code Description ----- ---------- ---------- GPI 21300050100310 Methotrexate Sodium Tab 2.5 MG (Base Equiv) GPI 21300050100320 Methotrexate Sodium Tab 5 MG (Base Equiv) GPI 21300050100330 Methotrexate Sodium Tab 7.5 MG (Base Equiv) GPI 21300050100340 Methotrexate Sodium Tab 10 MG (Base Equiv) GPI 21300050100350 Methotrexate Sodium Tab 15 MG (Base Equiv) GPI 66250050100320 Methotrexate Sodium Tab 2.5 MG (Antirheumatic) Penicillamine (Medispan Drug) ========== Type GPI Code Description ----- ---------- ---------- GPI 99200030000105 Penicillamine Cap 125 MG GPI 99200030000110 Penicillamine Cap 250 MG GPI 99200030000305 Penicillamine Tab 250 MG GPI 99200030002900 Penicillamine Powder Sulfasalazine (Medispan Drug) ========== Type GPI Code Description ----- ---------- ---------- GPI 52500060000310 Sulfasalazine Tab 500 MG GPI 52500060000610 Sulfasalazine Tab Delayed Release 500 MG GPI 52500060002900 Sulfasalazine Powder
6 (2a, 2d)	**Denominator Exclusions:** The measure excludes patients who have had an inpatient hospitalization during the measurement year because UB04 claims do not document individual lab tests ordered during an inpatient stay. **Denominator Exclusion Details** (Definitions, codes with description): Patient cannot have claims for inpatient hospitalization during the measurement year
7 (2a, 2h)	**Stratification** Do the measure specifications require the results to be stratified? No ► If "other" describe: **Identification of stratification variable(s):** **Stratification Details** (Definitions, codes with description):
8 (2a, 2e)	**Risk Adjustment** Does the measure require risk adjustment to account for differences in patient severity before the onset of care? No ► **If yes,** (select one) ► Is there a separate proprietary owner of the risk model? (select one) **Identify Risk Adjustment Variables:** **Detailed risk model:** attached ☐ **OR** Web page URL:
9 (2a)	**Type of Score:** Rate/proportion **Calculation Algorithm:** attached ☐ **OR** Web page URL: **Interpretation of Score** (*Classifies interpretation of score according to whether better quality is associated with a higher score, a lower score, a score falling within a defined interval, or a passing score*)

	Better quality = Higher score ► If "Other", please describe:
10 (2a. 4a, 4b)	**Identify the required data elements**(e.g., primary diagnosis, lab values, vital signs)**:** procedure, pharmacy claims, diagnosis **Data dictionary/code table** attached ☒ **OR** Web page URL: **Data Quality** (2a) *Check all that apply* ☐ Data are captured from an authoritative/accurate source (e.g., lab values from laboratory personnel) ☒ Data are coded using recognized data standards ☐ Method of capturing data electronically fits the workflow of the authoritative source ☐ Data are available in EHRs ☒ Data are auditable
11 (2a, 4b)	**Data Source and Data Collection Methods** *Identifies the data source(s) necessary to implement the measure specifications. Check all that apply* ☐ Electronic Health/Medical Record ☐ Electronic Clinical Database, Name: ☐ Electronic Clinical Registry, Name: ☒ Electronic Claims ☒ Electronic Pharmacy data ☐ Electronic Lab data ☐ Electronic source – other, Describe: ☐ Paper Medical Record ☐ Standardized clinical instrument, Name: ☐ Standardized patient survey, Name: ☐ Standardized clinician survey, Name: ☒ Other, Describe: It is reasonable to allow physicians to submit definitive evidence that a particular service was provided to a patient. For example, a lab result from a testing facility would indicate that that lab test was performed. A notation in a patient chart that the test was ordered, in contrast, would not provide definitive evidence that the test was performed. Instrument/survey attached ☐ **OR** Web page URL:
12 (2a)	**Sampling** *If measure is based on a sample, provide instructions and guidance on sample size.* **Minimum sample size:** 10 **Instructions:** We have developed a hierarchical logistic regression model with expert biostatisticians at the Johns Hopkins School of Public Health that enables one to produce a probability distribution around a point estimate of the "quality score" for a given physician. This model has shown that there is no minimum sample size that is required to produce a quality score which has a comparatively "tight" probability distribution. Rather, the number of required observations depends on how a given physician performs on particular measures compared to how all other MDs perform on those measures. We recommend that a minimum of 10 observations be required, however, because of the normality assumptions that underlies the model and for public "face validity". Alternatively, to satisfy current NCQA standards, a minimum of 30 observations could be required.
13 (2a)	**Type of Measure:** Process ► If "Other", please describe: ► If part of a composite or paired with another measure, please identify composite or paired measure
14 (2a)	**Unit of Measurement/Analysis** (*Who or what is being measured*) *Check all that apply.* ☐ Can be measured at all levels ☒ Individual clinician (e.g., physician, nurse) ☒ Group of clinicians (e.g., facility department/unit, group practice) ☐ Facility (e.g., hospital, nursing home) ☒ Integrated delivery system ☒ Health plan ☒ Community/Population ☐ Other (*Please describe*):
15 (2a)	**Applicable Care Settings** *Check all that apply* ☐ Can be used in all healthcare settings ☒ Ambulatory Care (office/clinic) ☐ Behavioral Healthcare ☐ Community Healthcare ☐ Dialysis Facility ☐ Hospice ☐ Hospital ☐ Long term acute care hospital ☐ Nursing home/ Skilled Nursing Facility (SNF) ☐ Prescription Drug Plan

	☐ Emergency Department ☐ EMS emergency medical services ☒ Health Plan ☐ Home Health ☐ Rehabilitation Facility ☐ Substance Use Treatment Program/Center ☐ Other (*Please describe*):
	IMPORTANCE TO MEASURE AND REPORT
	Note: This is a threshold criterion. If a measure is not judged to be sufficiently important to measure and report, it will not be evaluated against the remaining criteria.
16 (1a)	**Addresses a Specific National Priority Partners Goal** *Enter the numbers of the specific goals related to this measure (see list of goals on last page)*: 6.1
17 (1a)	**If not related to NPP goal, identify high impact aspect of healthcare** (select one) **Summary of Evidence:** **Citations[2] for Evidence:**
18 (1b)	**Opportunity for Improvement** *Provide evidence that demonstrates considerable variation, or overall poor performance, across providers.* **Summary of Evidence:** numerator denominator proportion --- 5 8 62.50% 139 177 78.53% 29 36 80.56% 34 41 82.93% 114 133 85.71% 60 69 86.96% **Citations for Evidence:** RHI client experience
19 (1b)	**Disparities** *Provide evidence that demonstrates disparity in care/outcomes related to the measure focus among populations.* **Summary of Evidence:** **Citations for evidence:**
20 (1c)	**If measuring an Outcome** Describe relevance to the national health goal/priority, condition, population, and/or care being addressed: **If not measuring an outcome, provide evidence supporting this measure topic and grade the strength of the evidence** *Summarize the evidence (including citations to source) supporting the focus of the measure as follows:* • Intermediate outcome – evidence that the measured intermediate outcome (e.g., blood pressure, Hba1c) leads to improved health/avoidance of harm or cost/benefit. • Process – evidence that the measured clinical or administrative process leads to improved health/avoidance of harm and if the measure focus is on one step in a multi-step care process, it measures the step that has the greatest effect on improving the specified desired outcome(s). • Structure – evidence that the measured structure supports the consistent delivery of effective processes or access that lead to improved health/avoidance of harm or cost/benefit. • Patient experience – evidence that an association exists between the measure of patient experience of health care and the outcomes, values and preferences of individuals/ the public. • Access – evidence that an association exists between access to a health service and the outcomes of, or experience with, care.

[2] Citations can include, but are not limited to journal articles, reports, web pages (URLs).

	• Efficiency- demonstration of an association between the measured resource use and level of performance with respect to one or more of the other five IOM aims of quality. **Type of Evidence** *Check all that apply* ☒ Evidence-based guideline ☐ Quantitative research studies ☐ Meta-analysis ☐ Qualitative research studies ☐ Systematic synthesis of research ☐ Other (*Please describe*): **Overall Grade for Strength of the Evidence**[3] (*Use the USPSTF system, or if different, also describe how it relates to the USPSTF system)*: B **Summary of Evidence** (*provide guideline information below*): ACR, AFQuIP **Citations for Evidence:** American College of Rheumatology's Starter Set of Measures for Quality in the Care for Rheumatic and Musculoskeletal Diseases, February 2006. American College of Rheumatology. Arthritis Foundation Quality Indicator Project (AFQuIP) Khanna D, Arnold E, Pencharz JN, Grossman JM, Traina SB, Lal A, MacLean CH. Measuring Process of Arthritis Care: The Arthritis Foundation's Quality Indicator Set for Rheumatoid Arthritis. Semin Arthritis Rheum. 2006;35:211-37. American College of Rheumatology 2008 recommendations for the use of nonbiologic and biologic disease-modifying antirheumatic drugs in rheumatoid arthritis. Arthritis Rheum. 2008 Jun 15;59(6):762-84.
21 (1c)	**Clinical Practice Guideline** *Cite the guideline reference; quote the specific guideline recommendation related to the measure and the guideline author's assessment of the strength of the evidence; and summarize the rationale for using this guideline over others.* **Guideline Citation:** American College of Rheumatology's Starter Set of Measures for Quality in the Care for Rheumatic and Musculoskeletal Diseases, February 2006. American College of Rheumatology. **Specific guideline recommendation:** IF a patient with rheumatoid arthritis is newly prescribed a DMARD, THEN appropriate baseline studies should be documented within an appropriate period of time from the original prescription. (See Table 1 of guideline). Table 1 indicates that baseline CBC (WBC, Hgb and platelet counts) should be performed for initiation of sulfasalazine, methotrexate, leflunomide, azathioprine, D-Penicillamine, intramuscular gold, oral gold, cyclosporine, or cyclophosphamide. **Guideline author's rating of strength of evidence** (*If different from USPSTF, also describe it and how it relates to USPSTF)*: B **Rationale for using this guideline over others:** This measure is based on Rheumatoid Arthritis Quality Measures from the American College of Rheumatology and the Arthritis Foundation.
22 (1c)	**Controversy/Contradictory Evidence** *Summarize any areas of controversy, contradictory evidence, or contradictory guidelines and provide citations.* **Summary:**

[3]The strength of the body of evidence for the specific measure focus should be systematically assessed and rated, e.g., USPSTF grading system **www.ahrq.gov/clinic/uspstmeth.htm**: **A -** The USPSTF recommends the service. There is high certainty that the net benefit is substantial. **B -** The USPSTF recommends the service. There is high certainty that the net benefit is moderate or there is moderate certainty that the net benefit is moderate to substantial. **C -** The USPSTF recommends against routinely providing the service. There may be considerations that support providing the service in an individual patient. There is at least moderate certainty that the net benefit is small. Offer or provide this service only if other considerations support the offering or providing the service in an individual patient. **D -** The USPSTF recommends against the service. There is moderate or high certainty that the service has no net benefit or that the harms outweigh the benefits. **I -** The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of the service. Evidence is lacking, of poor quality, or conflicting, and the balance of benefits and harms cannot be determined.

	Citations:
23 (1)	**Briefly describe how this measure (as specified) will facilitate significant gains in healthcare quality related to the specific priority goals and quality problems identified above:** ACR Guidelines for the Management of Rheumatoid Arthritis recommends baseline laboratory testing for certain DMARDs, given the potential for significant side effects. This measure captures whether baseline lab testing for a complete blood count (CBC) test (or individual test elements Hgb or Hct, WBC, and platelet count) were appropriately ordered when initiating a 'DMARD needing baseline CBC,' specifically sulfasalazine, methotrexate, leflunomide, azathioprine, D-Penicillamine, intramuscular gold, oral gold, cyclosporine, or cyclophosphamide during the measurement year.
	SCIENTIFIC ACCEPTABILITY OF MEASURE PROPERTIES
	Note: Testing and results should be summarized in this form. However, additional detail and reports may be submitted as supplemental information or provided as a web page URL. If a measure has not been tested, it is only potentially eligible for time-limited endorsement.
24	**Supplemental Testing Information:** attached ☐ **OR** Web page URL:
25 (2b)	**Reliability Testing** **Data/sample:** We have tested this measure on several patient populations, including, in total, more than 30 million people enrolled in 18 different health plans. In addition, we have used analogous computer algorithms to identify patient-specific QI opportunities in more than 5 million health plan members and have sent messages regarding those opportunities to either the member or the member's physician or both. **Analytic Method:** The validity of a physician quality score describes how accurately it estimates the true value. Reliability is the stability or consistency of an estimator from one data set to the next. Both are important in assessing the performance of the quality score. We have used the following measure as an indication of the reliability of each of our measures: 1 minus [(the variance of the posterior distribution of the physician quality score) divided by (the variance of the true physician quality score)], which is the reduction in the variance of a doctor's performance score (posterior distribution) obtained by using his or her performance data, expressed as a fraction of the total variance before any data is collected. **Testing Results:** The reliability of a physician quality score depends on the number of observations available for a given physician, how the physician performs relative to all other physician, and the overall variance in physician quality scores. As a result, reliability varies with the population of MDs in whom the measure is used. In our experience, reliability is in the range of 0.5 to >0.7.
26 (2c)	**Validity Testing** **Data/sample:** We have tested this measure on several patient populations, including, in total, more than 30 million people enrolled in 18 different health plans. In addition, we have used analogous computer algorithms to identify patient-specific QI opportunities in more than 5 million health plan members and have sent messages regarding those opportunities to either the member or the member's physician or both. **Analytic Method:** We have employed several approaches to ensure the validity of this measure: 1) we've ensured that the technical specifications for this measure are valid reflections of the underlying clinical practice guideline; 2) we have obtained feedback on the validity of the measure from several physician panels that were assembled by either Care Focused Purchasing or the Massachusetts Group Insurance Commission Clinical Performance Improvement Initiative, or both, and 3) we have systematically collected feedback from physicians and health plan members to whom we have sent messages regarding this measure. **Testing Results:** This measure is considered to be valid by the physician panels that have reviewed it. (More information regarding the panels is provided elsewhere in this document.) In addition, the measure has been considered to be valid by the medical directors of 17 different health plans. In addition, the fact that thousands of physicians have received results based on this measure without indicating that they

	don't believe the measure is valid attests to its validity.
27 (2d)	**Measure Exclusions** *Provide evidence to justify exclusion(s) and analysis of impact on measure results during testing.* **Summary of Evidence supporting exclusion(s):** UB04 claims do not document individual lab tests ordered during an inpatient stay. Therefore, RHI's proposed measure "Rheumatoid Arthritis New DMARD Baseline CBC" excludes patients who have had an inpatient hospitalization during the four months prior to or after the new 'DMARD needing baseline CBC' prescription date, with the assumption that a CBC test may have been ordered during the hospitalization. **Citations for Evidence:** **Data/sample:** **Analytic Method:** **Testing Results:**
28 (2e)	**Risk Adjustment Testing** *Summarize the testing used to determine the need (or no need) for risk adjustment and the statistical performance of the risk adjustment method.* **Data/sample:** **Analytic Method:** **Testing Results:** ►**If outcome or resource use measure not risk adjusted, provide rationale:** There is no need to risk adjust results from this measure. To the extent that the measure applies only to patients in a particular risk category, that has been taken into account in the specifications for the denominator or exclusions for this measure.
29 (2g)	**Testing comparability of results when more than 1 data method is specified** (*e.g., administrative claims or chart abstraction*) **Data/sample:** **Analytic Method:** **Results:**
30 (2f)	**Provide Measure Results from Testing or Current Use** Results from current use **Data/sample:** **Group Insurance Commission (GIC):** In 2003, the Massachusetts Group Insurance Commission GIC launched the Clinical Performance Improvement initiative, requiring health plans under contract with the GIC to incorporate provider "tiering"—differential payments based on value—into their GIC product. For this initiative, RHI evaluates physician performance on a set of quality measures using administrative claims data from approximately 2.2 million health plan members. **Care Focused Purchasing (CFP)** Care Focused Purchasing, Inc. (CFP) is the largest private or public clinical performance measurement initiative in the nation, representing a coalition of major insurance carriers and more than 50 national self-insured employers. Since CFP's incorporation in 2005, RHI has analyzed medical and pharmacy claims data to assess the quality of care provided by physicians to 29 million CFP employees and members. **Methods to identify statistically significant and practically/meaningfully differences in performance:** We have developed a hierarchical logistic regression model with expert biostatisticians at the Johns Hopkins School of Public Health that enables one to produce a probability distribution around a point estimate of the "quality score" for a given physician. This model has shown that there is no minimum sample size that is required to produce a quality score which has a comparatively "tight" probability

	distribution. Rather, the number of required observations depends on how a given physician performs on particular measures compared to how all other MDs perform on those measures. We recommend that a minimum of 10 observations be required, however, because of the normality assumption that underlies the model and for public "face validity". Alternatively, to satisfy current NCQA standards, a minimum of 30 observations could be required. We have employed this statistical approach in the MD quality profiling we performed on the experience of more than 2 million members of 6 health plans participating in the Massachusetts Group Insurance Commission Clinical Performance Improvement Initiative in 2008. **Results:** numerator denominator proportion --- 381 464 82.11%
31 (2h)	**Identification of Disparities** ►If measure is stratified by factors related to disparities (i.e. race/ethnicity, primary language, gender, SES, health literacy), **provide stratified results:** ►If disparities have been reported/identified, but measure is not specified to detect disparities, provide rationale:
	USABILITY
32 (3)	**Current Use** In use **If in use, how widely used** State ► If "other," please describe: ☒ Used in a public reporting initiative, name of initiative: Group Insurance Commision of Masschusetts Clinical Practice Improvement Initiative Sample report attached ☐ **OR** Web page URL: http://www.mass.gov/gic/annualreportb.htm
33 (3a)	**Testing of Interpretability** (*Testing that demonstrates the results are understood by the potential users for public reporting and quality improvement*) **Data/sample:** We have tested this measure on several patient populations, including, in total, more than 30 million people enrolled in 18 different health plans. **Methods:** The results have been provided to the medical directors of the 18 health plans, all of whom have indicated that they understand the particular aspect of care that the measure addresses and how to interpret the result for a physician. In addition, results have been presented to HR directors from >60 national employers. **Results:** Both the health plan medical directors and the HR personnel from the employers have indicated that they understand the particular aspect of care that the measure addresses and how to interpret the result for a physician. We do not have data on the extent to which individual physicians understand the measure result, but we presume that, since health plan medical directors and non-medical personnel from employers understand the result, that physicians and lay people will also so long that adequate explanation is provided.
34 (3b, 3c)	**Relation to other NQF-endorsed™ measures** ►Is this measure similar or related to measure(s) already endorsed by NQF (on the same topic or the same target population)? *Measures can be found at **www.qualityforum.org** under Core Documents.* *Check all that apply* ☐ Have not looked at other NQF measures ☐ Other measure(s) on same topic ☐ Other measure(s) for same target population ☒ No similar or related measures **Name of similar or related NQF-endorsed™ measure(s):** **Are the measure specifications harmonized with existing NQF-endorsed™ measures?** (select one) ►If not fully harmonized, provide rationale: **Describe the distinctive, improved, or additive value this measure provides to existing NQF-endorsed measures:**

	FEASIBILITY
35 (4a)	**How are the required data elements generated?** *Check all that apply* ☐ Data elements are generated concurrent with and as a byproduct of care processes during care delivery (e.g., blood pressure or other assessment recorded by personnel conducting the assessment) ☐ Data elements are generated from a patient survey (e.g., CAHPS) ☒ Data elements are generated through coding performed by someone other than the person who obtained the original information (e.g., DRG or ICD-9 coding on claims) ☐ Other, Please describe:
36 (4b)	**Electronic Sources** All data elements ►**If all data elements are not in electronic sources, specify the near-term path to electronic collection by most providers:** ►**Specify the data elements for the electronic health record:**
37 (4c)	**Do the specified exclusions require additional data sources beyond what is required for the other specifications?** No ►**If yes, provide justification:**
38 (4d)	**Identify susceptibility to inaccuracies, errors, or unintended consequences of the measure:** As with any type of clinical performance measure, and with any source of data used to operationalize the measure, there will be some instances in which the data used to compute the measure are incomplete or inaccurate. We try to minimize the impact of such errors or omissions through the way we have constructed the technical specifications for the measure. There is no data source for performance measurement that is completely accurate. Two studies have shown that physician performance tends to be better when assessed using claims data compared to via chart abstraction. **Describe how could these potential problems be audited:** Potential data errors of omission or commission could be audited through chart abstraction, or feedback from physicians and patients. However, as mentioned above, each of these alternative sources of information also are susceptible to error and thus are not true gold standards. **Did you audit for these potential problems during testing?** Yes **If yes, provide results:** Through feedback from physicians whose performance has been evaluated.
39 (4e)	**Testing feasibility** Describe what have you learned/modified as a result of testing and/or operational use of the measure regarding data collection, availability of data/missing data, timing/frequency of data collection, patient confidentiality, time/cost of data collection, other feasibility/ implementation issues: The technical specifications for all of our measures have been reviewed over time by numerous physicians and have been adjusted when feedback has indicated a way to improve the measure. Our experience suggests that the only practical and affordable approach for evaluation of the performance of individual MDs on a large scale is through use of claims data. We have found there to be benefit from determining whether a particular health plan has capitated arrangements with physicians or other types of providers (e.g. labs and radiology facilities) in a particular geographic area and, in those instances, to only include observations if encounter data are available. We routinely require at least 4 months of "claims runout" after the end of a measurement year in order to take account of claim lag.
	CONTACT INFORMATION
40	**Web Page URL for Measure Information** *Describe where users (implementers) should go for more details on specifications of measures, or assistance in implementing the measure.* **Web page URL:** *www.resolutionhealth.com*
41	**Measure Intellectual Property Agreement Owner Point of Contact** **First Name:** Alan **MI:** **Last Name:** Lefkowitz **Credentials (MD, MPH, etc.):** **Organization:** Resolution Health **Street Address:** 10490 Little Patuxent Parkway **City:** Columbia **State:** MD **ZIP:** 21044

	Email: alefkowitz@resolutionhealth.com **Telephone:** 240-295-5834 ext:
42	**Measure Submission Point of Contact** **If different than IP Owner Contact** **First Name:** Darren **MI:** M **Last Name:** Schulte **Credentials (MD, MPH, etc.):** MD, MPP **Organization:** Resolution Health **Street Address:** 10490 Little Patuxent Parkway **City:** Columbia **State:** MD **ZIP:** 21044 **Email:** dschulte@resolutionhealth.com **Telephone:** 650-773-3308 ext:
43	**Measure Developer Point of Contact** **If different than IP Owner Contact** **First Name:** Darren **MI:** M **Last Name:** Schulte **Credentials (MD, MPH, etc.):** MD, MPP **Organization:** Resolution Health **Street Address:** 10490 Little Patuxent Parkway **City:** Columbia **State:** MD **ZIP:** 21044 **Email:** dschulte@resolutionhealth.com **Telephone:** 650-773-3308 ext:
44	**Measure Steward Point of Contact** **If different than IP Owner Contact** *Identifies the organization that will take responsibility for updating the measure and assuring it is consistent with the scientific evidence and current coding schema; the steward of the measure may be different than the developer.* **First Name:** Darren **MI:** M **Last Name:** Schulte **Credentials (MD, MPH, etc.):** MD, MPP **Organization:** Resolution Health **Street Address:** 10490 Little Patuxent Parkway **City:** Columbia **State:** MD **ZIP:** 21044 **Email:** dschulte@resolutionhealth.com **Telephone:** 650-773-3308 ext:
	ADDITIONAL INFORMATION
45	**Workgroup/Expert Panel involved in measure development** Workgroup/panel used ►If workgroup used, describe the members' role in measure development: Over the past several years, two formal workgroups -- one organized by the Care Focused Purchasing initiative and one organized by the Massachusetts Group Insurance Commission Clinical Performance Improvement Initiative -- and several ad hoc experts have provided useful input to our measure development and refinement processes. In each case, we have provided the Work Group Members with details regarding each of our performance measures and members of the work group (not always all members) have provided feedback on the validity of the clinical practice guideline underlying the measure and suggestions regarding potential ways to improve the technical specifications for the measure. In some instances, we have eliminated measures based on feedback from the work groups. In other instances, work group members have proposed new measures. We try to get feedback from work group members and selected clinical experts on an annual basis. ►Provide a list of workgroup/panel members' names and organizations: **Care Focused Purchasing Clinical Advisory Panel** Bobbie Berg -BCBS -IL Dow Briggs - BCBS- AL Joe Calderella - Cigna Carl Cameron - Preferred Care Steven Goldberg – Humana Tom James – Humana Don Liss – Aetna Catherine MacLean – WellPoint Zak Ramadan-Jradi – Regence Fred Volkman – Avidyn Health Constance Hwang – Resolution Health Darren Schulte - Resolution Health Earl Steinberg – Resolution Health **Massachusetts Group Insurance Commission Physician Advisory Panel** Jim Glauber – Neighborhood Health Plan Lyn Laurenco - Neighborhood Health Plan Anton Dodek - Tufts Barbara Chase - Fallon

	Jonathan Scott Coblyn – Brigham and Women's Hospital Tom Ebert - Health New England Elaine Wilson - Harvard Pilgrim Health Care Jennifer St. Thomas – Tufts Jennifer Lavigne – Fallon Michael O'Shea - Baycare Health Neil Minkoff - Harvard Pilgrim Health Care Paul Mendis- Neighborhood Health Plan Bob Jordan - Neighborhood Health Plan Bob Sorrenti – Unicare Constance Williams – Unicare Laura Syron - Neighborhood Health Plan Susan Tiffany – Unicare Constance Hwang – Resolution Health Darren Schulte - Resolution Health Earl Steinberg – Resolution Health David Gregg – Mercer Russ Robinson - Mercer
46	**Measure Developer/Steward Updates and Ongoing Maintenance** Year the measure was first released: 2008 Month and Year of most recent revision: October 2008 What is the frequency for review/update of this measure? Annual Review When is the next scheduled review/update for this measure? Summer 2009
47	**Copyright statement/disclaimers:** Copyright © 2008 – Resolution Health, Inc. All rights reserved. The material submitted is confidential and proprietary. No use of this material is permitted other than in accordance with the Agreement with Measure Stewards between National Quality Forum and Resolution Health, Inc.
48	**Additional Information:** None
49	**I have checked that the submission is complete and any blank fields indicate that no information is provided.** ☒
50	**Date of Submission** (*MM/DD/YY*)**:** 11/20/2008

PATIENT & FAMILY ENGAGEMENT

PRIORITY STATEMENT: Engage Patients and Their Families in Managing Their Health and Making Decisions About Their Care

1.1. All providers will routinely solicit and publicly report on their patients' perspectives of care

1.2. All providers will work collaboratively with their patients to assist them in making informed decisions about treatment options consistent with their values and preferences

POPULATION HEALTH

PRIORITY STATEMENT: IMPROVE THE HEALTH OF THE U.S. POPULATION

2.1. The population will be up to date on all high-priority age- and gender-appropriate evidence-based clinical preventive services

2.2. The population will receive recommended evidence-based interventions to improve targeted healthy lifestyle behaviors

2.3. All communities will demonstrate a 10% improvement in their community index of health

2.4. Americans will have all recommended high priority healthy lifestyle behaviors under control

SAFETY

PRIORITY STATEMENT: IMPROVE THE SAFETY OF THE U.S. HEALTH CARE SYSTEM

3.1. All providers will drive all preventable healthcare-associated infections (HAI) to zero

3.2. All providers will drive the incidence of preventable NQF Serious Reportable Events (SRE) to zero

3.3. All hospitals will reduce preventable and premature mortality rates to best-in-class

3.4. All hospitals and their community partners will reduce 30-day mortality rates following hospitalization for select conditions to best-in-class

PALLIATIVE CARE

PRIORITY STATEMENT: GUARANTEE APPROPRIATE AND COMPASSIONATE CARE FOR PATIENTS WITH LIFE-LIMITING ILLNESSES

4.1. All providers will identify, document, and effectively treat physical symptoms (e.g. pain, shortness of breath, constipation, others) at levels acceptable to patients with a life-limiting illness

4.2. All providers will effectively address the psychosocial and spiritual needs of patients with life-limiting illnesses and their families according to their preferences

4.3. All eligible patients will receive high quality palliative care and hospice services

CARE COORDINATION

PRIORITY STATEMENT: ENSURE PATIENTS RECEIVE WELL-COORDINATED CARE ACROSS ALL PROVIDERS, SETTINGS, AND LEVELS OF CARE

5.1. All providers will accurately and completely reconcile medications across the continuum of care (i.e. admission, transfer within and between care providers, discharge, and outpatient appointments) and ensure communication with the next provider of services

5.2. All inpatient and outpatient providers will assess the patient's perspective of the coordination of their care using a validated care coordination survey tool

5.3. All providers will reduce 30-day all-cause readmission rates resulting from poorly coordinated care to best-in-class

5.4. All providers will reduce preventable emergency department (i.e. those that could be avoided with timely access to primary care) visits resulting from poorly coordinated care by 50%

PATIENT-FOCUSED CARE

PRIORITY STATEMENT: GUARANTEE HIGH VALUE CARE ACROSS ACUTE AND CHRONIC EPISODES

6.1. All patients will receive high-value care over the course of their acute or chronic illness

OVERUSE

PRIORITY STATEMENT: ELIMINATE WASTE WHILE ENSURING THE DELIVERY OF APPROPRIATE CARE

7.1. Reduce wasteful and inappropriate care for the top ten targeted areas by 50%

THE NATIONAL QUALITY FORUM

MEASURE SUBMISSION FORM VERSION 3.0
August 2008

The measure information you submit will be shared with NQF's Steering Committees and Technical Advisory Panels to evaluate measures against the NQF criteria of importance to measure and report, scientific acceptability of measure properties, usability, and feasibility. Four conditions (as indicated below) must be met before proposed measures may be considered and evaluated for suitability as voluntary consensus standards. Not all acceptable measures will be strong—or equally strong—among each set of criteria. The assessment of each criterion is a matter of degree; however, all measures must be judged to have met the first criterion, importance to measure and report, in order to be evaluated against the remaining criteria. References to the specific measure evaluation criteria are provided in parentheses following the item numbers. Please refer to the *Measure Evaluation Criteria* for more information at ***www.qualityforum.org*** under Core Documents. Additional guidance is being developed and when available will be posted on the NQF website.

Use the tab or arrow (↓→) keys to move the cursor to the next field (or back ←↑). There are three types of response fields:

- drop-down menus - select one response;
- check boxes – check as many as apply; and
- text fields – you can copy and paste text into these fields or enter text; these fields are not limited in size, but in most cases, we ask that you summarize the requested information.

Please note that URL hyperlinks do not work in the form; you will need to type them into your web browser.

Be sure to answer all questions. Fields that are left blank will be interpreted as no or none. Information must be provided in this form. Attachments are not allowed except when specifically requested or to provide additional detail or source documents for information that is summarized in this form. If you have important information that is not addressed by the questions, they can be entered into item #48 near the end of the form.

For questions about this form, please contact the NQF Project Director listed in the corresponding call for measures.

	CONDITIONS FOR CONSIDERATION BY NQF
	Four conditions must be met before proposed measures may be considered and evaluated for suitability as voluntary consensus standards.
A (A)	**Public domain or Intellectual Property Agreement signed:** IP Agreement signed and submitted (If no, do not submit) *Template for the Intellectual Property Agreement is available at* **www.qualityforum.org** *under Core Documents.*
B (B)	**Measure steward/maintenance:** Is there an identified responsible entity and process to maintain and update the measure on a schedule commensurate with clinical innovation, but at least every 3 years? Yes, information provided in contact section (If no, do not submit)
C (C)	**Intended use:** Does the intended use of the measure include BOTH public reporting AND quality improvement? Yes (If no, do not submit)
D (D)	**Fully developed and tested:** Is the measure fully developed AND tested? Yes, fully developed and tested (If not tested and no plans for testing within 24 months, do not submit)

THE NATIONAL QUALITY FORUM

MEASURE SUBMISSION FORM VERSION 3.0
August 2008

	(for NQF staff use) **NQF Review #:** EC-060-08 **NQF Project:** National Voluntary Consensus Standards for Ambulatory Care Using Clinically Enriched Administrative Data
	MEASURE SPECIFICATIONS & DESCRIPTIVE INFORMATION
1	**Information current as of** *(date- MM/DD/YY)*: 10/31/2008
2	**Title of Measure:** Rheumatoid Arthritis Annual ESR or CRP
3	**Brief description of measure** [1]**:** This measure identifies adult patients with a history of rheumatoid arthritis who have received erythrocyte sedimentation rate (ESR) or C-reactive protein (CRP) lab tests during the measurement year.
4 (2a)	**Numerator Statement:** Patients in the denominator who had an ESR or CRP lab test during the measurement year **Time Window:** **Numerator Details** (Definitions, codes with description): >=1 claim for 'ESR' or 'CRP' lab tests during the measurement year **CRP (Procedure)** ========== Type Code Description ------ ------ ---------- CPT4 86140 C-REACTIVE PROTEIN; CPT4 86141 C-REACTV PROTEIN; HIGH SENSITIVITY **ESR (Procedure)** ========== Type Code Description ------ ------ ---------- CPT4 85652 SED RATE ERYTHROCYTE; AUTOMATED CPT4 85651 SED RATE ERYTHROCYTE; NON-AUTOMATED
5 (2a)	**Denominator Statement:** Patients >=18 years old with a history of rheumatoid arthritis, diagnosed prior to the measurement year **Time Window:** **Denominator Details** (Definitions, codes with description): - Age >=18 years as of the end of the measurement year - AND has a diagnosis of rheumatoid arthritis based on RHI's Rheumatoid Arthritis Criteria, which requires: >=2 office visits with a diagnosis code for 'rheumatoid arthritis' or >=1 inpatient or emergency room claim for 'rheumatoid arthritis' anytime in the past - AND the earliest 'rheumatoid arthritis' claim must occur prior to the measurement year - AND is eligible for medical benefits during the measurement year **Rheumatoid Arthritis (Diagnosis)** ========== Type Code Description ------ ------ ---------- ICD9 7140 RHEUMATOID ARTHRITIS ICD9 7141 FELTYS SYNDROME ICD9 7142 OTH RA W/VISCERAL/SYSTEMIC INVLV ICD9 71481 RHEUMATOID LUNG

[1] Example of measure description: Percentage of adult patients with diabetes aged 18-75 years receiving one or more A1c test(s) per year.

6 (2a, 2d)	**Denominator Exclusions:** The measure excludes patients who have had an inpatient hospitalization during the measurement year because UB04 claims do not document individual lab tests ordered during an inpatient stay. **Denominator Exclusion Details** (Definitions, codes with description): Patient cannot have claims for inpatient hospitalization during the measurement year
7 (2a, 2h)	**Stratification** Do the measure specifications require the results to be stratified? No ► If "other" describe: **Identification of stratification variable(s):** **Stratification Details** (Definitions, codes with description):
8 (2a, 2e)	**Risk Adjustment** Does the measure require risk adjustment to account for differences in patient severity before the onset of care? No ► **If yes,** (select one) ► Is there a separate proprietary owner of the risk model? (select one) **Identify Risk Adjustment Variables:** **Detailed risk model:** attached ☐ **OR** Web page URL:
9 (2a)	**Type of Score:** Rate/proportion **Calculation Algorithm:** attached ☒ **OR** Web page URL: **Interpretation of Score** (*Classifies interpretation of score according to whether better quality is associated with a higher score, a lower score, a score falling within a defined interval, or a passing score*) Better quality = Higher score ► If "Other", please describe:
10 (2a. 4a, 4b)	**Identify the required data elements**(e.g., primary diagnosis, lab values, vital signs)**:** procedure**,** diagnosis **Data dictionary/code table** attached ☒ **OR** Web page URL: **Data Quality** (2a) *Check all that apply* ☐ Data are captured from an authoritative/accurate source (e.g., lab values from laboratory personnel) ☒ Data are coded using recognized data standards ☐ Method of capturing data electronically fits the workflow of the authoritative source ☒ Data are available in EHRs ☒ Data are auditable
11 (2a, 4b)	**Data Source and Data Collection Methods** *Identifies the data source(s) necessary to implement the measure specifications. Check all that apply* ☐ Electronic Health/Medical Record ☐ Electronic Clinical Database, Name: ☐ Electronic Clinical Registry, Name: ☒ Electronic Claims ☐ Electronic Pharmacy data ☐ Electronic Lab data ☐ Electronic source – other, Describe: ☐ Paper Medical Record ☐ Standardized clinical instrument, Name: ☐ Standardized patient survey, Name: ☐ Standardized clinician survey, Name: ☐ Other, Describe: It is reasonable to allow physicians to submit definitive evidence that a particular service was provided to a patient. For example, a lab result from a testing facility would indicate that that lab test was performed. A notation in a patient chart that the test was ordered, in contrast, would not provide definitive evidence that the test was performed. Instrument/survey attached ☐ **OR** Web page URL:
12 (2a)	**Sampling** *If measure is based on a sample, provide instructions and guidance on sample size.* **Minimum sample size:** 10 **Instructions:** We have developed a hierarchical logistic regression model with expert biostatisticians at the Johns Hopkins School of Public Health that enables one to produce a probability distribution around a point estimate of the "quality score" for a given physician. This model has shown that there is no minimum sample size that is required to produce a quality score which has a comparatively "tight"

probability distribution. Rather, the number of required observations depends on how a given physician performs on particular measures compared to how all other MDs perform on those measures. We recommend that a minimum of 10 observations be required, however, because of the normality assumptions that underlies the model and for public "face validity".

13 **Type of Measure:** Process ► If "Other", please describe:

(2a) ► If part of a composite or paired with another measure, please identify composite or paired measure

14 **Unit of Measurement/Analysis** (*Who or what is being measured*) *Check all that apply.*

(2a)

- ☐ Can be measured at all levels
- ☒ Individual clinician (e.g., physician, nurse)
- ☒ Group of clinicians (e.g., facility department/unit, group practice)
- ☐ Facility (e.g., hospital, nursing home)
- ☒ Integrated delivery system
- ☒ Health plan
- ☒ Community/Population
- ☐ Other (*Please describe*):

15 **Applicable Care Settings** *Check all that apply*

(2a)

- ☐ Can be used in all healthcare settings
- ☒ Ambulatory Care (office/clinic)
- ☐ Behavioral Healthcare
- ☒ Community Healthcare
- ☐ Dialysis Facility
- ☐ Emergency Department
- ☐ EMS emergency medical services
- ☒ Health Plan
- ☐ Home Health
- ☐ Hospice
- ☐ Hospital
- ☐ Long term acute care hospital
- ☐ Nursing home/ Skilled Nursing Facility (SNF)
- ☐ Prescription Drug Plan
- ☐ Rehabilitation Facility
- ☐ Substance Use Treatment Program/Center
- ☐ Other (*Please describe*):

IMPORTANCE TO MEASURE AND REPORT

Note: This is a threshold criterion. If a measure is not judged to be sufficiently important to measure and report, it will not be evaluated against the remaining criteria.

16 **Addresses a Specific National Priority Partners Goal** *Enter the numbers of the specific goals related to this measure (see list of goals on last page)*: 6.1 (1a)

17 **If not related to NPP goal, identify high impact aspect of healthcare** (select one)

(1a) **Summary of Evidence:**

Citations[2] for Evidence:

18 **Opportunity for Improvement** *Provide evidence that demonstrates considerable variation, or overall poor performance, across providers.*

(1b) **Summary of Evidence:**

Numerator	Denominator	Proportion
1946	290	14.9%

Citations for Evidence: RHI testing results

19 **Disparities** *Provide evidence that demonstrates disparity in care/outcomes related to the measure focus among populations.*

(1b) **Summary of Evidence:** not applicable

Citations for evidence:

20 **If measuring an Outcome** Describe relevance to the national health goal/priority, condition, population, and/or care being addressed:

(1c)

[2] Citations can include, but are not limited to journal articles, reports, web pages (URLs).

	If not measuring an outcome, provide evidence supporting this measure topic and grade the strength of the evidence *Summarize the evidence (including citations to source) supporting the focus of the measure as follows:* • Intermediate outcome – evidence that the measured intermediate outcome (e.g., blood pressure, Hba1c) leads to improved health/avoidance of harm or cost/benefit. • Process – evidence that the measured clinical or administrative process leads to improved health/avoidance of harm and if the measure focus is on one step in a multi-step care process, it measures the step that has the greatest effect on improving the specified desired outcome(s). • Structure – evidence that the measured structure supports the consistent delivery of effective processes or access that lead to improved health/avoidance of harm or cost/benefit. • Patient experience – evidence that an association exists between the measure of patient experience of health care and the outcomes, values and preferences of individuals/ the public. • Access – evidence that an association exists between access to a health service and the outcomes of, or experience with, care. • Efficiency– demonstration of an association between the measured resource use and level of performance with respect to one or more of the other five IOM aims of quality. **Type of Evidence** *Check all that apply* ☒ Evidence-based guideline ☐ Quantitative research studies ☐ Meta-analysis ☐ Qualitative research studies ☐ Systematic synthesis of research ☐ Other (*Please describe*): **Overall Grade for Strength of the Evidence**[3] (*Use the USPSTF system, or if different, also describe how it relates to the USPSTF system)*: B **Summary of Evidence** (*provide guideline information below*): ACR, AFQuIP **Citations for Evidence:** American College of Rheumatology's Starter Set of Measures for Quality in the Care for Rheumatic and Musculoskeletal Diseases, February 2006. American College of Rheumatology. Arthritis Foundation Quality Indicator Project (AFQuIP) Khanna D, Arnold E, Pencharz JN, Grossman JM, Traina SB, Lal A, MacLean CH. Measuring Process of Arthritis Care: The Arthritis Foundation's Quality Indicator Set for Rheumatoid Arthritis. Semin Arthritis Rheum. 2006;35:211-37. American College of Rheumatology Subcommittee on Rheumatoid Arthritis Guidelines. Guidelines for the management of rheumatoid arthritis: 2002 Update. Arthritis Rheum. 2002 Feb;46(2):328-46.
21 (1c)	**Clinical Practice Guideline** *Cite the guideline reference; quote the specific guideline recommendation related to the measure and the guideline author's assessment of the strength of the evidence; and summarize the rationale for using this guideline over others.* **Guideline Citation:** American College of Rheumatology's Starter Set of Measures for Quality in the Care for Rheumatic and Musculoskeletal Diseases, February 2006. American College of Rheumatology. **Specific guideline recommendation:** If a patient has a confirmed diagnosis of rheumatoid arthritis, THEN

[3]The strength of the body of evidence for the specific measure focus should be systematically assessed and rated, e.g., USPSTF grading system **www.ahrq.gov/clinic/uspstmeth.htm**: **A -** The USPSTF recommends the service. There is high certainty that the net benefit is substantial. **B -** The USPSTF recommends the service. There is high certainty that the net benefit is moderate or there is moderate certainty that the net benefit is moderate to substantial. **C -** The USPSTF recommends against routinely providing the service. There may be considerations that support providing the service in an individual patient. There is at least moderate certainty that the net benefit is small. Offer or provide this service only if other considerations support the offering or providing the service in an individual patient. **D -** The USPSTF recommends against the service. There is moderate or high certainty that the service has no net benefit or that the harms outweigh the benefits. **I -** The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of the service. Evidence is lacking, of poor quality, or conflicting, and the balance of benefits and harms cannot be determined.

	a measure of each of the following should be documented within 3 months of diagnosis and at least annually thereafter: joint exam, functional status assessment, acute phase reactant, measurement of pain, physician global assessment and patient global assessment. **Guideline author's rating of strength of evidence** (*If different from USPSTF, also describe it and how it relates to USPSTF*)**:** B **Rationale for using this guideline over others:** This measure is based on Rheumatoid Arthritis Quality Measures from the American College of Rheumatology and the Arthritis Foundation.
22 (1c)	**Controversy/Contradictory Evidence** *Summarize any areas of controversy, contradictory evidence, or contradictory guidelines and provide citations.* **Summary:** **Citations:**
23 (1)	**Briefly describe how this measure (as specified) will facilitate significant gains in healthcare quality related to the specific priority goals and quality problems identified above:** ACR Guidelines for the Management of Rheumatoid Arthritis recommend evaluating for subjective and objective evidence of active disease at each visit. This measure captures whether objective lab testing (ESR or CRP) is assessed at least once a year, according to the ACR Starter Set of Measures for Quality in the Care for Rheumatic and Musculoskeletal Diseases.
	SCIENTIFIC ACCEPTABILITY OF MEASURE PROPERTIES
	Note: Testing and results should be summarized in this form. However, additional detail and reports may be submitted as supplemental information or provided as a web page URL. If a measure has not been tested, it is only potentially eligible for time-limited endorsement.
24	**Supplemental Testing Information:** attached ☐ **OR** Web page URL:
25 (2b)	**Reliability Testing** **Data/sample:** We have tested this measure on several patient populations, including, in total, more than a million commercial health plan members. In addition, we have used analogous computer algorithms to identify patient-specific QI opportunities in more than 5 million health plan members and have sent messages regarding those opportunities to either the member or the member's physician or both. **Analytic Method:** The validity of a physician quality score describes how accurately it estimates the true value. Reliability is the stability or consistency of an estimator from one data set to the next. Both are important in assessing the performance of the quality score. We have used the following measure as an indication of the reliability of each of our measures: 1 minus [(the variance of the posterior distribution of the physician quality score) divided by (the variance of the true physician quality score)], which is the reduction in the variance of a doctor's performance score (posterior distribution) obtained by using his or her performance data, expressed as a fraction of the total variance before any data is collected. **Testing Results:** The reliability of a physician quality score depends on the number of observations available for a given physician, how the physician performs relative to all other physician, and the overall variance in physician quality scores. As a result, reliability varies with the population of MDs in whom the measure is used. In our experience, reliability is in the range of 0.5 to >0.7.
26 (2c)	**Reliability Testing** **Data/sample:** We have tested this measure on several patient populations, including, in total, more than a million commercial health plan members. In addition, we have used analogous computer algorithms to identify patient-specific QI opportunities in more than 5 million health plan members and have sent messages regarding those opportunities to either the member or the member's physician or both. **Analytic Method:** The validity of a physician quality score describes how accurately it estimates the true value. Reliability is the stability or consistency of an estimator from one data set to the next. Both are important in assessing the performance of the quality score. We have used the following measure as an

	indication of the reliability of each of our measures: 1 minus [(the variance of the posterior distribution of the physician quality score) divided by (the variance of the true physician quality score)], which is the reduction in the variance of a doctor's performance score (posterior distribution) obtained by using his or her performance data, expressed as a fraction of the total variance before any data is collected. **Testing Results:** The reliability of a physician quality score depends on the number of observations available for a given physician, how the physician performs relative to all other physician, and the overall variance in physician quality scores. As a result, reliability varies with the population of MDs in whom the measure is used. In our experience, reliability is in the range of 0.5 to >0.7.
27 (2d)	**Measure Exclusions** *Provide evidence to justify exclusion(s) and analysis of impact on measure results during testing.* **Summary of Evidence supporting exclusion(s):** UB04 claims do not document individual lab tests ordered during an inpatient stay. Therefore, RHI's proposed measure "Rheumatoid Arthritis Annual ESR or CRP" excludes patients who have had an inpatient hospitalization during the measurement year, with the assumption that an ESR or CRP test may have been ordered during the hospitalization. **Citations for Evidence:** **Data/sample:** **Analytic Method:** **Testing Results:**
28 (2e)	**Risk Adjustment Testing** *Summarize the testing used to determine the need (or no need) for risk adjustment and the statistical performance of the risk adjustment method.* **Data/sample:** **Analytic Method:** **Testing Results:** ►**If outcome or resource use measure not risk adjusted, provide rationale:** There is no need to risk adjust results from this measure. To the extent that the measure applies only to patients in a particular risk category, that has been taken into account in the specifications for the denominator or exclusions for this measure.
29 (2g)	**Testing comparability of results when more than 1 data method is specified** (*e.g., administrative claims or chart abstraction*) **Data/sample:** **Analytic Method:** **Results:**
30 (2f)	**Provide Measure Results from Testing or Current Use** Results from testing **Data/sample:** Sample dataset of 1 million commercial health plan members, from years 2005-2007 **Methods to identify statistically significant and practically/meaningfully differences in performance:** **Results:** Numerator: 1946; Denominator: 290; Proportion: 14.9%
31	**Identification of Disparities**

(2h)	►If measure is stratified by factors related to disparities (i.e. race/ethnicity, primary language, gender, SES, health literacy), **provide stratified results:** ►If disparities have been reported/identified, but measure is not specified to detect disparities, provide rationale:
	USABILITY
32 (3)	**Current Use** Testing completed **If in use, how widely used** (select one) ► If "other," please describe: ☐ Used in a public reporting initiative, name of initiative: Sample report attached ☐ **OR** Web page URL:
33 (3a)	**Testing of Interpretability** (*Testing that demonstrates the results are understood by the potential users for public reporting and quality improvement*) **Data/sample:** We have tested this measure on several patient populations, including, in total, more than 30 million people enrolled in 18 different health plans. **Methods:** The results have been provided to the medical directors of the 18 health plans, all of whom have indicated that they understand the particular aspect of care that the measure addresses and how to interpret the result for a physician. In addition, results have been presented to HR directors from >60 national employers. **Results:** Both the health plan medical directors and the HR personnel from the employers have indicated that they understand the particular aspect of care that the measure addresses and how to interpret the result for a physician. We do not have data on the extent to which individual physicians understand the measure result, but we presume that, since health plan medical directors and non-medical personnel from employers understand the result, that physicians and lay people will also so long that adequate explanation is provided
34 (3b, 3c)	**Relation to other NQF-endorsed™ measures** ►Is this measure similar or related to measure(s) already endorsed by NQF (on the same topic or the same target population)? *Measures can be found at **www.qualityforum.org** under Core Documents.* *Check all that apply* ☐ Have not looked at other NQF measures ☐ Other measure(s) on same topic ☐ Other measure(s) for same target population ☒ No similar or related measures **Name of similar or related NQF-endorsed™ measure(s):** **Are the measure specifications harmonized with existing NQF-endorsed™ measures?** (select one) ►If not fully harmonized, provide rationale: **Describe the distinctive, improved, or additive value this measure provides to existing NQF-endorsed measures:** This measure can be used exclusively with enriched administrative data
	FEASIBILITY
35 (4a)	**How are the required data elements generated?** *Check all that apply* ☐ Data elements are generated concurrent with and as a byproduct of care processes during care delivery (e.g., blood pressure or other assessment recorded by personnel conducting the assessment) ☐ Data elements are generated from a patient survey (e.g., CAHPS) ☒ Data elements are generated through coding performed by someone other than the person who obtained the original information (e.g., DRG or ICD-9 coding on claims) ☐ Other, Please describe:
36 (4b)	**Electronic Sources** All data elements ►**If all data elements are not in electronic sources, specify the near-term path to electronic collection by most providers:**

	►**Specify the data elements for the electronic health record:**
37 (4c)	**Do the specified exclusions require additional data sources beyond what is required for the other specifications?** No ►**If yes, provide justification:**
38 (4d)	**Identify susceptibility to inaccuracies, errors, or unintended consequences of the measure:** As with any type of clinical performance measure, and with any source of data used to operationalize the measure, there will be some instances in which the data used to compute the measure are incomplete or inaccurate. We try to minimize the impact of such errors or omissions through the way we have constructed the technical specifications for the measure. There is no data source for performance measurement that is completely accurate. Two studies have shown that physician performance tends to be better when assessed using claims data compared to via chart abstraction. **Describe how could these potential problems be audited:** Potential data errors of omission or commission could be audited through chart abstraction, or feedback from physicians and patients. However, as mentioned above, each of these alternative sources of information also are susceptible to error and thus are not true gold standards. **Did you audit for these potential problems during testing?** Yes **If yes, provide results:** Through feedback from physicians whose performance has been evaluated.
39 (4e)	**Testing feasibility** Describe what have you learned/modified as a result of testing and/or operational use of the measure regarding data collection, availability of data/missing data, timing/frequency of data collection, patient confidentiality, time/cost of data collection, other feasibility/ implementation issues: The technical specifications for all of our measures have been reviewed over time by numerous physicians and have been adjusted when feedback has indicated a way to improve the measure. Our experience suggests that the only practical and affordable approach for evaluation of the performance of individual MDs on a large scale is through use of claims data. We have found there to be benefit from determining whether a particular health plan has capitated arrangements with physicians or other types of providers (e.g. labs and radiology facilities) in a particular geographic area and, in those instances, to only include observations if encounter data are available. We routinely require at least 4 months of "claims runout" after the end of a measurement year in order to take account of claim lag.
	CONTACT INFORMATION
40	**Web Page URL for Measure Information** *Describe where users (implementers) should go for more details on specifications of measures, or assistance in implementing the measure.* **Web page URL:** *www.resolutionhealth.com*
41	**Measure Intellectual Property Agreement Owner Point of Contact** **First Name:** Alan **MI:** **Last Name:** Lefkowitz **Credentials (MD, MPH, etc.):** **Organization:** Resolution Health **Street Address:** 10490 Little Patuxent Parkway **City:** Columbia **State:** MD **ZIP:** 21044 **Email:** alefkowitz@resolutionhealth.com **Telephone:** 240-295-5834 ext:
42	**Measure Submission Point of Contact** **If different than IP Owner Contact** **First Name:** Darren **MI:** M **Last Name:** Schulte **Credentials (MD, MPH, etc.):** MD, MPP **Organization:** Resolution Health **Street Address:** 10490 Little Patuxent Parkway **City:** Columbia **State:** MD **ZIP:** 21044 **Email:** dschulte@resolutionhealth.com **Telephone:** 650-773-3308 ext:
43	**Measure Developer Point of Contact** **If different than IP Owner Contact** **First Name:** Darren **MI:** M **Last Name:** Schulte **Credentials (MD, MPH, etc.):** MD, MPP **Organization:** Resolution Health **Street Address:** 10490 Little Patuxent Parkway **City:** Columbia **State:** MD **ZIP:** 21044

	Email: dschulte@resolutionhealth.com **Telephone:** 650-773-3308 ext:
44	**Measure Steward Point of Contact** **If different than IP Owner Contact** *Identifies the organization that will take responsibility for updating the measure and assuring it is consistent with the scientific evidence and current coding schema; the steward of the measure may be different than the developer.* **First Name:** Darren **MI:** M **Last Name:** Schulte **Credentials (MD, MPH, etc.):** MD, MPP **Organization:** Resolution Health **Street Address:** 10490 Little Patuxent Parkway **City:** Columbia **State:** MD **ZIP:** 21044 **Email:** dschulte@resolutionhealth.com **Telephone:** 650-773-3308 ext:
	ADDITIONAL INFORMATION
45	**Workgroup/Expert Panel involved in measure development** Workgroup/panel used ►If workgroup used, describe the members' role in measure development: Over the past several years, two formal workgroups -- one organized by the Care Focused Purchasing initiative and one organized by the Massachusetts Group Insurance Commission Clinical Performance Improvement Initiative -- and several ad hoc experts have provided useful input to our measure development and refinement processes. In each case, we have provided the Work Group Members with details regarding each of our performance measures and members of the work group (not always all members) have provided feedback on the validity of the clinical practice guideline underlying the measure and suggestions regarding potential ways to improve the technical specifications for the measure. In some instances, we have eliminated measures based on feedback from the work groups. In other instances, work group members have proposed new measures. We try to get feedback from work group members and selected clinical experts on an annual basis. ►Provide a list of workgroup/panel members' names and organizations: **Care Focused Purchasing Clinical Advisory Panel** Bobbie Berg -BCBS -IL Dow Briggs - BCBS- AL Joe Calderella - Cigna Carl Cameron - Preferred Care Steven Goldberg – Humana Tom James – Humana Don Liss – Aetna Catherine MacLean – WellPoint Zak Ramadan-Jradi – Regence Fred Volkman – Avidyn Health Constance Hwang – Resolution Health Darren Schulte - Resolution Health Earl Steinberg – Resolution Health **Massachusetts Group Insurance Commission Physician Advisory Panel** Jim Glauber – Neighborhood Health Plan Lyn Laurenco - Neighborhood Health Plan Anton Dodek - Tufts Barbara Chase - Fallon Jonathan Scott Coblyn – Brigham and Women's Hospital Tom Ebert - Health New England Elaine Wilson - Harvard Pilgrim Health Care Jennifer St. Thomas – Tufts Jennifer Lavigne – Fallon Michael O'Shea - Baycare Health Neil Minkoff - Harvard Pilgrim Health Care Paul Mendis- Neighborhood Health Plan Bob Jordan - Neighborhood Health Plan Bob Sorrenti – Unicare Constance Williams – Unicare Laura Syron - Neighborhood Health Plan

	Susan Tiffany – Unicare Constance Hwang – Resolution Health Darren Schulte - Resolution Health Earl Steinberg – Resolution Health David Gregg – Mercer Russ Robinson - Mercer
46	**Measure Developer/Steward Updates and Ongoing Maintenance** Year the measure was first released: 2008 Month and Year of most recent revision: October 2008 What is the frequency for review/update of this measure? Annual Review When is the next scheduled review/update for this measure? Summer 2009
47	**Copyright statement/disclaimers:** Copyright © 2008 – Resolution Health, Inc. All rights reserved. The material submitted is confidential and proprietary. No use of this material is permitted other than in accordance with the Agreement with Measure Stewards between National Quality Forum and Resolution Health, Inc.
48	**Additional Information:** None
49	**I have checked that the submission is complete and any blank fields indicate that no information is provided.** ☒
50	**Date of Submission** (*MM/DD/YY*)**:** 11/20/2008

PATIENT & FAMILY ENGAGEMENT

PRIORITY STATEMENT: Engage Patients and Their Families in Managing Their Health and Making Decisions About Their Care

1.1. All providers will routinely solicit and publicly report on their patients' perspectives of care

1.2. All providers will work collaboratively with their patients to assist them in making informed decisions about treatment options consistent with their values and preferences

POPULATION HEALTH

PRIORITY STATEMENT: IMPROVE THE HEALTH OF THE U.S. POPULATION

2.1. The population will be up to date on all high-priority age- and gender-appropriate evidence-based clinical preventive services

2.2. The population will receive recommended evidence-based interventions to improve targeted healthy lifestyle behaviors

2.3. All communities will demonstrate a 10% improvement in their community index of health

2.4. Americans will have all recommended high priority healthy lifestyle behaviors under control

SAFETY

PRIORITY STATEMENT: IMPROVE THE SAFETY OF THE U.S. HEALTH CARE SYSTEM

3.1. All providers will drive all preventable healthcare-associated infections (HAI) to zero

3.2. All providers will drive the incidence of preventable NQF Serious Reportable Events (SRE) to zero

3.3. All hospitals will reduce preventable and premature mortality rates to best-in-class

3.4. All hospitals and their community partners will reduce 30-day mortality rates following hospitalization for select conditions to best-in-class

PALLIATIVE CARE

PRIORITY STATEMENT: GUARANTEE APPROPRIATE AND COMPASSIONATE CARE FOR PATIENTS WITH LIFE-LIMITING ILLNESSES

4.1. All providers will identify, document, and effectively treat physical symptoms (e.g. pain, shortness of breath, constipation, others) at levels acceptable to patients with a life-limiting illness

4.2. All providers will effectively address the psychosocial and spiritual needs of patients with life-limiting illnesses and their families according to their preferences

4.3. All eligible patients will receive high quality palliative care and hospice services

CARE COORDINATION

PRIORITY STATEMENT: ENSURE PATIENTS RECEIVE WELL-COORDINATED CARE ACROSS ALL PROVIDERS, SETTINGS, AND LEVELS OF CARE

5.1. All providers will accurately and completely reconcile medications across the continuum of care (i.e. admission, transfer within and between care providers, discharge, and outpatient appointments) and ensure communication with the next provider of services

5.2. All inpatient and outpatient providers will assess the patient's perspective of the coordination of their care using a validated care coordination survey tool

5.3. All providers will reduce 30-day all-cause readmission rates resulting from poorly coordinated care to best-in-class

5.4. All providers will reduce preventable emergency department (i.e. those that could be avoided with timely access to primary care) visits resulting from poorly coordinated care by 50%

PATIENT-FOCUSED CARE

PRIORITY STATEMENT: GUARANTEE HIGH VALUE CARE ACROSS ACUTE AND CHRONIC EPISODES

6.1. All patients will receive high-value care over the course of their acute or chronic illness

OVERUSE

PRIORITY STATEMENT: ELIMINATE WASTE WHILE ENSURING THE DELIVERY OF APPROPRIATE CARE

7.1. Reduce wasteful and inappropriate care for the top ten targeted areas by 50%

THE NATIONAL QUALITY FORUM

MEASURE SUBMISSION FORM VERSION 3.0
August 2008

The measure information you submit will be shared with NQF's Steering Committees and Technical Advisory Panels to evaluate measures against the NQF criteria of importance to measure and report, scientific acceptability of measure properties, usability, and feasibility. Four conditions (as indicated below) must be met before proposed measures may be considered and evaluated for suitability as voluntary consensus standards. Not all acceptable measures will be strong—or equally strong—among each set of criteria. The assessment of each criterion is a matter of degree; however, all measures must be judged to have met the first criterion, importance to measure and report, in order to be evaluated against the remaining criteria. References to the specific measure evaluation criteria are provided in parentheses following the item numbers. Please refer to the *Measure Evaluation Criteria* for more information at ***www.qualityforum.org*** under Core Documents. Additional guidance is being developed and when available will be posted on the NQF website.

Use the tab or arrow (↓→) keys to move the cursor to the next field (or back ←↑). There are three types of response fields:

- drop-down menus - select one response;
- check boxes – check as many as apply; and
- text fields – you can copy and paste text into these fields or enter text; these fields are not limited in size, but in most cases, we ask that you summarize the requested information.

Please note that URL hyperlinks do not work in the form; you will need to type them into your web browser.

Be sure to answer all questions. Fields that are left blank will be interpreted as no or none. Information must be provided in this form. Attachments are not allowed except when specifically requested or to provide additional detail or source documents for information that is summarized in this form. If you have important information that is not addressed by the questions, they can be entered into item #48 near the end of the form.

For questions about this form, please contact the NQF Project Director listed in the corresponding call for measures.

	CONDITIONS FOR CONSIDERATION BY NQF
	Four conditions must be met before proposed measures may be considered and evaluated for suitability as voluntary consensus standards.
A (A)	**Public domain or Intellectual Property Agreement signed:** IP Agreement signed and submitted (If no, do not submit) *Template for the Intellectual Property Agreement is available at* **www.qualityforum.org** *under Core Documents.*
B (B)	**Measure steward/maintenance:** Is there an identified responsible entity and process to maintain and update the measure on a schedule commensurate with clinical innovation, but at least every 3 years? Yes, information provided in contact section (If no, do not submit)
C (C)	**Intended use:** Does the intended use of the measure include BOTH public reporting AND quality improvement? Yes (If no, do not submit)
D (D)	**Fully developed and tested:** Is the measure fully developed AND tested? Yes, fully developed and tested (If not tested and no plans for testing within 24 months, do not submit)

THE NATIONAL QUALITY FORUM

MEASURE SUBMISSION FORM VERSION 3.0
August 2008

	(for NQF staff use) **NQF Review #:** EC-079-08 **NQF Project:** National Voluntary Consensus Standards for Ambulatory Care Using Clinically Enriched Administrative Data
	MEASURE SPECIFICATIONS & DESCRIPTIVE INFORMATION
1	**Information current as of** *(date- MM/DD/YY)*: 10/31/2008
2	**Title of Measure:** Methotrexate: LFT within 12 weeks
3	**Brief description of measure** [1]**:** This measure identifies adult patients with rheumatoid arthritis who were prescribed at least a 6-month supply of methotrexate during the measurement year and received a liver function test (LFT) in the 120 days (3 months + 1 month grace period) following the earliest observed methotrexate prescription claim.
4 (2a)	**Numerator Statement:** Patients in the denominator who received a liver function test within 120 days following the earliest observed methotrexate prescription claim. **Time Window:** See below **Numerator Details** (Definitions, codes with description): >=1 claim for a liver function test ('LFT') within 120 days following the earliest observed methotrexate prescription LFT (Procedure) ========== Type Code Description ------- ------- ---------- CPT4 80053 COMPREHENSIVE METABOLIC PANEL CPT4 80050 GENERAL HEALTH PANEL CPT4 80076 HEPATIC FUNCTION PANEL CPT4 84460 TRANSFERASE; ALANINE AMINO CPT4 84450 TRANSFERASE; ASPARTATE AMINO
5 (2a)	**Denominator Statement:** Patients >=18 years old with rheumatoid arthritis who have received at least a 6-month supply of oral methotrexate during the measurement year. **Time Window:** See below **Denominator Details** (Definitions, codes with description): - Age >=18 years as of the end of the measurement year - AND at least 2 outpatient claims for 'Rheumatoid Arthritis' (any position) OR 1 ER or Hospital claim for "Rheumatoid Arthritis' (any position) - AND continuous use of 'oral methotrexate' for 6 months (80% medication possession ratio) during the measurement year - AND service eligibility for 120 days following the earliest methotrexate prescription claim from the measurement year - Exclude members with inpatient hospitalization during the 120 days after the earliest observed methotrexate prescription Rheumatoid Arthritis (Diagnosis) ========== Type Code Description ------- ------- ----------

[1] Example of measure description: Percentage of adult patients with diabetes aged 18-75 years receiving one or more A1c test(s) per year.

	ICD9 7141 FELTYS SYNDROME ICD9 7142 OTH RA W/VISCERAL/SYSTEMIC INVLV ICD9 7140 RHEUMATOID ARTHRITIS ICD9 71481 RHEUMATOID LUNG oral methotrexate (Medispan Drug) ========== Type GPI Code Description ----- ---------- ---------- GPI 21300050100340 Methotrexate Sodium Tab 10 MG (Base Equiv) GPI 21300050100350 Methotrexate Sodium Tab 15 MG (Base Equiv) GPI 66250050100320 Methotrexate Sodium Tab 2.5 MG (Antirheumatic) GPI 21300050100310 Methotrexate Sodium Tab 2.5 MG (Base Equiv) GPI 21300050100320 Methotrexate Sodium Tab 5 MG (Base Equiv) GPI 21300050100330 Methotrexate Sodium Tab 7.5 MG (Base Equiv)
6 (2a, 2d)	**Denominator Exclusions:** Exclude members with an inpatient hospitalization during the 120 days after the earliest observed methotrexate prescription. **Denominator Exclusion Details** (Definitions, codes with description): Exclude any member with claims for a visit with an inpatient facility code from the time of earliest observed methotrexate prescription to 120 days afterward.
7 (2a, 2h)	**Stratification** Do the measure specifications require the results to be stratified? No ► If "other" describe: **Identification of stratification variable(s):** **Stratification Details** (Definitions, codes with description):
8 (2a, 2e)	**Risk Adjustment** Does the measure require risk adjustment to account for differences in patient severity before the onset of care? No ► **If yes,** (select one) ► Is there a separate proprietary owner of the risk model? (select one) **Identify Risk Adjustment Variables:** **Detailed risk model:** attached ☐ **OR** Web page URL:
9 (2a)	**Type of Score:** Rate/proportion **Calculation Algorithm:** attached ☒ **OR** Web page URL: **Interpretation of Score** (*Classifies interpretation of score according to whether better quality is associated with a higher score, a lower score, a score falling within a defined interval, or a passing score*) Better quality = Higher score ► If "Other", please describe:
10 (2a. 4a, 4b)	**Identify the required data elements**(e.g., primary diagnosis, lab values, vital signs)**:** Diagnosis, procedure, and pharmacy claims **Data dictionary/code table** attached ☐ **OR** Web page URL: **Data Quality** (2a) *Check all that apply* ☐ Data are captured from an authoritative/accurate source (e.g., lab values from laboratory personnel) ☒ Data are coded using recognized data standards ☐ Method of capturing data electronically fits the workflow of the authoritative source ☐ Data are available in EHRs ☒ Data are auditable
11 (2a, 4b)	**Data Source and Data Collection Methods** *Identifies the data source(s) necessary to implement the measure specifications. Check all that apply* ☐ Electronic Health/Medical Record ☐ Paper Medical Record ☐ Electronic Clinical Database, Name: ☐ Standardized clinical instrument, Name: ☐ Electronic Clinical Registry, Name: ☐ Standardized patient survey, Name:

	☒ Electronic Claims ☒ Electronic Pharmacy data ☐ Electronic Lab data ☐ Electronic source – other, Describe:	☐ Standardized clinician survey, Name: ☒ Other, Describe: It is reasonable to allow physicians to submit definitive evidence that a particular service was provided to a patient. For example, a lab result from a testing facility would indicate that that lab test was performed. A notation in a patient chart that the test was ordered, in contrast, would not provide definitive evidence that the test was performed. Instrument/survey attached ☐ **OR** Web page URL:
12 (2a)	**Sampling** *If measure is based on a sample, provide instructions and guidance on sample size.* **Minimum sample size:** 10 **Instructions:** We have developed a hierarchical logistic regression model with expert biostatisticians at the Johns Hopkins School of Public Health that enables one to produce a probability distribution around a point estimate of the "quality score" for a given physician. This model has shown that there is no minimum sample size that is required to produce a quality score which has a comparatively "tight" probability distribution. Rather, the number of required observations depends on how a given physician performs on particular measures compared to how all other MDs perform on those measures. We recommend that a minimum of 10 observations be required, however, because of the normality assumption that underlies the model and for public "face validity". Alternatively, to satisfy current NCQA standards, a minimum of 30 observations could be required.	
13 (2a)	**Type of Measure:** Process ► If "Other", please describe: ► If part of a composite or paired with another measure, please identify composite or paired measure	
14 (2a)	**Unit of Measurement/Analysis** (*Who or what is being measured*) *Check all that apply.*	
	☐ Can be measured at all levels ☒ Individual clinician (e.g., physician, nurse) ☒ Group of clinicians (e.g., facility department/unit, group practice) ☐ Facility (e.g., hospital, nursing home)	☒ Integrated delivery system ☒ Health plan ☒ Community/Population ☐ Other (*Please describe*):
15 (2a)	**Applicable Care Settings** *Check all that apply*	
	☐ Can be used in all healthcare settings ☒ Ambulatory Care (office/clinic) ☐ Behavioral Healthcare ☒ Community Healthcare ☐ Dialysis Facility ☐ Emergency Department ☐ EMS emergency medical services ☒ Health Plan ☐ Home Health	☐ Hospice ☐ Hospital ☐ Long term acute care hospital ☐ Nursing home/ Skilled Nursing Facility (SNF) ☐ Prescription Drug Plan ☐ Rehabilitation Facility ☐ Substance Use Treatment Program/Center ☐ Other (*Please describe*):
	IMPORTANCE TO MEASURE AND REPORT	
	Note: This is a threshold criterion. If a measure is not judged to be sufficiently important to measure and report, it will not be evaluated against the remaining criteria.	
16 (1a)	**Addresses a Specific National Priority Partners Goal** *Enter the numbers of the specific goals related to this measure (see list of goals on last page)*: 6.1	
17 (1a)	**If not related to NPP goal, identify high impact aspect of healthcare** (select one) **Summary of Evidence:**	

	Citations[2] for Evidence:
18 (1b)	**Opportunity for Improvement** *Provide evidence that demonstrates considerable variation, or overall poor performance, across providers.* **Summary of Evidence:** Distinct populations in which the measure was used for physician quality profiling: numerator denominator proportion ---------- 12 15 80.00% 107 129 82.95% 205 245 83.67% 240 282 85.11% 64 75 85.33% 65 75 86.67% **Citations for Evidence:** RHI client experience
19 (1b)	**Disparities** *Provide evidence that demonstrates disparity in care/outcomes related to the measure focus among populations.* **Summary of Evidence:** N/A **Citations for evidence:**
20 (1c)	**If measuring an Outcome** Describe relevance to the national health goal/priority, condition, population, and/or care being addressed: **If not measuring an outcome, provide evidence supporting this measure topic and grade the strength of the evidence** *Summarize the evidence (including citations to source) supporting the focus of the measure as follows:* • Intermediate outcome – evidence that the measured intermediate outcome (e.g., blood pressure, Hba1c) leads to improved health/avoidance of harm or cost/benefit. • Process – evidence that the measured clinical or administrative process leads to improved health/avoidance of harm and if the measure focus is on one step in a multi-step care process, it measures the step that has the greatest effect on improving the specified desired outcome(s). • Structure – evidence that the measured structure supports the consistent delivery of effective processes or access that lead to improved health/avoidance of harm or cost/benefit. • Patient experience – evidence that an association exists between the measure of patient experience of health care and the outcomes, values and preferences of individuals/ the public. • Access – evidence that an association exists between access to a health service and the outcomes of, or experience with, care. • Efficiency– demonstration of an association between the measured resource use and level of performance with respect to one or more of the other five IOM aims of quality. **Type of Evidence** *Check all that apply* ☐ Evidence-based guideline ☐ Quantitative research studies ☐ Meta-analysis ☐ Qualitative research studies ☐ Systematic synthesis of research ☒ Other (*Please describe*): Expert Opinion **Overall Grade for Strength of the Evidence[3]** (*Use the USPSTF system, or if different, also describe how it relates to the USPSTF system)*: The American College of Rheumatology notes in recent guidelines that

[2] Citations can include, but are not limited to journal articles, reports, web pages (URLs).

[3]The strength of the body of evidence for the specific measure focus should be systematically assessed and rated, e.g., USPSTF grading system **www.ahrq.gov/clinic/uspstmeth.htm**: **A -** The USPSTF recommends the service. There is high certainty that the net benefit is substantial. **B -** The USPSTF recommends the service. There is high certainty that the net benefit is moderate or there is moderate certainty that the net benefit is moderate to substantial. **C -** The USPSTF recommends against routinely providing the service. There may be considerations that support providing the service in an individual patient. There is at least moderate certainty that the net benefit is small. Offer or provide this service only if

	there is a strong association of certain Disease Modifying Anti-Rheumatic Drugs (DMARDS) with specific toxicities, but that evidence for supporting recommendations of specific time intervals for monitoring is limited, and that practical concerns including repeated phlebotomies or physician visits should be taken into account. **Summary of Evidence** (*provide guideline information below*)**:** See below. **Citations for Evidence:** See below.
21 (1c)	**Clinical Practice Guideline** *Cite the guideline reference; quote the specific guideline recommendation related to the measure and the guideline author's assessment of the strength of the evidence; and summarize the rationale for using this guideline over others.* **Guideline Citation:** American College of Rheumatology 2008 Recommendations for the use of Nonbiologic and Biologic Disease-modifying Antirheumatic Drugs in Rheumatoid Arthritis. Arthritis Rheum. 2008;59(6):762-784. **Specific guideline recommendation:** "Following initiation of leflunomide, methotrexate, and/or sulfasalazine or when the dose of these drugs is significantly increased, complete blood counts, liver function tests, and determination of serum creatinine levels were recommended every 2–4 weeks for the next 3 months." **Guideline author's rating of strength of evidence** (*If different from USPSTF, also describe it and how it relates to USPSTF)***:** The guideline states: "The recommended frequency of testing and the relationship of testing intervals to both DMARDs and duration remain rather empiric and are largely based on expert consensus (level C and level C* evidence)." ACR defines level C evidence as "data were derived from consensus opinion of experts, case studies, or standards of care." Therefore, the rating of evidence would likely be of moderate to low certainty according to USPSTF guidelines. **Rationale for using this guideline over others:** The American College of Rheumatology is an organization composed of physicians, health professionals, and scientists who work to support and advance the quality of care of people with rheumatic and musculoskeletal diseases. Although the evidence for specific time intervals of laboratory monitoring for toxicity during DMARD therapy is limited, the ACR guidelines provide recommendations from a recognized source of expertise in this field. Checking for liver function testing once during the first 120 days following the initiation of methotrexate allows for assessment of at least minimal compliance with the recommendations in the ACR guidelines.
22 (1c)	**Controversy/Contradictory Evidence** *Summarize any areas of controversy, contradictory evidence, or contradictory guidelines and provide citations.* **Summary:** N/A **Citations:**
23 (1)	**Briefly describe how this measure (as specified) will facilitate significant gains in healthcare quality related to the specific priority goals and quality problems identified above:** By identifying specific patients in whom care is not consistent with the clinical practice guideline underlying the measure, the measure will facilitate improvement in the care for those patients by highlighting the patient-specific QI opportunity for the patient's physician(s). In addition, the feedback physicians will receive on their overall performance on this measure will help focus their attention on the underlying care issue and improve their performance on that issue across all of their patients. If performance measurement is combined with some sort of financial incentive, such as in a pay for performance program, the QI impact may be increased.
	SCIENTIFIC ACCEPTABILITY OF MEASURE PROPERTIES
	Note: Testing and results should be summarized in this form. However, additional detail and reports

other considerations support the offering or providing the service in an individual patient. **D -** The USPSTF recommends against the service. There is moderate or high certainty that the service has no net benefit or that the harms outweigh the benefits. **I -** The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of the service. Evidence is lacking, of poor quality, or conflicting, and the balance of benefits and harms cannot be determined.

	may be submitted as supplemental information or provided as a web page URL. If a measure has not been tested, it is only potentially eligible for time-limited endorsement.
24	**Supplemental Testing Information:** attached ☐ **OR** Web page URL:
25 (2b)	**Reliability Testing** **Data/sample:** We have tested this measure on several patient populations, including, in total, more than 2 million people enrolled in 6 different health plans. In addition, we have used analogous computer algorithms to identify patient-specific QI opportunities in health plan members and have sent messages regarding those opportunities to either the member or the member's physician or both. **Analytic Method:** The validity of a physician quality score describes how accurately it estimates the true value. Reliability is the stability or consistency of an estimator from one data set to the next. Both are important in assessing the performance of the quality score. We have used the following measure as an indication of the reliability of each of our measures: 1 minus [(the variance of the posterior distribution of the physician quality score) divided by (the variance of the true physician quality score)], which is the reduction in the variance of a doctor's performance score (posterior distribution) obtained by using his or her performance data, expressed as a fraction of the total variance before any data is collected. **Testing Results:** The reliability of a physician quality score depends on the number of observations available for a given physician, how the physician performs relative to all other physician, and the overall variance in physician quality scores. As a result, reliability varies with the population of MDs in whom the measure is used. In our experience, reliability is in the range of 0.5 to >0.7.
26 (2c)	**Validity Testing** **Data/sample:** We have tested this measure on several patient populations, including, in total, more than 2 million people enrolled in 6 different health plans. In addition, we have used analogous computer algorithms to identify patient-specific QI opportunities in health plan members and have sent messages regarding those opportunities to either the member or the member's physician or both. **Analytic Method:** We have employed several approaches to ensure the validity of this measure: 1) we've ensured that the technical specifications for this measure are valid reflections of the underlying clinical practice guideline; 2) we have obtained feedback on the validity of the measure from several physician panels that were assembled by either Care Focused Purchasing or the Massachusetts Group Insurance Commission Clinical Performance Improvement Initiative, or both, and 3) we have systematically collected feedback from physicians and health plan members to whom we have sent messages regarding this measure. **Testing Results:** This measure is considered to be valid by the physician panels that have reviewed it. (More information regarding the panels is provided elsewhere in this document.) In addition, the measure has been considered to be valid by the medical directors of different health plans. In addition, the fact that hundreds of physicians have received results based on this measure without indicating that they don't believe the measure is valid attests to its validity.
27 (2d)	**Measure Exclusions** *Provide evidence to justify exclusion(s) and analysis of impact on measure results during testing.* **Summary of Evidence supporting exclusion(s):** Exclusion of members with an inpatient stay during the 120 days following the methotrexate prescription is done to avoid the possibility of missing inpatient claims for liver function testing. **Citations for Evidence:** N/A **Data/sample:** **Analytic Method:** **Testing Results:**

28 (2e)	**Risk Adjustment Testing** *Summarize the testing used to determine the need (or no need) for risk adjustment and the statistical performance of the risk adjustment method.* **Data/sample:** N/A **Analytic Method:** **Testing Results:** ►**If outcome or resource use measure not risk adjusted, provide rationale:** There is no need to risk-adjust results from this measure. To the extent that the measure applies only to patients in a particular risk category, that has been taken into account in the specifications for the denominator or exclusions for this measure.
29 (2g)	**Testing comparability of results when more than 1 data method is specified** (*e.g., administrative claims or chart abstraction*) **Data/sample:** N/A **Analytic Method:** **Results:**
30 (2f)	**Provide Measure Results from Testing or Current Use** Results from current use **Data/sample:** RHI client experience **Methods to identify statistically significant and practically/meaningfully differences in performance:** We have developed a hierarchical logistic regression model with expert biostatisticians at the Johns Hopkins School of Public Health that enables one to produce a probability distribution around a point estimate of the "quality score" for a given physician. This model has shown that there is no minimum sample size that is required to produce a quality score which has a comparatively "tight" probability distribution. Rather, the number of required observations depends on how a given physician performs on particular measures compared to how all other MDs perform on those measures. We recommend that a minimum of 10 observations be required, however, because of the normality assumption that underlies the model and for public "face validity". Alternatively, to satisfy current NCQA standards, a minimum of 30 observations could be required. We have employed this statistical approach in the MD quality profiling we performed on the experience of more than 2 million members of health plans participating in the Massachusetts Group Insurance Commission Clinical Performance Improvement Initiative in 2008. **Results:** Pooled results: numerator denominator proportion --- 693 821 84.41%
31 (2h)	**Identification of Disparities** ►If measure is stratified by factors related to disparities (i.e. race/ethnicity, primary language, gender, SES, health literacy), **provide stratified results:** ►If disparities have been reported/identified, but measure is not specified to detect disparities, provide rationale:
	USABILITY
32 (3)	**Current Use** In use **If in use, how widely used** State ► If "other," please describe: ☒ Used in a public reporting initiative, name of initiative: The GIC CPII project (Group Insurance Commission Clinical Performance Improvement Initiative) in Massachusetts. Sample report attached ☐ **OR** Web page URL:

33 (3a)	**Testing of Interpretability** (*Testing that demonstrates the results are understood by the potential users for public reporting and quality improvement*) **Data/sample:** We have tested this measure on several patient populations, including, in total, more than 2 million people enrolled in 6 different health plans. **Methods:** The results have been provided to the medical directors of the health plans, all of whom have indicated that they understand the particular aspect of care that the measure addresses and how to interpret the result for a physician. In addition, results have been presented to HR directors from national employers. **Results:** Both the health plan medical directors and the HR personnel from the employers have indicated that they understand the particular aspect of care that the measure addresses and how to interpret the result for a physician. We do not have data on the extent to which individual physicians understand the measure result, but we presume that, since health plan medical directors and non-medical personnel from employers understand the result, that physicians and lay people will also so long that adequate explanation is provided.
34 (3b, 3c)	**Relation to other NQF-endorsed™ measures** ►Is this measure similar or related to measure(s) already endorsed by NQF (on the same topic or the same target population)? *Measures can be found at **www.qualityforum.org** under Core Documents.* *Check all that apply* ☐ Have not looked at other NQF measures ☐ Other measure(s) on same topic ☐ Other measure(s) for same target population ☒ No similar or related measures **Name of similar or related NQF-endorsed™ measure(s):** **Are the measure specifications harmonized with existing NQF-endorsed™ measures?** (select one) ►If not fully harmonized, provide rationale: **Describe the distinctive, improved, or additive value this measure provides to existing NQF-endorsed measures:**
	FEASIBILITY
35 (4a)	**How are the required data elements generated?** *Check all that apply* ☐ Data elements are generated concurrent with and as a byproduct of care processes during care delivery (e.g., blood pressure or other assessment recorded by personnel conducting the assessment) ☐ Data elements are generated from a patient survey (e.g., CAHPS) ☒ Data elements are generated through coding performed by someone other than the person who obtained the original information (e.g., DRG or ICD-9 coding on claims) ☐ Other, Please describe:
36 (4b)	**Electronic Sources** All data elements ►**If all data elements are not in electronic sources, specify the near-term path to electronic collection by most providers:** ►**Specify the data elements for the electronic health record:**
37 (4c)	**Do the specified exclusions require additional data sources beyond what is required for the other specifications?** No ►**If yes, provide justification:**
38 (4d)	**Identify susceptibility to inaccuracies, errors, or unintended consequences of the measure:** As with any type of clinical performance measure, and with any source of data used to operationalize the measure, there will be some instances in which the data used to compute the measure are incomplete or inaccurate. We try to minimize the impact of such errors or omissions through the way we have constructed the technical specifications for the measure. There is no data source for performance measurement that is completely accurate. Two studies have shown that physician performance tends to

	be better when assessed using claims data compared to via chart abstraction. **Describe how could these potential problems be audited:** Potential data errors of omission or commission could be audited through chart abstraction, or feedback from physicians and patients. However, as mentioned above, each of these alternative sources of information also are susceptible to error and thus are not true gold standards. **Did you audit for these potential problems during testing?** Yes **If yes, provide results:** Through feedback from physicians whose performance has been evaluated.
39 (4e)	**Testing feasibility** Describe what have you learned/modified as a result of testing and/or operational use of the measure regarding data collection, availability of data/missing data, timing/frequency of data collection, patient confidentiality, time/cost of data collection, other feasibility/ implementation issues: The technical specifications for all of our measures have been reviewed over time by numerous physicians and have been adjusted when feedback has indicated a way to improve the measure. Our experience suggests that the only practical and affordable approach for evaluation of the performance of individual MDs on a large scale is through use of claims data. We have found there to be benefit from determining whether a particular health plan has capitated arrangements with physicians or other types of providers (e.g. labs and radiology facilities) in a particular geographic area and, in those instances, to only include observations if encounter data are available. We routinely require at least 4 months of "claims runout" after the end of a measurement year in order to take account of claim lag.
	CONTACT INFORMATION
40	**Web Page URL for Measure Information** *Describe where users (implementers) should go for more details on specifications of measures, or assistance in implementing the measure.* **Web page URL:** www.resolutionhealth.com
41	**Measure Intellectual Property Agreement Owner Point of Contact** **First Name:** Alan **MI:** **Last Name:** Lefkowitz **Credentials (MD, MPH, etc.):** **Organization:** Resolution Health, Inc. **Street Address:** 10490 Little Patuxent Parkway **City:** Columbia **State:** MD **ZIP:** 21044 **Email:** alefkowitz@resolutionhealth.com **Telephone:** 240-295-5834 ext:
42	**Measure Submission Point of Contact** **If different than IP Owner Contact** **First Name:** Darren **MI:** M **Last Name:** Schulte **Credentials (MD, MPH, etc.):** MD, MPP **Organization:** Resolution Health, Inc. **Street Address:** 10490 Little Patuxent Parkway **City:** Columbia **State:** MD **ZIP:** 21044 **Email:** dschulte@resolutionhealth.com **Telephone:** 650-773-3308 ext:
43	**Measure Developer Point of Contact** **If different than IP Owner Contact** **First Name:** Darren **MI:** M **Last Name:** Schulte **Credentials (MD, MPH, etc.):** MD, MPP **Organization:** Resolution Health, Inc. **Street Address:** 10490 Little Patuxent Parkway **City:** Columbia **State:** MD **ZIP:** 21044 **Email:** dschulte@resolutionhealth.com **Telephone:** 650-773-3308 ext:
44	**Measure Steward Point of Contact** **If different than IP Owner Contact** *Identifies the organization that will take responsibility for updating the measure and assuring it is consistent with the scientific evidence and current coding schema; the steward of the measure may be different than the developer.* **First Name:** Darren **MI:**M **Last Name:**Schulte **Credentials (MD, MPH, etc.):** MD, MPP **Organization:** Resolution Health, Inc. **Street Address:** 10490 Little Patuxent Parkway **City:**Columbia **State:**MD **ZIP:**21044 **Email:** dschulte@resolutionhealth.com **Telephone:** 650-773-3308 ext
	ADDITIONAL INFORMATION
45	**Workgroup/Expert Panel involved in measure development** Workgroup/panel used ►If workgroup used, describe the members' role in measure development: Over the past several years, two formal workgroups -- one organized by the Care Focused Purchasing initiative and one organized by

	the Massachusetts Group Insurance Commission Clinical Performance Improvement Initiative -- and several ad hoc experts have provided useful input to our measure development and refinement processes. In each case, we have provided the Work Group Members with details regarding each of our performance measures and members of the work group (not always all members) have provided feedback on the validity of the clinical practice guideline underlying the measure and suggestions regarding potential ways to improve the technical specifications for the measure. In some instances, we have eliminated measures based on feedback from the work groups. In other instances, work group members have proposed new measures. We try to get feedback from work group members and selected clinical experts on an annual basis. ►Provide a list of workgroup/panel members' names and organizations: Care Focused Purchasing Clinical Advisory Panel: Bobbie Berg -BCBS -IL Dow Briggs - BCBS- AL Joe Calderella - Cigna Carl Cameron - Preferred Care Steven Goldberg – Humana Tom James – Humana Don Liss – Aetna Catherine MacLean – WellPoint Zak Ramadan-Jradi – Regence Fred Volkman – Avidyn Health Constance Hwang – Resolution Health Darren Schulte - Resolution Health Earl Steinberg – Resolution Health Massachusetts Group Insurance Commission Physician Advisory Panel: Jim Glauber – Neighborhood Health Plan Lyn Laurenco - Neighborhood Health Plan Anton Dodek - Tufts Barbara Chase - Fallon Jonathan Scott Coblyn – Brigham and Women's Hospital Tom Ebert - Health New England Elaine Wilson - Harvard Pilgrim Health Care Jennifer St. Thomas – Tufts Jennifer Lavigne – Fallon Michael O'Shea - Baycare Health Neil Minkoff - Harvard Pilgrim Health Care Paul Mendis- Neighborhood Health Plan Bob Jordan - Neighborhood Health Plan Bob Sorrenti – Unicare Constance Williams – Unicare Laura Syron - Neighborhood Health Plan Susan Tiffany – Unicare Constance Hwang – Resolution Health Darren Schulte - Resolution Health Earl Steinberg – Resolution Health David Gregg – Mercer Russ Robinson - Mercer
46	**Measure Developer/Steward Updates and Ongoing Maintenance** Year the measure was first released: 2007 Month and Year of most recent revision: August, 2008 What is the frequency for review/update of this measure? Annual When is the next scheduled review/update for this measure? Summer, 2009
47	**Copyright statement/disclaimers:** Copyright © 2008 – Resolution Health, Inc. All rights reserved. The material submitted is confidential and proprietary. No use of this material is permitted other than in accordance with the Agreement with Measure Stewards between National Quality Forum and Resolution Health, Inc.

48	**Additional Information:** None
49	**I have checked that the submission is complete and any blank fields indicate that no information is provided.** ☒
50	**Date of Submission** (*MM/DD/YY*)**:** 11/20/08

PATIENT & FAMILY ENGAGEMENT

PRIORITY STATEMENT: Engage Patients and Their Families in Managing Their Health and Making Decisions About Their Care

1.1. All providers will routinely solicit and publicly report on their patients' perspectives of care

1.2. All providers will work collaboratively with their patients to assist them in making informed decisions about treatment options consistent with their values and preferences

POPULATION HEALTH

PRIORITY STATEMENT: IMPROVE THE HEALTH OF THE U.S. POPULATION

2.1. The population will be up to date on all high-priority age- and gender-appropriate evidence-based clinical preventive services

2.2. The population will receive recommended evidence-based interventions to improve targeted healthy lifestyle behaviors

2.3. All communities will demonstrate a 10% improvement in their community index of health

2.4. Americans will have all recommended high priority healthy lifestyle behaviors under control

SAFETY

PRIORITY STATEMENT: IMPROVE THE SAFETY OF THE U.S. HEALTH CARE SYSTEM

3.1. All providers will drive all preventable healthcare-associated infections (HAI) to zero

3.2. All providers will drive the incidence of preventable NQF Serious Reportable Events (SRE) to zero

3.3. All hospitals will reduce preventable and premature mortality rates to best-in-class

3.4. All hospitals and their community partners will reduce 30-day mortality rates following hospitalization for select conditions to best-in-class

PALLIATIVE CARE

PRIORITY STATEMENT: GUARANTEE APPROPRIATE AND COMPASSIONATE CARE FOR PATIENTS WITH LIFE-LIMITING ILLNESSES

4.1. All providers will identify, document, and effectively treat physical symptoms (e.g. pain, shortness of breath, constipation, others) at levels acceptable to patients with a life-limiting illness

4.2. All providers will effectively address the psychosocial and spiritual needs of patients with life-limiting illnesses and their families according to their preferences

4.3. All eligible patients will receive high quality palliative care and hospice services

CARE COORDINATION

PRIORITY STATEMENT: ENSURE PATIENTS RECEIVE WELL-COORDINATED CARE ACROSS ALL PROVIDERS, SETTINGS, AND LEVELS OF CARE

5.1. All providers will accurately and completely reconcile medications across the continuum of care (i.e. admission, transfer within and between care providers, discharge, and outpatient appointments) and ensure communication with the next provider of services

5.2. All inpatient and outpatient providers will assess the patient's perspective of the coordination of their care using a validated care coordination survey tool

5.3. All providers will reduce 30-day all-cause readmission rates resulting from poorly coordinated care to best-in-class

5.4. All providers will reduce preventable emergency department (i.e. those that could be avoided with timely access to primary care) visits resulting from poorly coordinated care by 50%

PATIENT-FOCUSED CARE

PRIORITY STATEMENT: GUARANTEE HIGH VALUE CARE ACROSS ACUTE AND CHRONIC EPISODES

6.1. All patients will receive high-value care over the course of their acute or chronic illness

OVERUSE

PRIORITY STATEMENT: ELIMINATE WASTE WHILE ENSURING THE DELIVERY OF APPROPRIATE CARE

7.1. Reduce wasteful and inappropriate care for the top ten targeted areas by 50%

THE NATIONAL QUALITY FORUM

MEASURE SUBMISSION FORM VERSION 3.0
August 2008

The measure information you submit will be shared with NQF's Steering Committees and Technical Advisory Panels to evaluate measures against the NQF criteria of importance to measure and report, scientific acceptability of measure properties, usability, and feasibility. Four conditions (as indicated below) must be met before proposed measures may be considered and evaluated for suitability as voluntary consensus standards. Not all acceptable measures will be strong—or equally strong—among each set of criteria. The assessment of each criterion is a matter of degree; however, all measures must be judged to have met the first criterion, importance to measure and report, in order to be evaluated against the remaining criteria. References to the specific measure evaluation criteria are provided in parentheses following the item numbers. Please refer to the *Measure Evaluation Criteria* for more information at *www.qualityforum.org* under Core Documents. Additional guidance is being developed and when available will be posted on the NQF website.

Use the tab or arrow (↓→) keys to move the cursor to the next field (or back ←↑). There are three types of response fields:

- drop-down menus - select one response;
- check boxes – check as many as apply; and
- text fields – you can copy and paste text into these fields or enter text; these fields are not limited in size, but in most cases, we ask that you summarize the requested information.

Please note that URL hyperlinks do not work in the form; you will need to type them into your web browser.

Be sure to answer all questions. Fields that are left blank will be interpreted as no or none. Information must be provided in this form. Attachments are not allowed except when specifically requested or to provide additional detail or source documents for information that is summarized in this form. If you have important information that is not addressed by the questions, they can be entered into item #48 near the end of the form.

For questions about this form, please contact the NQF Project Director listed in the corresponding call for measures.

	CONDITIONS FOR CONSIDERATION BY NQF
	Four conditions must be met before proposed measures may be considered and evaluated for suitability as voluntary consensus standards.
A (A)	**Public domain or Intellectual Property Agreement signed:** IP Agreement signed and submitted (If no, do not submit) *Template for the Intellectual Property Agreement is available at* **www.qualityforum.org** *under Core Documents.*
B (B)	**Measure steward/maintenance:** Is there an identified responsible entity and process to maintain and update the measure on a schedule commensurate with clinical innovation, but at least every 3 years? Yes, information provided in contact section (If no, do not submit)
C (C)	**Intended use:** Does the intended use of the measure include BOTH public reporting AND quality improvement? Yes (If no, do not submit)
D (D)	**Fully developed and tested:** Is the measure fully developed AND tested? Yes, fully developed and tested (If not tested and no plans for testing within 24 months, do not submit)

THE NATIONAL QUALITY FORUM

MEASURE SUBMISSION FORM VERSION 3.0

August 2008

	(for NQF staff use) **NQF Review #:** **NQF Project:**
	MEASURE SPECIFICATIONS & DESCRIPTIVE INFORMATION
1	**Information current as of** *(date- MM/DD/YY)*: 10/31/2008
2	**Title of Measure:** Methotrexate: CBC within 12 weeks
3	**Brief description of measure** [1]**:** This measure identifies adult patients with rheumatoid arthritis who were prescribed at least a 6-month supply of methotrexate during the measurement year and received a CBC test within 120 days (3 months + 1 month grace period) following the earliest observed methotrexate prescription claim.
4 (2a)	**Numerator Statement:** Patients in the denominator who received a CBC test within 120 days following the earliest observed methotrexate prescription claim **Time Window:** See below **Numerator Details** (Definitions, codes with description): >=1 claim for 'CBC group_PQP' in the 120 days following the earliest observed methotrexate prescription CBC Group_PQP (Procedure) ========== Type Code Description ------- ------- ---------- CPT4 85007 BLD CNT; SMER MIC EX MNL DIFF WBC CPT4 85025 BLD CNT;CMPL AUTO&AUTO DIFF WBC CNT CPT4 85008 BLD CNT;SMER MIC EX NO MNL DIFF WBC CPT4 85027 BLOOD COUNT; COMPLETE AUTOMATIC HCPCS G0306 CMPL CBC AUTO&AUTO WBC DIFF COUNT HCPCS G0307 COMPLETE AUTOMATED CPT4 80050 GENERAL HEALTH PANEL CPT4 80055 OBSTETRIC PANEL
5 (2a)	**Denominator Statement:** Patients >=18 years old with rheumatoid arthritis who have received at least a 6-month supply of oral methotrexate during the measurement year **Time Window:** See below **Denominator Details** (Definitions, codes with description): - Age >=18 years as of the end of the measurement year - AND at least 2 outpatient claims for 'Rheumatoid Arthritis' (any position) OR 1 ER or Hospital claim for 'Rheumatoid Arthritis' - AND continuous use of 'oral methotrexate' for 6 months (80% medication possession ratio) during the measurement year - AND service eligibility for 120 days following the earliest methotrexate prescription claim from the measurement year - Exclude members with inpatient hospitalization during the 120 days after the earliest observed methotrexate prescription Rheumatoid Arthritis (Diagnosis) ==========

[1] Example of measure description: Percentage of adult patients with diabetes aged 18-75 years receiving one or more A1c test(s) per year.

	Type Code Description ------- ------- ---------- ICD9 7141 FELTYS SYNDROME ICD9 7142 OTH RA W/VISCERAL/SYSTEMIC INVLV ICD9 7140 RHEUMATOID ARTHRITIS ICD9 71481 RHEUMATOID LUNG oral methotrexate (Medispan Drug) ========== Type GPI Code Description ----- ---------- ---------- GPI 21300050100340 Methotrexate Sodium Tab 10 MG (Base Equiv) GPI 21300050100350 Methotrexate Sodium Tab 15 MG (Base Equiv) GPI 66250050100320 Methotrexate Sodium Tab 2.5 MG (Antirheumatic) GPI 21300050100310 Methotrexate Sodium Tab 2.5 MG (Base Equiv) GPI 21300050100320 Methotrexate Sodium Tab 5 MG (Base Equiv) GPI 21300050100330 Methotrexate Sodium Tab 7.5 MG (Base Equiv)
6 (2a, 2d)	**Denominator Exclusions:** Exclude members with an inpatient hospitalization during the 120 days after the earliest observed methotrexate prescription **Denominator Exclusion Details** (Definitions, codes with description): Exclude any member with claims for a visit with an inpatient facility code from the time of earliest observed methotrexate prescription to 120 days afterward.
7 (2a, 2h)	**Stratification** Do the measure specifications require the results to be stratified? No ► If "other" describe: **Identification of stratification variable(s):** **Stratification Details** (Definitions, codes with description):
8 (2a, 2e)	**Risk Adjustment** Does the measure require risk adjustment to account for differences in patient severity before the onset of care? No ► **If yes,** (select one) ► Is there a separate proprietary owner of the risk model? (select one) **Identify Risk Adjustment Variables:** **Detailed risk model:** attached ☐ **OR** Web page URL:
9 (2a)	**Type of Score:** Rate/proportion **Calculation Algorithm:** attached ☒ **OR** Web page URL: **Interpretation of Score** (*Classifies interpretation of score according to whether better quality is associated with a higher score, a lower score, a score falling within a defined interval, or a passing score*) Better quality = Higher score ► If "Other", please describe:
10 (2a. 4a, 4b)	**Identify the required data elements**(e.g., primary diagnosis, lab values, vital signs)**:** Diagnosis, procedure, pharmacy claims **Data dictionary/code table** attached ☐ **OR** Web page URL: **Data Quality** (2a) *Check all that apply* ☐ Data are captured from an authoritative/accurate source (e.g., lab values from laboratory personnel) ☒ Data are coded using recognized data standards ☐ Method of capturing data electronically fits the workflow of the authoritative source ☐ Data are available in EHRs ☒ Data are auditable
11 (2a, 4b)	**Data Source and Data Collection Methods** *Identifies the data source(s) necessary to implement the measure specifications. Check all that apply* ☐ Electronic Health/Medical Record ☐ Paper Medical Record ☐ Electronic Clinical Database, Name: ☐ Standardized clinical instrument, Name: ☐ Electronic Clinical Registry, Name: ☐ Standardized patient survey, Name:

	☒ Electronic Claims ☒ Electronic Pharmacy data ☐ Electronic Lab data ☐ Electronic source – other, Describe:	☐ Standardized clinician survey, Name: ☒ Other, Describe: It is reasonable to allow physicians to submit definitive evidence that a particular service was provided to a patient. For example, a lab result from a testing facility would indicate that that lab test was performed. A notation in a patient chart that the test was ordered, in contrast, would not provide definitive evidence that the test was performed. Instrument/survey attached ☐ **OR** Web page URL:
12 (2a)	**Sampling** *If measure is based on a sample, provide instructions and guidance on sample size.* **Minimum sample size:** 10 **Instructions:** We have developed a hierarchical logistic regression model with expert biostatisticians at the Johns Hopkins School of Public Health that enables one to produce a probability distribution around a point estimate of the "quality score" for a given physician. This model has shown that there is no minimum sample size that is required to produce a quality score which has a comparatively "tight" probability distribution. Rather, the number of required observations depends on how a given physician performs on particular measures compared to how all other MDs perform on those measures. We recommend that a minimum of 10 observations be required, however, because of the normality assumption that underlies the model and for public "face validity". Alternatively, to satisfy current NCQA standards, a minimum of 30 observations could be required.	
13 (2a)	**Type of Measure:** Process ► If "Other", please describe: ► If part of a composite or paired with another measure, please identify composite or paired measure	
14 (2a)	**Unit of Measurement/Analysis** (*Who or what is being measured*) *Check all that apply.*	
	☐ Can be measured at all levels ☒ Individual clinician (e.g., physician, nurse) ☒ Group of clinicians (e.g., facility department/unit, group practice) ☒ Facility (e.g., hospital, nursing home)	☒ Integrated delivery system ☒ Health plan ☒ Community/Population ☐ Other (*Please describe*):
15 (2a)	**Applicable Care Settings** *Check all that apply*	
	☐ Can be used in all healthcare settings ☒ Ambulatory Care (office/clinic) ☐ Behavioral Healthcare ☒ Community Healthcare ☐ Dialysis Facility ☐ Emergency Department ☐ EMS emergency medical services ☒ Health Plan ☐ Home Health	☐ Hospice ☐ Hospital ☐ Long term acute care hospital ☐ Nursing home/ Skilled Nursing Facility (SNF) ☐ Prescription Drug Plan ☐ Rehabilitation Facility ☐ Substance Use Treatment Program/Center ☐ Other (*Please describe*):
	IMPORTANCE TO MEASURE AND REPORT	
	Note: This is a threshold criterion. If a measure is not judged to be sufficiently important to measure and report, it will not be evaluated against the remaining criteria.	
16	**Addresses a Specific National Priority Partners Goal** *Enter the numbers of the specific goals related*	

(1a)	*to this measure (see list of goals on last page)*: 6.1
17 (1a)	**If not related to NPP goal, identify high impact aspect of healthcare** (select one) **Summary of Evidence:** **Citations[2] for Evidence:**
18 (1b)	**Opportunity for Improvement** *Provide evidence that demonstrates considerable variation, or overall poor performance, across providers.* **Summary of Evidence:** Distinct populations in which the measure was used for physician quality profiling: numerator denominator proportion --- 12 15 80.00% 105 129 81.40% 204 245 83.27% 239 282 84.75% 64 75 85.33% 65 75 86.67% **Citations for Evidence:** RHI client experience
19 (1b)	**Disparities** *Provide evidence that demonstrates disparity in care/outcomes related to the measure focus among populations.* **Summary of Evidence:** N/A **Citations for evidence:**
20 (1c)	**If measuring an Outcome** Describe relevance to the national health goal/priority, condition, population, and/or care being addressed: **If not measuring an outcome, provide evidence supporting this measure topic and grade the strength of the evidence** *Summarize the evidence (including citations to source) supporting the focus of the measure as follows:* • Intermediate outcome – evidence that the measured intermediate outcome (e.g., blood pressure, Hba1c) leads to improved health/avoidance of harm or cost/benefit. • Process – evidence that the measured clinical or administrative process leads to improved health/avoidance of harm and if the measure focus is on one step in a multi-step care process, it measures the step that has the greatest effect on improving the specified desired outcome(s). • Structure – evidence that the measured structure supports the consistent delivery of effective processes or access that lead to improved health/avoidance of harm or cost/benefit. • Patient experience – evidence that an association exists between the measure of patient experience of health care and the outcomes, values and preferences of individuals/ the public. • Access – evidence that an association exists between access to a health service and the outcomes of, or experience with, care. • Efficiency– demonstration of an association between the measured resource use and level of performance with respect to one or more of the other five IOM aims of quality. **Type of Evidence** *Check all that apply* ☐ Evidence-based guideline ☐ Quantitative research studies ☐ Meta-analysis ☐ Qualitative research studies ☐ Systematic synthesis of research ☒ Other (*Please describe*): Expert Opinion **Overall Grade for Strength of the Evidence[3]** (*Use the USPSTF system, or if different, also describe how*

[2] Citations can include, but are not limited to journal articles, reports, web pages (URLs).

	it relates to the USPSTF system): The American College of Rheumatology notes in recent guidelines that there is a strong association of certain Disease Modifying Anti-Rheumatic Drugs (DMARDS) with specific toxicities , but that evidence for supporting recommendations of specific time intervals for monitoring is limited, and that practical concerns including repeated phlebotomies or physician visits should be taken into account. **Summary of Evidence** (*provide guideline information below*): See below. **Citations for Evidence:** See below.
21 (1c)	**Clinical Practice Guideline** *Cite the guideline reference; quote the specific guideline recommendation related to the measure and the guideline author's assessment of the strength of the evidence; and summarize the rationale for using this guideline over others.* **Guideline Citation:** American College of Rheumatology 2008 Recommendations for the use of Nonbiologic and Biologic Disease-modifying Antirheumatic Drugs in Rheumatoid Arthritis. Arthritis Rheum. 2008;59(6):762-784. **Specific guideline recommendation:** "Following initiation of leflunomide, methotrexate, and/or sulfasalazine or when the dose of these drugs is significantly increased, complete blood counts, liver function tests, and determination of serum creatinine levels were recommended every 2–4 weeks for the next 3 months." **Guideline author's rating of strength of evidence** (*If different from USPSTF, also describe it and how it relates to USPSTF)*: The guideline states: "The recommended frequency of testing and the relationship of testing intervals to both DMARDs and duration remain rather empiric and are largely based on expert consensus (level C and level C* evidence)." ACR defines level C evidence as "data were derived from consensus opinion of experts, case studies, or standards of care." Therefore, the rating of evidence would likely be of moderate to low certainty according to USPSTF guidelines. **Rationale for using this guideline over others:** The American College of Rheumatology is an organization composed of physicians, health professionals, and scientists who work to support and advance the quality of care of people with rheumatic and musculoskeletal diseases. Although the evidence for specific time intervals of laboratory monitoring for toxicity during DMARD therapy is limited, the ACR guidelines provide recommendations from a recognized source of expertise in this field. Checking for at least one CBC during the first 120 days following the initiation of methotrexate allows assessment of at least minimal compliance with the recommendations in the ACR guidelines.
22 (1c)	**Controversy/Contradictory Evidence** *Summarize any areas of controversy, contradictory evidence, or contradictory guidelines and provide citations.* **Summary:** N/A **Citations:**
23 (1)	**Briefly describe how this measure (as specified) will facilitate significant gains in healthcare quality related to the specific priority goals and quality problems identified above:** By identifying specific patients in whom care is not consistent with the clinical practice guideline underlying the measure, the measure will facilitate improvement in the care for those patients by highlighting the patient-specific QI opportunity for the patient's physician(s). In addition, the feedback physicians will receive on their overall performance on this measure will help focus their attention on the underlying care issue and

[3]The strength of the body of evidence for the specific measure focus should be systematically assessed and rated, e.g., USPSTF grading system www.ahrq.gov/clinic/uspstmeth.htm: A - The USPSTF recommends the service. There is high certainty that the net benefit is substantial. B - The USPSTF recommends the service. There is high certainty that the net benefit is moderate or there is moderate certainty that the net benefit is moderate to substantial. C - The USPSTF recommends against routinely providing the service. There may be considerations that support providing the service in an individual patient. There is at least moderate certainty that the net benefit is small. Offer or provide this service only if other considerations support the offering or providing the service in an individual patient. D - The USPSTF recommends against the service. There is moderate or high certainty that the service has no net benefit or that the harms outweigh the benefits. I - The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of the service. Evidence is lacking, of poor quality, or conflicting, and the balance of benefits and harms cannot be determined.

	improve their performance on that issue across all of their patients. If performance measurement is combined with some sort of financial incentive, such as in a pay for performance program, the QI impact may be increased.
	SCIENTIFIC ACCEPTABILITY OF MEASURE PROPERTIES
	Note: Testing and results should be summarized in this form. However, additional detail and reports may be submitted as supplemental information or provided as a web page URL. If a measure has not been tested, it is only potentially eligible for time-limited endorsement.
24	**Supplemental Testing Information:** attached ☐ **OR** Web page URL:
25 (2b)	**Reliability Testing** **Data/sample:** We have tested this measure on several patient populations, including, in total, more than 2 million people enrolled in 6 different health plans. In addition, we have used analogous computer algorithms to identify patient-specific QI opportunities in health plan members and have sent messages regarding those opportunities to either the member or the member's physician or both. **Analytic Method:** The validity of a physician quality score describes how accurately it estimates the true value. Reliability is the stability or consistency of an estimator from one data set to the next. Both are important in assessing the performance of the quality score. We have used the following measure as an indication of the reliability of each of our measures: 1 minus [(the variance of the posterior distribution of the physician quality score) divided by (the variance of the true physician quality score)], which is the reduction in the variance of a doctor's performance score (posterior distribution) obtained by using his or her performance data, expressed as a fraction of the total variance before any data is collected. **Testing Results:** The reliability of a physician quality score depends on the number of observations available for a given physician, how the physician performs relative to all other physicians, and the overall variance in physician quality scores. As a result, reliability varies with the population of MDs in whom the measure is used. In our experience, reliability is in the range of 0.5 to >0.7.
26 (2c)	**Validity Testing** **Data/sample:** We have tested this measure on several patient populations, including, in total, more than 2 million people enrolled in 6 different health plans. In addition, we have used analogous computer algorithms to identify patient-specific QI opportunities in health plan members and have sent messages regarding those opportunities to either the member or the member's physician or both. **Analytic Method:** We have employed several approaches to ensure the validity of this measure: 1) we've ensured that the technical specifications for this measure are valid reflections of the underlying clinical practice guideline; 2) we have obtained feedback on the validity of the measure from several physician panels that were assembled by either Care Focused Purchasing or the Massachusetts Group Insurance Commission Clinical Performance Improvement Initiative, or both, and 3) we have systematically collected feedback from physicians and health plan members to whom we have sent messages regarding this measure. **Testing Results:** This measure is considered to be valid by the physician panels that have reviewed it. (More information regarding the panels is provided elsewhere in this document.) In addition, the measure has been considered to be valid by the medical directors of different health plans. In addition, the fact that hundreds of physicians have received results based on this measure without indicating that they don't believe the measure is valid attests to its validity.
27 (2d)	**Measure Exclusions** *Provide evidence to justify exclusion(s) and analysis of impact on measure results during testing.* **Summary of Evidence supporting exclusion(s):** Exclusion of members with an inpatient stay during the 120 days following the methotrexate prescription is done to avoid the possibility of missing inpatient claims for a CBC.

	Citations for Evidence: N/A **Data/sample:** **Analytic Method:** **Testing Results:**
28 (2e)	**Risk Adjustment Testing** *Summarize the testing used to determine the need (or no need) for risk adjustment and the statistical performance of the risk adjustment method.* **Data/sample:** N/A **Analytic Method:** **Testing Results:** ►**If outcome or resource use measure not risk adjusted, provide rationale:** There is no need to risk-adjust results from this measure. To the extent that the measure applies only to patients in a particular risk category, that has been taken into account in the specifications for the denominator or exclusions for this measure.
29 (2g)	**Testing comparability of results when more than 1 data method is specified** (*e.g., administrative claims or chart abstraction*) **Data/sample:** N/A **Analytic Method:** **Results:**
30 (2f)	**Provide Measure Results from Testing or Current Use** Results from current use **Data/sample:** RHI client experience **Methods to identify statistically significant and practically/meaningfully differences in performance:** We have developed a hierarchical logistic regression model with expert biostatisticians at the Johns Hopkins School of Public Health that enables one to produce a probability distribution around a point estimate of the "quality score" for a given physician. This model has shown that there is no minimum sample size that is required to produce a quality score which has a comparatively "tight" probability distribution. Rather, the number of required observations depends on how a given physician performs on particular measures compared to how all other MDs perform on those measures. We recommend that a minimum of 10 observations be required, however, because of the normality assumption that underlies the model and for public "face validity". Alternatively, to satisfy current NCQA standards, a minimum of 30 observations could be required. We have employed this statistical approach in the MD quality profiling we performed on the experience of more than 2 million members of health plans participating in the Massachusetts Group Insurance Commission Clinical Performance Improvement Initiative in 2008. **Results:** Pooled results: numerator denominator proportion --- 689 821 83.92%
31 (2h)	**Identification of Disparities** ►If measure is stratified by factors related to disparities (i.e. race/ethnicity, primary language, gender, SES, health literacy), **provide stratified results:** ►If disparities have been reported/identified, but measure is not specified to detect disparities, provide rationale:
	USABILITY

32 (3)	**Current Use** In use **If in use, how widely used** State ► If "other," please describe: ☒ Used in a public reporting initiative, name of initiative: The GIC CPII project (Group Insurance Commission Clinical Performance Improvement Initiative) in Massachusetts. Sample report attached ☐ **OR** Web page URL:
33 (3a)	**Testing of Interpretability** (*Testing that demonstrates the results are understood by the potential users for public reporting and quality improvement*) **Data/sample:** We have tested this measure on several patient populations, including, in total, millions of people enrolled in multiple health plans. **Methods:** The results have been provided to the medical directors of the health plans, all of whom have indicated that they understand the particular aspect of care that the measure addresses and how to interpret the result for a physician. In addition, results have been presented to HR directors from national employers. **Results:** Both the health plan medical directors and the HR personnel from the employers have indicated that they understand the particular aspect of care that the measure addresses and how to interpret the result for a physician. We do not have data on the extent to which individual physicians understand the measure result, but we presume that, since health plan medical directors and non-medical personnel from employers understand the result, that physicians and lay people will also so long that adequate explanation is provided.
34 (3b, 3c)	**Relation to other NQF-endorsed™ measures** ►Is this measure similar or related to measure(s) already endorsed by NQF (on the same topic or the same target population)? *Measures can be found at www.qualityforum.org under Core Documents.* *Check all that apply* ☐ Have not looked at other NQF measures ☐ Other measure(s) on same topic ☐ Other measure(s) for same target population ☒ No similar or related measures **Name of similar or related NQF-endorsed™ measure(s):** **Are the measure specifications harmonized with existing NQF-endorsed™ measures?** (select one) ►If not fully harmonized, provide rationale: **Describe the distinctive, improved, or additive value this measure provides to existing NQF-endorsed measures:**
	FEASIBILITY
35 (4a)	**How are the required data elements generated?** *Check all that apply* ☐ Data elements are generated concurrent with and as a byproduct of care processes during care delivery (e.g., blood pressure or other assessment recorded by personnel conducting the assessment) ☐ Data elements are generated from a patient survey (e.g., CAHPS) ☒ Data elements are generated through coding performed by someone other than the person who obtained the original information (e.g., DRG or ICD-9 coding on claims) ☐ Other, Please describe:
36 (4b)	**Electronic Sources** All data elements ►**If all data elements are not in electronic sources, specify the near-term path to electronic collection by most providers:** ►**Specify the data elements for the electronic health record:**
37 (4c)	**Do the specified exclusions require additional data sources beyond what is required for the other specifications?** No ►**If yes, provide justification:**
38	**Identify susceptibility to inaccuracies, errors, or unintended consequences of the measure:** As with

(4d)	any type of clinical performance measure, and with any source of data used to operationalize the measure, there will be some instances in which the data used to compute the measure are incomplete or inaccurate. We try to minimize the impact of such errors or omissions through the way we have constructed the technical specifications for the measure. There is no data source for performance measurement that is completely accurate. Two studies have shown that physician performance tends to be better when assessed using claims data compared to via chart abstraction. **Describe how could these potential problems be audited:** Potential data errors of omission or commission could be audited through chart abstraction, or feedback from physicians and patients. However, as mentioned above, each of these alternative sources of information also are susceptible to error and thus are not true gold standards. **Did you audit for these potential problems during testing?** Yes **If yes, provide results:** Through feedback from physicians whose performance has been evaluated.
39 (4e)	**Testing feasibility** Describe what have you learned/modified as a result of testing and/or operational use of the measure regarding data collection, availability of data/missing data, timing/frequency of data collection, patient confidentiality, time/cost of data collection, other feasibility/ implementation issues: The technical specifications for all of our measures have been reviewed over time by numerous physicians and have been adjusted when feedback has indicated a way to improve the measure. Our experience suggests that the only practical and affordable approach for evaluation of the performance of individual MDs on a large scale is through use of claims data. We have found there to be benefit from determining whether a particular health plan has capitated arrangements with physicians or other types of providers (e.g. labs and radiology facilities) in a particular geographic area and, in those instances, to only include observations if encounter data are available. We routinely require at least 4 months of "claims runout" after the end of a measurement year in order to take account of claim lag.
	CONTACT INFORMATION
40	**Web Page URL for Measure Information** *Describe where users (implementers) should go for more details on specifications of measures, or assistance in implementing the measure.* **Web page URL:** www.resolutionhealth.com
41	**Measure Intellectual Property Agreement Owner Point of Contact** **First Name:** Alan **MI:** **Last Name:** Lefkowitz **Credentials (MD, MPH, etc.):** **Organization:** Resolution Health, Inc. **Street Address:** 10490 Little Patuxent Parkway **City:** Columbia **State:** MD **ZIP:** 21044 **Email:** alefkowitz@resolutionhealth.com **Telephone:** 240-295-5834 ext:
42	**Measure Submission Point of Contact** **If different than IP Owner Contact** **First Name:** Darren **MI:** M **Last Name:** Schulte **Credentials (MD, MPH, etc.):** MD, MPP **Organization:** Resolution Health, Inc. **Street Address:** 10490 Little Patuxent Parkway **City:** Columbia **State:** MD **ZIP:** 21044 **Email:** dschulte@resolutionhealth.com **Telephone:** 650-773-3308 ext:
43	**Measure Developer Point of Contact** **If different than IP Owner Contact** **First Name:** Darren **MI:** M **Last Name:** Schulte **Credentials (MD, MPH, etc.):** MD, MPP **Organization:** Resolution Health, Inc. **Street Address:** 10490 Little Patuxent Parkway **City:** Columbia **State:** MD **ZIP:** 21044 **Email:** dschulte@resolutionhealth.com **Telephone:** 650-773-3308 ext:
44	**Measure Steward Point of Contact** **If different than IP Owner Contact** *Identifies the organization that will take responsibility for updating the measure and assuring it is consistent with the scientific evidence and current coding schema; the steward of the measure may be different than the developer.* **First Name:** Darren **MI:**M **Last Name:**Schulte **Credentials (MD, MPH, etc.):** MD, MPP **Organization:** Resolution Health, Inc. **Street Address:** 10490 Little Patuxent Parkway **City:**Columbia **State:**MD **ZIP:**21044 **Email:** dschulte@resolutionhealth.com **Telephone:** 650-773-3308 ext

	ADDITIONAL INFORMATION
45	**Workgroup/Expert Panel involved in measure development** Workgroup/panel used ►If workgroup used, describe the members' role in measure development: Over the past several years, two formal workgroups -- one organized by the Care Focused Purchasing initiative and one organized by the Massachusetts Group Insurance Commission Clinical Performance Improvement Initiative -- and several ad hoc experts have provided useful input to our measure development and refinement processes. In each case, we have provided the Work Group Members with details regarding each of our performance measures and members of the work group (not always all members) have provided feedback on the validity of the clinical practice guideline underlying the measure and suggestions regarding potential ways to improve the technical specifications for the measure. In some instances, we have eliminated measures based on feedback from the work groups. In other instances, work group members have proposed new measures. We try to get feedback from work group members and selected clinical experts on an annual basis. ►Provide a list of workgroup/panel members' names and organizations: Care Focused Purchasing Clinical Advisory Panel: Bobbie Berg -BCBS -IL Dow Briggs - BCBS- AL Joe Calderella - Cigna Carl Cameron - Preferred Care Steven Goldberg – Humana Tom James – Humana Don Liss – Aetna Catherine MacLean – WellPoint Zak Ramadan–Jradi – Regence Fred Volkman – Avidyn Health Constance Hwang – Resolution Health Darren Schulte - Resolution Health Earl Steinberg – Resolution Health Massachusetts Group Insurance Commission Physician Advisory Panel: Jim Glauber – Neighborhood Health Plan Lyn Laurenco - Neighborhood Health Plan Anton Dodek - Tufts Barbara Chase - Fallon Jonathan Scott Coblyn – Brigham and Women's Hospital Tom Ebert - Health New England Elaine Wilson - Harvard Pilgrim Health Care Jennifer St. Thomas – Tufts Jennifer Lavigne – Fallon Michael O'Shea - Baycare Health Neil Minkoff - Harvard Pilgrim Health Care Paul Mendis- Neighborhood Health Plan Bob Jordan - Neighborhood Health Plan Bob Sorrenti – Unicare Constance Williams – Unicare Laura Syron - Neighborhood Health Plan Susan Tiffany – Unicare Constance Hwang – Resolution Health Darren Schulte - Resolution Health Earl Steinberg – Resolution Health David Gregg – Mercer Russ Robinson - Mercer
46	**Measure Developer/Steward Updates and Ongoing Maintenance** Year the measure was first released: 2007 Month and Year of most recent revision: August, 2008 What is the frequency for review/update of this measure? Annual

	When is the next scheduled review/update for this measure? Summer, 2009
47	**Copyright statement/disclaimers:** Copyright © 2008 – Resolution Health, Inc. All rights reserved. The material submitted is confidential and proprietary. No use of this material is permitted other than in accordance with the Agreement with Measure Stewards between National Quality Forum and Resolution Health, Inc.
48	**Additional Information:** None
49	**I have checked that the submission is complete and any blank fields indicate that no information is provided.** ☒
50	**Date of Submission** (*MM/DD/YY*)**:** 11/20/08

PATIENT & FAMILY ENGAGEMENT

PRIORITY STATEMENT: Engage Patients and Their Families in Managing Their Health and Making Decisions About Their Care

1.1. All providers will routinely solicit and publicly report on their patients' perspectives of care

1.2. All providers will work collaboratively with their patients to assist them in making informed decisions about treatment options consistent with their values and preferences

POPULATION HEALTH

PRIORITY STATEMENT: IMPROVE THE HEALTH OF THE U.S. POPULATION

2.1. The population will be up to date on all high-priority age- and gender-appropriate evidence-based clinical preventive services

2.2. The population will receive recommended evidence-based interventions to improve targeted healthy lifestyle behaviors

2.3. All communities will demonstrate a 10% improvement in their community index of health

2.4. Americans will have all recommended high priority healthy lifestyle behaviors under control

SAFETY

PRIORITY STATEMENT: IMPROVE THE SAFETY OF THE U.S. HEALTH CARE SYSTEM

3.1. All providers will drive all preventable healthcare-associated infections (HAI) to zero

3.2. All providers will drive the incidence of preventable NQF Serious Reportable Events (SRE) to zero

3.3. All hospitals will reduce preventable and premature mortality rates to best-in-class

3.4. All hospitals and their community partners will reduce 30-day mortality rates following hospitalization for select conditions to best-in-class

PALLIATIVE CARE

PRIORITY STATEMENT: GUARANTEE APPROPRIATE AND COMPASSIONATE CARE FOR PATIENTS WITH LIFE-LIMITING ILLNESSES

4.1. All providers will identify, document, and effectively treat physical symptoms (e.g. pain, shortness of breath, constipation, others) at levels acceptable to patients with a life-limiting illness

4.2. All providers will effectively address the psychosocial and spiritual needs of patients with life-limiting illnesses and their families according to their preferences

4.3. All eligible patients will receive high quality palliative care and hospice services

CARE COORDINATION

PRIORITY STATEMENT: ENSURE PATIENTS RECEIVE WELL-COORDINATED CARE ACROSS ALL PROVIDERS, SETTINGS, AND LEVELS OF CARE

5.1. All providers will accurately and completely reconcile medications across the continuum of care (i.e. admission, transfer within and between care providers, discharge, and outpatient appointments) and ensure communication with the next provider of services

5.2. All inpatient and outpatient providers will assess the patient's perspective of the coordination of their care using a validated care coordination survey tool

5.3. All providers will reduce 30-day all-cause readmission rates resulting from poorly coordinated care to best-in-class

5.4. All providers will reduce preventable emergency department (i.e. those that could be avoided with timely access to primary care) visits resulting from poorly coordinated care by 50%

PATIENT-FOCUSED CARE

PRIORITY STATEMENT: GUARANTEE HIGH VALUE CARE ACROSS ACUTE AND CHRONIC EPISODES

6.1. All patients will receive high-value care over the course of their acute or chronic illness

OVERUSE

PRIORITY STATEMENT: ELIMINATE WASTE WHILE ENSURING THE DELIVERY OF APPROPRIATE CARE

7.1. Reduce wasteful and inappropriate care for the top ten targeted areas by 50%

THE NATIONAL QUALITY FORUM

MEASURE SUBMISSION FORM VERSION 3.0
August 2008

The measure information you submit will be shared with NQF's Steering Committees and Technical Advisory Panels to evaluate measures against the NQF criteria of importance to measure and report, scientific acceptability of measure properties, usability, and feasibility. Four conditions (as indicated below) must be met before proposed measures may be considered and evaluated for suitability as voluntary consensus standards. Not all acceptable measures will be strong—or equally strong—among each set of criteria. The assessment of each criterion is a matter of degree; however, all measures must be judged to have met the first criterion, importance to measure and report, in order to be evaluated against the remaining criteria. References to the specific measure evaluation criteria are provided in parentheses following the item numbers. Please refer to the *Measure Evaluation Criteria* for more information at *www.qualityforum.org* under Core Documents. Additional guidance is being developed and when available will be posted on the NQF website.

Use the tab or arrow (↓→) keys to move the cursor to the next field (or back ←↑). There are three types of response fields:

- drop-down menus - select one response;
- check boxes – check as many as apply; and
- text fields – you can copy and paste text into these fields or enter text; these fields are not limited in size, but in most cases, we ask that you summarize the requested information.

Please note that URL hyperlinks do not work in the form; you will need to type them into your web browser.

Be sure to answer all questions. Fields that are left blank will be interpreted as no or none. Information must be provided in this form. Attachments are not allowed except when specifically requested or to provide additional detail or source documents for information that is summarized in this form. If you have important information that is not addressed by the questions, they can be entered into item #48 near the end of the form.

For questions about this form, please contact the NQF Project Director listed in the corresponding call for measures.

	CONDITIONS FOR CONSIDERATION BY NQF
	Four conditions must be met before proposed measures may be considered and evaluated for suitability as voluntary consensus standards.
A (A)	**Public domain or Intellectual Property Agreement signed:** IP Agreement signed and submitted (If no, do not submit) *Template for the Intellectual Property Agreement is available at* **www.qualityforum.org** *under Core Documents.*
B (B)	**Measure steward/maintenance:** Is there an identified responsible entity and process to maintain and update the measure on a schedule commensurate with clinical innovation, but at least every 3 years? Yes, information provided in contact section (If no, do not submit)
C (C)	**Intended use:** Does the intended use of the measure include BOTH public reporting AND quality improvement? Yes (If no, do not submit)
D (D)	**Fully developed and tested:** Is the measure fully developed AND tested? Yes, fully developed and tested (If not tested and no plans for testing within 24 months, do not submit)

THE NATIONAL QUALITY FORUM

MEASURE SUBMISSION FORM VERSION 3.0

August 2008

	(for NQF staff use) **NQF Review #:** **NQF Project:**
	MEASURE SPECIFICATIONS & DESCRIPTIVE INFORMATION
1	**Information current as of** *(date- MM/DD/YY)*: 10/31/2008
2	**Title of Measure:** Methotrexate: Creatinine within 12 weeks
3	**Brief description of measure** [1]**:** This measure identifies adult patients with rheumatoid arthritis who were prescribed at least a 6-month supply of methotrexate during the measurement year and received a serum creatinine test in the 120 days (3 months + 1 month grace period) after the earliest observed methotrexate prescription claim.
4 (2a)	**Numerator Statement:** Patients in the denominator who received a serum creatinine or BUN test in the 120 days following the earliest observed methotrexate prescription claim. **Time Window:** See below **Numerator Details** (Definitions, codes with description): >=1 claim for 'serum creatinine' or 'RHI_BUN' within 120 days following the earliest observed methotrexate prescription serum creatinine (Procedure) ========== Type Code Description ------- ------- ---------- CPT4 80048 BASIC METABOLIC PANEL CPT4 80053 COMPREHENSIVE METABOLIC PANEL CPT4 82565 CREATININE; BLOOD CPT4 82575 CREATININE; CLEARANCE CPT4 80050 GENERAL HEALTH PANEL CPT4 80047 METABOLIC PANEL IONIZED CA CPT4 80048 METABOLIC PANEL TOTAL CA CPT4 80069 RENAL FUNCTION PANEL CPT4 84520 UREA NITROGEN; QUANTITATIVE CPT4 84525 UREA NITROGEN; SEMIQUANTITATIVE RHI_BUN (Procedure) ========== Type Code Description ------- ------- ---------- CPT4 80048 BASIC METABOLIC PANEL CPT4 80053 COMPREHENSIVE METABOLIC PANEL CPT4 80050 GENERAL HEALTH PANEL CPT4 80047 METABOLIC PANEL IONIZED CA CPT4 80048 METABOLIC PANEL TOTAL CA CPT4 80069 RENAL FUNCTION PANEL CPT4 84520 UREA NITROGEN; QUANTITATIVE CPT4 84525 UREA NITROGEN; SEMIQUANTITATIVE

[1] Example of measure description: Percentage of adult patients with diabetes aged 18-75 years receiving one or more A1c test(s) per year.

5

(2a)

Denominator Statement: Patients >=18 years old with rheumatoid arthritis who have received at least a 6-month supply of oral methotrexate during the measurement year

Time Window: See below

Denominator Details (Definitions, codes with description):
- Age >=18 years as of the end of the measurement year
- AND at least 2 outpatient claims for 'Rheumatoid Arthritis' in any position OR 1 ER or Hospital claim for 'Rheumatoid Arthritis' in any position
- AND continuous use of 'oral methothrexate' for 6 months (80% medication possession ratio) during the measurement year
- AND service eligibility for 120 days following the earliest methotrexate prescription claim from the measurement year
- Exclude members with claims for end-stage renal disease ('ESRD')
- Exclude members with inpatient hospitalization 120 days after the earliest observed methotrexate prescription

Rheumatoid Arthritis (Diagnosis)

Type	Code	Description
ICD9	7141	FELTYS SYNDROME
ICD9	7142	OTH RA W/VISCERAL/SYSTEMIC INVLV
ICD9	7140	RHEUMATOID ARTHRITIS
ICD9	71481	RHEUMATOID LUNG

oral methotrexate (Medispan Drug)

Type	GPI Code	Description
GPI	21300050100340	Methotrexate Sodium Tab 10 MG (Base Equiv)
GPI	21300050100350	Methotrexate Sodium Tab 15 MG (Base Equiv)
GPI	66250050100320	Methotrexate Sodium Tab 2.5 MG (Antirheumatic)
GPI	21300050100310	Methotrexate Sodium Tab 2.5 MG (Base Equiv)
GPI	21300050100320	Methotrexate Sodium Tab 5 MG (Base Equiv)
GPI	21300050100330	Methotrexate Sodium Tab 7.5 MG (Base Equiv)

6

(2a, 2d)

Denominator Exclusions: 1) Exclude members with an inpatient hospitalization within 120 days after the earliest observed methotrexate prescription; 2) Exclude members with claims for ESRD.

Denominator Exclusion Details (Definitions, codes with description): 1) Exclude any member with claims for a visit with an inpatient facility code from the time of earliest observed methotrexate prescription to 120 days afterward; 2) Exclude any member who has claims indicating a history of end-stage renal disease ('ESRD')

ESRD (Diagnosis)

Type	Code	Description
ICD9	5855	CHRONIC KIDNEY DISEASE STAGE V
ICD9	V5632	ENCNTR ADEQUACY TEST PERITON DIAL
ICD9	V5631	ENCOUNTER ADEQUACY TESTING HEMODIAL
ICD9	V560	ENCOUNTER EXTRACORPOREAL DIALYSIS
ICD9	V568	ENCOUNTER OTHER DIALYSIS
ICD9	5856	END STAGE RENAL DISEASE
ICD9	V562	FIT&ADJ PERITON DIALYSIS CATHETER
ICD9	V561	FIT&ADJ XTRACORP DIALYSIS CATHETER
ICD9	40301	HTN CHR KID DZ MAL KID DZ ST V/ESRD

	ICD9 40311 HTN CKD BEN W/CKD STAGE V/ESRD ICD9 40391 HTN CKD UNSPEC W/CKD STAGE V/ESRD ICD9 40413 HTN H & CKD BEN HF & CKD ST V/ESRD ICD9 40412 HTN H & CKD BEN W/CKD ST V/ESRD ICD9 40493 HTN H & CKD UNS HF & CKD ST V/ESRD ICD9 40492 HTN H & CKD UNS W/CKD STAGE V/ESRD ICD9 40402 HTN H&CKD MAL W/O HF&CKD ST V/ESRD ICD9 40402 HTN HEART & K DZ MALIG W/CHRON K DZ ICD9 40492 HTN HEART & K DZ UNS W/CHRONIC K DZ ICD9 40403 HTN HRT & CKD MAL HF&CKD ST V/ESRD ICD9 40413 HTN HRT & K DZ BEN W/HF & CKD ICD9 40412 HTN HRT & K DZ BENIGN W/CHRON K DZ ICD9 40403 HTN HRT & K DZ MALIG W/HF & CHRN K ICD9 40493 HTN HRT & K DZ UNS W/HF & CHRN K DZ ICD9 40311 HTN KIDNEY DZ BEN W/CHRON KID DZ ICD9 40301 HTN KIDNEY DZ MALIG W/CHRON KID DZ ICD9 40391 HTN KIDNEY DZ UNS W/ CKD ICD9 V451 RENAL DIALYSIS STATUS
7 (2a, 2h)	**Stratification** Do the measure specifications require the results to be stratified? No ► If "other" describe: **Identification of stratification variable(s):** **Stratification Details** (Definitions, codes with description):
8 (2a, 2e)	**Risk Adjustment** Does the measure require risk adjustment to account for differences in patient severity before the onset of care? No ► **If yes,** (select one) ► Is there a separate proprietary owner of the risk model? (select one) **Identify Risk Adjustment Variables:** **Detailed risk model:** attached ☐ **OR** Web page URL:
9 (2a)	**Type of Score:** Rate/proportion **Calculation Algorithm:** attached ☒ **OR** Web page URL: **Interpretation of Score** (*Classifies interpretation of score according to whether better quality is associated with a higher score, a lower score, a score falling within a defined interval, or a passing score*) Better quality = Higher score ► If "Other", please describe:
10 (2a. 4a, 4b)	**Identify the required data elements**(e.g., primary diagnosis, lab values, vital signs)**:** Diagnosis, procedure, and pharmacy claims **Data dictionary/code table** attached ☒ **OR** Web page URL: **Data Quality** (2a) *Check all that apply* ☐ Data are captured from an authoritative/accurate source (e.g., lab values from laboratory personnel) ☒ Data are coded using recognized data standards ☐ Method of capturing data electronically fits the workflow of the authoritative source ☐ Data are available in EHRs ☒ Data are auditable
11 (2a, 4b)	**Data Source and Data Collection Methods** *Identifies the data source(s) necessary to implement the measure specifications. Check all that apply* ☐ Electronic Health/Medical Record ☐ Electronic Clinical Database, Name: ☐ Electronic Clinical Registry, Name: ☒ Electronic Claims ☒ Electronic Pharmacy data ☐ Electronic Lab data ☐ Electronic source – other, Describe: ☐ Paper Medical Record ☐ Standardized clinical instrument, Name: ☐ Standardized patient survey, Name: ☐ Standardized clinician survey, Name: ☒ Other, Describe: It is reasonable to allow physicians to submit definitive evidence that a particular service was provided to a patient. For example, a lab result from a testing facility would indicate

	that that lab test was performed. A notation in a patient chart that the test was ordered, in contrast, would not provide definitive evidence that the test was performed. Instrument/survey attached ☐ **OR** Web page URL:
12 (2a)	**Sampling** *If measure is based on a sample, provide instructions and guidance on sample size.* **Minimum sample size:** 10 **Instructions:** We have developed a hierarchical logistic regression model with expert biostatisticians at the Johns Hopkins School of Public Health that enables one to produce a probability distribution around a point estimate of the "quality score" for a given physician. This model has shown that there is no minimum sample size that is required to produce a quality score which has a comparatively "tight" probability distribution. Rather, the number of required observations depends on how a given physician performs on particular measures compared to how all other MDs perform on those measures. We recommend that a minimum of 10 observations be required, however, because of the normality assumption that underlies the model and for public "face validity". Alternatively, to satisfy current NCQA standards, a minimum of 30 observations could be required.
13 (2a)	**Type of Measure:** Process ► If "Other", please describe: ► If part of a composite or paired with another measure, please identify composite or paired measure
14 (2a)	**Unit of Measurement/Analysis** (*Who or what is being measured*) *Check all that apply.* ☐ Can be measured at all levels ☒ Individual clinician (e.g., physician, nurse) ☒ Group of clinicians (e.g., facility department/unit, group practice) ☐ Facility (e.g., hospital, nursing home) ☒ Integrated delivery system ☒ Health plan ☒ Community/Population ☐ Other (*Please describe*):
15 (2a)	**Applicable Care Settings** *Check all that apply* ☐ Can be used in all healthcare settings ☒ Ambulatory Care (office/clinic) ☐ Behavioral Healthcare ☒ Community Healthcare ☐ Dialysis Facility ☐ Emergency Department ☐ EMS emergency medical services ☒ Health Plan ☐ Home Health ☐ Hospice ☐ Hospital ☐ Long term acute care hospital ☐ Nursing home/ Skilled Nursing Facility (SNF) ☐ Prescription Drug Plan ☐ Rehabilitation Facility ☐ Substance Use Treatment Program/Center ☐ Other (*Please describe*):
	IMPORTANCE TO MEASURE AND REPORT
	Note: This is a threshold criterion. If a measure is not judged to be sufficiently important to measure and report, it will not be evaluated against the remaining criteria.
16 (1a)	**Addresses a Specific National Priority Partners Goal** *Enter the numbers of the specific goals related to this measure (see list of goals on last page)*: 6.1
17 (1a)	**If not related to NPP goal, identify high impact aspect of healthcare** (select one) **Summary of Evidence:** **Citations[2] for Evidence:**
18	**Opportunity for Improvement** *Provide evidence that demonstrates considerable variation, or overall*

[2] Citations can include, but are not limited to journal articles, reports, web pages (URLs).

poor performance, across providers.

(1b) **Summary of Evidence:**

Distinct populations in which the measure was used for physician quality profiling:

numerator	denominator	proportion
166	244	68.03%
52	75	69.33%
196	281	69.75%
92	128	71.88%
11	15	73.33%
59	74	79.73%

Citations for Evidence: RHI client experience

19 (1b) **Disparities** *Provide evidence that demonstrates disparity in care/outcomes related to the measure focus among populations.*

Summary of Evidence:

Citations for evidence:

20 (1c) **If measuring an Outcome** Describe relevance to the national health goal/priority, condition, population, and/or care being addressed:

If not measuring an outcome, provide evidence supporting this measure topic and grade the strength of the evidence

Summarize the evidence (including citations to source) supporting the focus of the measure as follows:

- Intermediate outcome – evidence that the measured intermediate outcome (e.g., blood pressure, Hba1c) leads to improved health/avoidance of harm or cost/benefit.
- Process – evidence that the measured clinical or administrative process leads to improved health/avoidance of harm and
  if the measure focus is on one step in a multi-step care process, it measures the step that has the greatest effect on improving the specified desired outcome(s).
- Structure – evidence that the measured structure supports the consistent delivery of effective processes or access that lead to improved health/avoidance of harm or cost/benefit.
- Patient experience – evidence that an association exists between the measure of patient experience of health care and the outcomes, values and preferences of individuals/ the public.
- Access – evidence that an association exists between access to a health service and the outcomes of, or experience with, care.
- Efficiency– demonstration of an association between the measured resource use and level of performance with respect to one or more of the other five IOM aims of quality.

Type of Evidence *Check all that apply*

☐ Evidence-based guideline
☐ Meta-analysis
☐ Systematic synthesis of research
☐ Quantitative research studies
☐ Qualitative research studies
☒ Other (*Please describe*): Expert Opinion

Overall Grade for Strength of the Evidence[3] (*Use the USPSTF system, or if different, also describe how it relates to the USPSTF system)*: The American College of Rheumatology notes in recent guidelines that there is a strong association of certain Disease Modifying Anti-Rheumatic Drugs (DMARDS) with specific

[3]The strength of the body of evidence for the specific measure focus should be systematically assessed and rated, e.g., USPSTF grading system www.ahrq.gov/clinic/uspstmeth.htm: A - The USPSTF recommends the service. There is high certainty that the net benefit is substantial. B - The USPSTF recommends the service. There is high certainty that the net benefit is moderate or there is moderate certainty that the net benefit is moderate to substantial. C - The USPSTF recommends against routinely providing the service. There may be considerations that support providing the service in an individual patient. There is at least moderate certainty that the net benefit is small. Offer or provide this service only if other considerations support the offering or providing the service in an individual patient. D - The USPSTF recommends against the service. There is moderate or high certainty that the service has no net benefit or that the harms outweigh the benefits. I - The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of the service. Evidence is lacking, of poor quality, or conflicting, and the balance of benefits and harms cannot be determined.

	toxicities, but that evidence for supporting recommendations of specific time intervals for monitoring is limited, and that practical concerns including repeated phlebotomies or physician visits should be taken into account. **Summary of Evidence** (*provide guideline information below*)**:** See below. **Citations for Evidence:** See below.
21 (1c)	**Clinical Practice Guideline** *Cite the guideline reference; quote the specific guideline recommendation related to the measure and the guideline author's assessment of the strength of the evidence; and summarize the rationale for using this guideline over others.* **Guideline Citation:** American College of Rheumatology 2008 Recommendations for the use of Nonbiologic and Biologic Disease-modifying Antirheumatic Drugs in Rheumatoid Arthritis. Arthritis Rheum. 2008;59(6):762-784. **Specific guideline recommendation:** "Following initiation of leflunomide, methotrexate, and/or sulfasalazine or when the dose of these drugs is significantly increased, complete blood counts, liver function tests, and determination of serum creatinine levels were recommended every 2-4 weeks for the next 3 months." **Guideline author's rating of strength of evidence** (*If different from USPSTF, also describe it and how it relates to USPSTF)***:** The guideline states: "The recommended frequency of testing and the relationship of testing intervals to both DMARDs and duration remain rather empiric and are largely based on expert consensus (level C and level C* evidence)." ACR defines level C evidence as "data were derived from consensus opinion of experts, case studies, or standards of care." Therefore, the rating of evidence would likely be of moderate to low certainty according to USPSTF guidelines. **Rationale for using this guideline over others:** The American College of Rheumatology is an organization composed of physicians, health professionals, and scientists who work to support and advance the quality of care of people with rheumatic and musculoskeletal diseases. Although the evidence for specific time intervals of laboratory monitoring for toxicity during DMARD therapy is limited, the ACR guidelines provide recommendations from a recognized source of expertise in this field. Checking for at least one serum creatinine or BUN during the first 120 days following the initiation of methotrexate allows an assessment of at least minimal compliance with the recommendations in the ACR guidelines.
22 (1c)	**Controversy/Contradictory Evidence** *Summarize any areas of controversy, contradictory evidence, or contradictory guidelines and provide citations.* **Summary:** N/A **Citations:**
23 (1)	**Briefly describe how this measure (as specified) will facilitate significant gains in healthcare quality related to the specific priority goals and quality problems identified above:** By identifying specific patients in whom care is not consistent with the clinical practice guideline underlying the measure, the measure will facilitate improvement in the care for those patients by highlighting the patient-specific QI opportunity for the patient's physician(s). In addition, the feedback physicians will receive on their overall performance on this measure will help focus their attention on the underlying care issue and improve their performance on that issue across all of their patients. If performance measurement is combined with some sort of financial incentive, such as in a pay for performance program, the QI impact may be increased.
	SCIENTIFIC ACCEPTABILITY OF MEASURE PROPERTIES
	Note: Testing and results should be summarized in this form. However, additional detail and reports may be submitted as supplemental information or provided as a web page URL. If a measure has not been tested, it is only potentially eligible for time-limited endorsement.
24	**Supplemental Testing Information:** attached ☐ **OR** Web page URL:
25	**Reliability Testing**

(2b)	**Data/sample:** We have tested this measure on several patient populations, including, in total, more than 2 million people enrolled in 6 different health plans. In addition, we have used analogous computer algorithms to identify patient-specific QI opportunities in health plan members and have sent messages regarding those opportunities to either the member or the member's physician or both. **Analytic Method:** The validity of a physician quality score describes how accurately it estimates the true value. Reliability is the stability or consistency of an estimator from one data set to the next. Both are important in assessing the performance of the quality score. We have used the following measure as an indication of the reliability of each of our measures: 1 minus [(the variance of the posterior distribution of the physician quality score) divided by (the variance of the true physician quality score)], which is the reduction in the variance of a doctor's performance score (posterior distribution) obtained by using his or her performance data, expressed as a fraction of the total variance before any data is collected. **Testing Results:** The reliability of a physician quality score depends on the number of observations available for a given physician, how the physician performs relative to all other physician, and the overall variance in physician quality scores. As a result, reliability varies with the population of MDs in whom the measure is used. In our experience, reliability is in the range of 0.5 to >0.7.
26 (2c)	**Validity Testing** **Data/sample:** We have tested this measure on several patient populations, including, in total, more than 2 million people enrolled in 6 different health plans. In addition, we have used analogous computer algorithms to identify patient-specific QI opportunities in health plan members and have sent messages regarding those opportunities to either the member or the member's physician or both. **Analytic Method:** We have employed several approaches to ensure the validity of this measure: 1) we've ensured that the technical specifications for this measure are valid reflections of the underlying clinical practice guideline; 2) we have obtained feedback on the validity of the measure from several physician panels that were assembled by either Care Focused Purchasing or the Massachusetts Group Insurance Commission Clinical Performance Improvement Initiative, or both, and 3) we have systematically collected feedback from physicians and health plan members to whom we have sent messages regarding this measure. **Testing Results:** This measure is considered to be valid by the physician panels that have reviewed it. (More information regarding the panels is provided elsewhere in this document.) In addition, the measure has been considered to be valid by the medical directors of different health plans. In addition, the fact that hundreds of physicians have received results based on this measure without indicating that they don't believe the measure is valid attests to its validity.
27 (2d)	**Measure Exclusions** *Provide evidence to justify exclusion(s) and analysis of impact on measure results during testing.* **Summary of Evidence supporting exclusion(s):** 1) Exclusion of members with an inpatient stay during the 120 days following the methotrexate prescription is done to avoid the possibility of missing inpatient claims for a Creatinine; 2) Exclusion of members with end-stage renal disease is done since kidney function has already deteriorated to the point of requiring dialysis or transplant. **Citations for Evidence:** N/A **Data/sample:** **Analytic Method:** **Testing Results:**
28 (2e)	**Risk Adjustment Testing** *Summarize the testing used to determine the need (or no need) for risk adjustment and the statistical performance of the risk adjustment method.* **Data/sample:** N/A

	Analytic Method: **Testing Results:** ►**If outcome or resource use measure not risk adjusted, provide rationale:** There is no need to risk-adjust results from this measure. To the extent that the measure applies only to patients in a particular risk category, that has been taken into account in the specifications for the denominator or exclusions for this measure.
29 (2g)	**Testing comparability of results when more than 1 data method is specified** (*e.g., administrative claims or chart abstraction*) **Data/sample:** N/A **Analytic Method:** **Results:**
30 (2f)	**Provide Measure Results from Testing or Current Use** Results from current use **Data/sample:** RHI client experience **Methods to identify statistically significant and practically/meaningfully differences in performance:** We have developed a hierarchical logistic regression model with expert biostatisticians at the Johns Hopkins School of Public Health that enables one to produce a probability distribution around a point estimate of the "quality score" for a given physician. This model has shown that there is no minimum sample size that is required to produce a quality score which has a comparatively "tight" probability distribution. Rather, the number of required observations depends on how a given physician performs on particular measures compared to how all other MDs perform on those measures. We recommend that a minimum of 10 observations be required, however, because of the normality assumption that underlies the model and for public "face validity". Alternatively, to satisfy current NCQA standards, a minimum of 30 observations could be required. We have employed this statistical approach in the MD quality profiling we performed on the experience of more than 2 million members of health plans participating in the Massachusetts Group Insurance Commission Clinical Performance Improvement Initiative in 2008. **Results:** Pooled results: numerator denominator proportion --- 576 817 70.50%
31 (2h)	**Identification of Disparities** ►If measure is stratified by factors related to disparities (i.e. race/ethnicity, primary language, gender, SES, health literacy), **provide stratified results:** N/A ►If disparities have been reported/identified, but measure is not specified to detect disparities, provide rationale:
	USABILITY
32 (3)	**Current Use** In use **If in use, how widely used** State ► If "other," please describe: ☒ Used in a public reporting initiative, name of initiative: The GIC CPII project (Group Insurance Commission Clinical Performance Improvement Initiative) in Massachusetts. Sample report attached ☐ **OR** Web page URL:
33 (3a)	**Testing of Interpretability** (*Testing that demonstrates the results are understood by the potential users for public reporting and quality improvement*) **Data/sample:** We have tested this measure on several patient populations, including, in total, more than 2 million people enrolled in 6 different health plans.

	Methods: The results have been provided to the medical directors of the health plans, all of whom have indicated that they understand the particular aspect of care that the measure addresses and how to interpret the result for a physician. In addition, results have been presented to HR directors from national employers. **Results:** Both the health plan medical directors and the HR personnel from the employers have indicated that they understand the particular aspect of care that the measure addresses and how to interpret the result for a physician. We do not have data on the extent to which individual physicians understand the measure result, but we presume that since health plan medical directors and non-medical personnel from employers understand the result, that physicians and lay people will also so long that adequate explanation is provided.
34 (3b, 3c)	**Relation to other NQF-endorsed™ measures** ►Is this measure similar or related to measure(s) already endorsed by NQF (on the same topic or the same target population)? *Measures can be found at www.qualityforum.org under Core Documents.* *Check all that apply* ☐ Have not looked at other NQF measures ☐ Other measure(s) on same topic ☐ Other measure(s) for same target population ☒ No similar or related measures **Name of similar or related NQF-endorsed™ measure(s):** **Are the measure specifications harmonized with existing NQF-endorsed™ measures?** (select one) ►If not fully harmonized, provide rationale: **Describe the distinctive, improved, or additive value this measure provides to existing NQF-endorsed measures:**
	FEASIBILITY
35 (4a)	**How are the required data elements generated?** *Check all that apply* ☐ Data elements are generated concurrent with and as a byproduct of care processes during care delivery (e.g., blood pressure or other assessment recorded by personnel conducting the assessment) ☐ Data elements are generated from a patient survey (e.g., CAHPS) ☒ Data elements are generated through coding performed by someone other than the person who obtained the original information (e.g., DRG or ICD-9 coding on claims) ☐ Other, Please describe:
36 (4b)	**Electronic Sources** All data elements ►**If all data elements are not in electronic sources, specify the near-term path to electronic collection by most providers:** ►**Specify the data elements for the electronic health record:**
37 (4c)	**Do the specified exclusions require additional data sources beyond what is required for the other specifications?** No ►**If yes, provide justification:**
38 (4d)	**Identify susceptibility to inaccuracies, errors, or unintended consequences of the measure:** As with any type of clinical performance measure, and with any source of data used to operationalize the measure, there will be some instances in which the data used to compute the measure are incomplete or inaccurate. We try to minimize the impact of such errors or omissions through the way we have constructed the technical specifications for the measure. There is no data source for performance measurement that is completely accurate. Two studies have shown that physician performance tends to be better when assessed using claims data compared to via chart abstraction. **Describe how could these potential problems be audited:** Potential data errors of omission or commission could be audited through chart abstraction, or feedback from physicians and patients. However, as mentioned above, each of these alternative sources of information also are susceptible to

	error and thus are not true gold standards. **Did you audit for these potential problems during testing?** Yes **If yes, provide results:** Through feedback from physicians whose performance has been evaluated.
39 (4e)	**Testing feasibility** Describe what have you learned/modified as a result of testing and/or operational use of the measure regarding data collection, availability of data/missing data, timing/frequency of data collection, patient confidentiality, time/cost of data collection, other feasibility/ implementation issues: The technical specifications for all of our measures have been reviewed over time by numerous physicians and have been adjusted when feedback has indicated a way to improve the measure. Our experience suggests that the only practical and affordable approach for evaluation of the performance of individual MDs on a large scale is through use of claims data. We have found there to be benefit from determining whether a particular health plan has capitated arrangements with physicians or other types of providers (e.g. labs and radiology facilities) in a particular geographic area and, in those instances, to only include observations if encounter data are available. We routinely require at least 4 months of "claims runout" after the end of a measurement year in order to take account of claim lag.
	CONTACT INFORMATION
40	**Web Page URL for Measure Information** *Describe where users (implementers) should go for more details on specifications of measures, or assistance in implementing the measure.* **Web page URL:** www.resolutionhealth.com
41	**Measure Intellectual Property Agreement Owner Point of Contact** **First Name:** Alan **MI:** **Last Name:** Lefkowitz **Credentials (MD, MPH, etc.):** **Organization:** Resolution Health, Inc. **Street Address:** 10490 Little Patuxent Parkway **City:** Columbia **State:** MD **ZIP:** 21044 **Email:** alefkowitz@resolutionhealth.com **Telephone:** 240-295-5834 ext:
42	**Measure Submission Point of Contact** **If different than IP Owner Contact** **First Name:** Darren **MI:** M **Last Name:** Schulte **Credentials (MD, MPH, etc.):** MD, MPP **Organization:** Resolution Health, Inc. **Street Address:** 10490 Little Patuxent Parkway **City:** Columbia **State:** MD **ZIP:** 21044 **Email:** dschulte@resolutionhealth.com **Telephone:** 650-773-3308 ext:
43	**Measure Developer Point of Contact** **If different than IP Owner Contact** **First Name:** Darren **MI:** M **Last Name:** Schulte **Credentials (MD, MPH, etc.):** MD, MPP **Organization:** Resolution Health, Inc. **Street Address:** 10490 Little Patuxent Parkway **City:** Columbia **State:** MD **ZIP:** 21044 **Email:** dschulte@resolutionhealth.com **Telephone:** 650-773-3308 ext:
44	**Measure Steward Point of Contact** **If different than IP Owner Contact** *Identifies the organization that will take responsibility for updating the measure and assuring it is consistent with the scientific evidence and current coding schema; the steward of the measure may be different than the developer.* **First Name:** Darren **MI:**M **Last Name:**Schulte **Credentials (MD, MPH, etc.):** MD, MPP **Organization:** Resolution Health, Inc. **Street Address:** 10490 Little Patuxent Parkway **City:**Columbia **State:**MD **ZIP:**21044 **Email:** dschulte@resolutionhealth.com **Telephone:** 650-773-3308 ext
	ADDITIONAL INFORMATION
45	**Workgroup/Expert Panel involved in measure development** Workgroup/panel used ►If workgroup used, describe the members' role in measure development: Over the past several years, two formal workgroups -- one organized by the Care Focused Purchasing initiative and one organized by the Massachusetts Group Insurance Commission Clinical Performance Improvement Initiative -- and several ad hoc experts have provided useful input to our measure development and refinement processes. In each case, we have provided the Work Group Members with details regarding each of our performance measures and members of the work group (not always all members) have provided feedback on the validity of the clinical practice guideline underlying the measure and suggestions regarding potential ways

	to improve the technical specifications for the measure. In some instances, we have eliminated measures based on feedback from the work groups. In other instances, work group members have proposed new measures. We try to get feedback from work group members and selected clinical experts on an annual basis. ►Provide a list of workgroup/panel members' names and organizations: **Care Focused Purchasing Clinical Advisory Panel:** Bobbie Berg -BCBS -IL Dow Briggs - BCBS- AL Joe Calderella - Cigna Carl Cameron - Preferred Care Steven Goldberg – Humana Tom James – Humana Don Liss – Aetna Catherine MacLean – WellPoint Zak Ramadan-Jradi – Regence Fred Volkman – Avidyn Health Constance Hwang – Resolution Health Darren Schulte - Resolution Health Earl Steinberg – Resolution Health **Massachusetts Group Insurance Commission Physician Advisory Panel:** Jim Glauber – Neighborhood Health Plan Lyn Laurenco - Neighborhood Health Plan Anton Dodek - Tufts Barbara Chase - Fallon Jonathan Scott Coblyn – Brigham and Women's Hospital Tom Ebert - Health New England Elaine Wilson - Harvard Pilgrim Health Care Jennifer St. Thomas – Tufts Jennifer Lavigne – Fallon Michael O'Shea - Baycare Health Neil Minkoff - Harvard Pilgrim Health Care Paul Mendis- Neighborhood Health Plan Bob Jordan - Neighborhood Health Plan Bob Sorrenti – Unicare Constance Williams – Unicare Laura Syron - Neighborhood Health Plan Susan Tiffany – Unicare Constance Hwang – Resolution Health Darren Schulte - Resolution Health Earl Steinberg – Resolution Health David Gregg – Mercer Russ Robinson - Mercer
46	**Measure Developer/Steward Updates and Ongoing Maintenance** Year the measure was first released: 2007 Month and Year of most recent revision: August, 2008 What is the frequency for review/update of this measure? Annual When is the next scheduled review/update for this measure? Summer, 2009
47	**Copyright statement/disclaimers:** Copyright © 2008 – Resolution Health, Inc. All rights reserved. The material submitted is confidential and proprietary. No use of this material is permitted other than in accordance with the Agreement with Measure Stewards between National Quality Forum and Resolution Health, Inc.
48	**Additional Information:** None
49	**I have checked that the submission is complete and any blank fields indicate that no information is provided.** ☒

50	**Date of Submission** (*MM/DD/YY*)**:** 11/20/08

PATIENT & FAMILY ENGAGEMENT

PRIORITY STATEMENT: Engage Patients and Their Families in Managing Their Health and Making Decisions About Their Care

1.1. All providers will routinely solicit and publicly report on their patients' perspectives of care

1.2. All providers will work collaboratively with their patients to assist them in making informed decisions about treatment options consistent with their values and preferences

POPULATION HEALTH

PRIORITY STATEMENT: IMPROVE THE HEALTH OF THE U.S. POPULATION

2.1. The population will be up to date on all high-priority age- and gender-appropriate evidence-based clinical preventive services

2.2. The population will receive recommended evidence-based interventions to improve targeted healthy lifestyle behaviors

2.3. All communities will demonstrate a 10% improvement in their community index of health

2.4. Americans will have all recommended high priority healthy lifestyle behaviors under control

SAFETY

PRIORITY STATEMENT: IMPROVE THE SAFETY OF THE U.S. HEALTH CARE SYSTEM

3.1. All providers will drive all preventable healthcare-associated infections (HAI) to zero

3.2. All providers will drive the incidence of preventable NQF Serious Reportable Events (SRE) to zero

3.3. All hospitals will reduce preventable and premature mortality rates to best-in-class

3.4. All hospitals and their community partners will reduce 30-day mortality rates following hospitalization for select conditions to best-in-class

PALLIATIVE CARE

PRIORITY STATEMENT: GUARANTEE APPROPRIATE AND COMPASSIONATE CARE FOR PATIENTS WITH LIFE-LIMITING ILLNESSES

4.1. All providers will identify, document, and effectively treat physical symptoms (e.g. pain, shortness of breath, constipation, others) at levels acceptable to patients with a life-limiting illness

4.2. All providers will effectively address the psychosocial and spiritual needs of patients with life-limiting illnesses and their families according to their preferences

4.3. All eligible patients will receive high quality palliative care and hospice services

CARE COORDINATION

PRIORITY STATEMENT: ENSURE PATIENTS RECEIVE WELL-COORDINATED CARE ACROSS ALL PROVIDERS, SETTINGS, AND LEVELS OF CARE

5.1. All providers will accurately and completely reconcile medications across the continuum of care (i.e. admission, transfer within and between care providers, discharge, and outpatient appointments) and ensure communication with the next provider of services

5.2. All inpatient and outpatient providers will assess the patient's perspective of the coordination of their care using a validated care coordination survey tool

5.3. All providers will reduce 30-day all-cause readmission rates resulting from poorly coordinated care to best-in-class

5.4. All providers will reduce preventable emergency department (i.e. those that could be avoided with timely access to primary care) visits resulting from poorly coordinated care by 50%

PATIENT-FOCUSED CARE

PRIORITY STATEMENT: GUARANTEE HIGH VALUE CARE ACROSS ACUTE AND CHRONIC EPISODES

6.1. All patients will receive high-value care over the course of their acute or chronic illness

OVERUSE

PRIORITY STATEMENT: ELIMINATE WASTE WHILE ENSURING THE DELIVERY OF APPROPRIATE CARE

7.1. Reduce wasteful and inappropriate care for the top ten targeted areas by 50%

THE NATIONAL QUALITY FORUM

MEASURE SUBMISSION FORM VERSION 3.0
August 2008

The measure information you submit will be shared with NQF's Steering Committees and Technical Advisory Panels to evaluate measures against the NQF criteria of importance to measure and report, scientific acceptability of measure properties, usability, and feasibility. Four conditions (as indicated below) must be met before proposed measures may be considered and evaluated for suitability as voluntary consensus standards. Not all acceptable measures will be strong—or equally strong—among each set of criteria. The assessment of each criterion is a matter of degree; however, all measures must be judged to have met the first criterion, importance to measure and report, in order to be evaluated against the remaining criteria. References to the specific measure evaluation criteria are provided in parentheses following the item numbers. Please refer to the *Measure Evaluation Criteria* for more information at ***www.qualityforum.org*** under Core Documents. Additional guidance is being developed and when available will be posted on the NQF website.

Use the tab or arrow (↓→) keys to move the cursor to the next field (or back ←↑). There are three types of response fields:

- drop-down menus - select one response;
- check boxes – check as many as apply; and
- text fields – you can copy and paste text into these fields or enter text; these fields are not limited in size, but in most cases, we ask that you summarize the requested information.

Please note that URL hyperlinks do not work in the form; you will need to type them into your web browser.

Be sure to answer all questions. Fields that are left blank will be interpreted as no or none. Information must be provided in this form. Attachments are not allowed except when specifically requested or to provide additional detail or source documents for information that is summarized in this form. If you have important information that is not addressed by the questions, they can be entered into item #48 near the end of the form.

For questions about this form, please contact the NQF Project Director listed in the corresponding call for measures.

	CONDITIONS FOR CONSIDERATION BY NQF
	Four conditions must be met before proposed measures may be considered and evaluated for suitability as voluntary consensus standards.
A (A)	**Public domain or Intellectual Property Agreement signed:** IP Agreement signed and submitted (If no, do not submit) *Template for the Intellectual Property Agreement is available at* **www.qualityforum.org** *under Core Documents.*
B (B)	**Measure steward/maintenance:** Is there an identified responsible entity and process to maintain and update the measure on a schedule commensurate with clinical innovation, but at least every 3 years? Yes, information provided in contact section (If no, do not submit)
C (C)	**Intended use:** Does the intended use of the measure include BOTH public reporting AND quality improvement? Yes (If no, do not submit)
D (D)	**Fully developed and tested:** Is the measure fully developed AND tested? Yes, fully developed and tested (If not tested and no plans for testing within 24 months, do not submit)

THE NATIONAL QUALITY FORUM

MEASURE SUBMISSION FORM VERSION 3.0
August 2008

	(for NQF staff use) **NQF Review #:** EC-089-08 **NQF Project:** National Voluntary Consensus Standards for Ambulatory Care Using Clinically Enriched Administrative Data
	MEASURE SPECIFICATIONS & DESCRIPTIVE INFORMATION
1	**Information current as of** *(date- MM/DD/YY)*: 10/31/2008
2	**Title of Measure:** New Rheumatoid Arthritis Baseline ESR or CRP within Three Months
3	**Brief description of measure** [1]**:** This measure identifies adult patients newly diagnosed with rheumatoid arthritis during the first 8 months of the measurement year who received erythrocyte sedimentation rate (ESR) or C-reactive protein (CRP) lab tests either 4 months (3 months + 1-month grace period) before or after the initial diagnosis.
4 (2a)	**Numerator Statement:** Patients in the denominator who had an ESR or CRP lab test either 4 months before or after the initial rheumatoid arthritis diagnosis date **Time Window:** **Numerator Details** (Definitions, codes with description): >=1 procedure claim for 'ESR' or 'CRP' lab testing 4 months before or after the initial rheumatoid arthritis diagnosis date ESR (Procedure) Type Code Description CPT4 85652 SED RATE ERYTHROCYTE; AUTOMATED CPT4 85651 SED RATE ERYTHROCYTE; NON-AUTOMATED CRP (Procedure) Type Code Description CPT4 86140 C-REACTIVE PROTEIN; CPT4 86141 C-REACTV PROTEIN; HIGH SENSITIVITY
5 (2a)	**Denominator Statement:** Patients >=18 years old newly diagnosed with rheumatoid arthritis during the first 8 months of the measurement year **Time Window:** **Denominator Details** (Definitions, codes with description): - Age >=18 years as of the end of the measurement year - AND diagnosed with rheumatoid arthritis, based on RHI's Rheumatoid Arthritis criteria which requires: >=2 office visits with a diagnosis code for 'rheumatoid arthritis' or >=1 inpatient or emergency room claim for 'rheumatoid arthritis' - AND the earliest 'rheumatoid arthritis' claim must occur during the first 8 months of the measurement year - AND no claims for 'rheumatoid arthritis anytime prior to the measurement year - AND is eligible for medical benefits 1 year before and 4 months after the initial rheumatoid arthritis diagnosis date - AND has no claims for inpatient hospitalization 4 months before and after the initial RA diagnosis date

[1] Example of measure description: Percentage of adult patients with diabetes aged 18-75 years receiving one or more A1c test(s) per year.

	Rheumatoid arthritis (Diagnosis) ========== Type Code Description ------- ------- ---------- ICD9 7141 FELTYS SYNDROME ICD9 7142 OTH RA W/VISCERAL/SYSTEMIC INVLV ICD9 7140 RHEUMATOID ARTHRITIS ICD9 71481 RHEUMATOID LUNG
6 (2a, 2d)	**Denominator Exclusions:** The measure excludes patients who have had an inpatient hospitalization 4 months before and after the initial rheumatoid arthritis diagnosis because UB04 claims do not document individual lab tests ordered during an inpatient stay. **Denominator Exclusion Details** (Definitions, codes with description): Patient cannot have claims for inpatient hospitalization 4 months before and after the initial rheumatoid arthritis diagnosis. Rheumatoid arthritis (Diagnosis) ========== see above
7 (2a, 2h)	**Stratification** Do the measure specifications require the results to be stratified? No ► If "other" describe: **Identification of stratification variable(s):** **Stratification Details** (Definitions, codes with description):
8 (2a, 2e)	**Risk Adjustment** Does the measure require risk adjustment to account for differences in patient severity before the onset of care? No ► **If yes,** (select one) ► Is there a separate proprietary owner of the risk model? (select one) **Identify Risk Adjustment Variables:** **Detailed risk model:** attached ☐ **OR** Web page URL:
9 (2a)	**Type of Score:** Ratio **Calculation Algorithm:** attached ☒ **OR** Web page URL: **Interpretation of Score** (*Classifies interpretation of score according to whether better quality is associated with a higher score, a lower score, a score falling within a defined interval, or a passing score*) Better quality = Higher score ► If "Other", please describe:
10 (2a. 4a, 4b)	**Identify the required data elements**(e.g., primary diagnosis, lab values, vital signs)**:** procedure, diagnosis **Data dictionary/code table** attached ☒ **OR** Web page URL: **Data Quality** (2a) *Check all that apply* ☐ Data are captured from an authoritative/accurate source (e.g., lab values from laboratory personnel) ☒ Data are coded using recognized data standards ☐ Method of capturing data electronically fits the workflow of the authoritative source ☐ Data are available in EHRs ☒ Data are auditable
11 (2a, 4b)	**Data Source and Data Collection Methods** *Identifies the data source(s) necessary to implement the measure specifications. Check all that apply* ☐ Electronic Health/Medical Record ☐ Electronic Clinical Database, Name: ☐ Electronic Clinical Registry, Name: ☒ Electronic Claims ☐ Electronic Pharmacy data ☐ Electronic Lab data ☐ Electronic source – other, Describe: ☐ Paper Medical Record ☐ Standardized clinical instrument, Name: ☐ Standardized patient survey, Name: ☐ Standardized clinician survey, Name: ☒ Other, Describe: It is reasonable to allow physicians to submit definitive evidence that a particular service was provided to a patient. For example, a lab result from a testing facility would indicate

	that that lab test was performed. A notation in a patient chart that the test was ordered, in contrast, would not provide definitive evidence that the test was performed. Instrument/survey attached ☐ **OR** Web page URL:
12 (2a)	**Instructions:** We have developed a hierarchical logistic regression model with expert biostatisticians at the Johns Hopkins School of Public Health that enables one to produce a probability distribution around a point estimate of the "quality score" for a given physician. This model has shown that there is no minimum sample size that is required to produce a quality score which has a comparatively "tight" probability distribution. Rather, the number of required observations depends on how a given physician performs on particular measures compared to how all other MDs perform on those measures. We recommend that a minimum of 10 observations be required, however, because of the normality assumptions that underlies the model and for public "face validity". Alternatively, to satisfy current NCQA standards, a minimum of 30 observations could be required.
13 (2a)	**Type of Measure:** Process ► If "Other", please describe: ► If part of a composite or paired with another measure, please identify composite or paired measure
14 (2a)	**Unit of Measurement/Analysis** (*Who or what is being measured*) *Check all that apply.* ☐ Can be measured at all levels ☒ Individual clinician (e.g., physician, nurse) ☒ Group of clinicians (e.g., facility department/unit, group practice) ☐ Facility (e.g., hospital, nursing home) ☒ Integrated delivery system ☒ Health plan ☒ Community/Population ☐ Other (*Please describe*):
15 (2a)	**Applicable Care Settings** *Check all that apply* ☐ Can be used in all healthcare settings ☒ Ambulatory Care (office/clinic) ☐ Behavioral Healthcare ☐ Community Healthcare ☐ Dialysis Facility ☐ Emergency Department ☐ EMS emergency medical services ☒ Health Plan ☐ Home Health ☐ Hospice ☐ Hospital ☐ Long term acute care hospital ☐ Nursing home/ Skilled Nursing Facility (SNF) ☐ Prescription Drug Plan ☐ Rehabilitation Facility ☐ Substance Use Treatment Program/Center ☐ Other (*Please describe*):
	IMPORTANCE TO MEASURE AND REPORT
	Note: This is a threshold criterion. If a measure is not judged to be sufficiently important to measure and report, it will not be evaluated against the remaining criteria.
16 (1a)	**Addresses a Specific National Priority Partners Goal** *Enter the numbers of the specific goals related to this measure (see list of goals on last page)*: 6.1
17 (1a)	**If not related to NPP goal, identify high impact aspect of healthcare** (select one) **Summary of Evidence:** **Citations[2] for Evidence:**
18 (1b)	**Opportunity for Improvement** *Provide evidence that demonstrates considerable variation, or overall poor performance, across providers.* **Summary of Evidence:** Distinct populations:

[2] Citations can include, but are not limited to journal articles, reports, web pages (URLs).

	num	denom	proportion
	29	49	59.18%
	66	100	66.00%
	24	34	70.59%
	172	231	74.46%
	406	539	75.32%
	136	166	81.93%
	8	8	100.00%

Citations for Evidence: RHI client experience

19 (1b)

Disparities *Provide evidence that demonstrates disparity in care/outcomes related to the measure focus among populations.*
Summary of Evidence:

Citations for evidence:

20 (1c)

If measuring an Outcome Describe relevance to the national health goal/priority, condition, population, and/or care being addressed:

If not measuring an outcome, provide evidence supporting this measure topic and grade the strength of the evidence
Summarize the evidence (including citations to source) supporting the focus of the measure as follows:

- Intermediate outcome – evidence that the measured intermediate outcome (e.g., blood pressure, Hba1c) leads to improved health/avoidance of harm or cost/benefit.
- Process – evidence that the measured clinical or administrative process leads to improved health/avoidance of harm and
  if the measure focus is on one step in a multi-step care process, it measures the step that has the greatest effect on improving the specified desired outcome(s).
- Structure – evidence that the measured structure supports the consistent delivery of effective processes or access that lead to improved health/avoidance of harm or cost/benefit.
- Patient experience – evidence that an association exists between the measure of patient experience of health care and the outcomes, values and preferences of individuals/ the public.
- Access – evidence that an association exists between access to a health service and the outcomes of, or experience with, care.
- Efficiency– demonstration of an association between the measured resource use and level of performance with respect to one or more of the other five IOM aims of quality.

Type of Evidence *Check all that apply*

- ☒ Evidence-based guideline
- ☐ Meta-analysis
- ☐ Systematic synthesis of research
- ☐ Quantitative research studies
- ☐ Qualitative research studies
- ☐ Other (*Please describe*):

Overall Grade for Strength of the Evidence[3] (*Use the USPSTF system, or if different, also describe how it relates to the USPSTF system)*: B
Summary of Evidence (*provide guideline information below*): ACR, AFQuIP

Citations for Evidence:
American College of Rheumatology's Starter Set of Measures for Quality in the Care for Rheumatic and

[3]The strength of the body of evidence for the specific measure focus should be systematically assessed and rated, e.g., USPSTF grading system **www.ahrq.gov/clinic/uspstmeth.htm**: **A -** The USPSTF recommends the service. There is high certainty that the net benefit is substantial. **B -** The USPSTF recommends the service. There is high certainty that the net benefit is moderate or there is moderate certainty that the net benefit is moderate to substantial. **C -** The USPSTF recommends against routinely providing the service. There may be considerations that support providing the service in an individual patient. There is at least moderate certainty that the net benefit is small. Offer or provide this service only if other considerations support the offering or providing the service in an individual patient. **D -** The USPSTF recommends against the service. There is moderate or high certainty that the service has no net benefit or that the harms outweigh the benefits. **I -** The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of the service. Evidence is lacking, of poor quality, or conflicting, and the balance of benefits and harms cannot be determined.

	Musculoskeletal Diseases, February 2006. American College of Rheumatology. Arthritis Foundation Quality Indicator Project (AFQuIP) Khanna D, Arnold E, Pencharz JN, Grossman JM, Traina SB, Lal A, MacLean CH. Measuring Process of Arthritis Care: The Arthritis Foundation's Quality Indicator Set for Rheumatoid Arthritis. Semin Arthritis Rheum. 2006;35:211-37. American College of Rheumatology Subcommittee on Rheumatoid Arthritis Guidelines. Guidelines for the management of rheumatoid arthritis: 2002 Update. Arthritis Rheum. 2002 Feb;46(2):328-46.
21 (1c)	**Clinical Practice Guideline** *Cite the guideline reference; quote the specific guideline recommendation related to the measure and the guideline author's assessment of the strength of the evidence; and summarize the rationale for using this guideline over others.* **Guideline Citation:** American College of Rheumatology's Starter Set of Measures for Quality in the Care for Rheumatic and Musculoskeletal Diseases, February 2006. American College of Rheumatology. **Specific guideline recommendation:** If a patient has a confirmed diagnosis of rheumatoid arthritis, THEN a measure of each of the following should be documented within 3 months of diagnosis and at least annually thereafter: joint exam, functional status assessment, acute phase reactant, measurement of pain, physician global assessment and patient global assessment. **Guideline author's rating of strength of evidence** *(If different from USPSTF, also describe it and how it relates to USPSTF)*: B **Rationale for using this guideline over others:** This measure is based on Rheumatoid Arthritis Quality Measures from the American College of Rheumatology and the Arthritis Foundation.
22 (1c)	**Controversy/Contradictory Evidence** *Summarize any areas of controversy, contradictory evidence, or contradictory guidelines and provide citations.* **Summary:** **Citations:**
23 (1)	**Briefly describe how this measure (as specified) will facilitate significant gains in healthcare quality related to the specific priority goals and quality problems identified above:** ACR Guidelines for the Management of Rheumatoid Arthritis recommend baseline evaluation for subjective and objective evidence of active disease. This measure captures whether objective lab testing (ESR or CRP) was appropriately ordered assessed at the time of initial rheumatoid arthritis diagnosis, according to the ACR Starter Set of Measures for Quality in the Care for Rheumatic and Musculoskeletal Diseases.
	SCIENTIFIC ACCEPTABILITY OF MEASURE PROPERTIES
	Note: Testing and results should be summarized in this form. However, additional detail and reports may be submitted as supplemental information or provided as a web page URL. If a measure has not been tested, it is only potentially eligible for time-limited endorsement.
24	**Supplemental Testing Information:** attached ☐ **OR** Web page URL:
25 (2b)	**Reliability Testing** **Data/sample:** We have tested this measure on several patient populations, including, in total, more than 30 million people enrolled in 18 different health plans. In addition, we have used analogous computer algorithms to identify patient-specific QI opportunities in more than 5 million health plan members and have sent messages regarding those opportunities to either the member or the member's physician or both. **Analytic Method:** The validity of a physician quality score describes how accurately it estimates the true value. Reliability is the stability or consistency of an estimator from one data set to the next. Both are

	important in assessing the performance of the quality score. We have used the following measure as an indication of the reliability of each of our measures: 1 minus [(the variance of the posterior distribution of the physician quality score) divided by (the variance of the true physician quality score)], which is the reduction in the variance of a doctor's performance score (posterior distribution) obtained by using his or her performance data, expressed as a fraction of the total variance before any data is collected. **Testing Results:** The reliability of a physician quality score depends on the number of observations available for a given physician, how the physician performs relative to all other physician, and the overall variance in physician quality scores. As a result, reliability varies with the population of MDs in whom the measure is used. In our experience, reliability is in the range of 0.5 to >0.7.
26 (2c)	**Validity Testing** **Data/sample:** We have tested this measure on several patient populations, including, in total, more than 30 million people enrolled in 18 different health plans. In addition, we have used analogous computer algorithms to identify patient-specific QI opportunities in more than 5 million health plan members and have sent messages regarding those opportunities to either the member or the member's physician or both. **Analytic Method:** We have employed several approaches to ensure the validity of this measure: 1) we've ensured that the technical specifications for this measure are valid reflections of the underlying clinical practice guideline; 2) we have obtained feedback on the validity of the measure from several physician panels that were assembled by either Care Focused Purchasing or the Massachusetts Group Insurance Commission Clinical Performance Improvement Initiative, or both, and 3) we have systematically collected feedback from physicians and health plan members to whom we have sent messages regarding this measure. **Testing Results:** This measure is considered to be valid by the physician panels that have reviewed it. (More information regarding the panels is provided elsewhere in this document.) In addition, the measure has been considered to be valid by the medical directors of 17 different health plans. In addition, the fact that thousands of physicians have received results based on this measure without indicating that they don't believe the measure is valid attests to its validity.
27 (2d)	**Measure Exclusions** *Provide evidence to justify exclusion(s) and analysis of impact on measure results during testing.* **Summary of Evidence supporting exclusion(s):** UB04 claims do not document individual lab tests ordered during an inpatient stay. Therefore, RHI's proposed measure "Rheumatoid Arthritis Annual ESR or CRP" excludes patients who have had an inpatient hospitalization 4 months before or after the initial diagnosis of rheumatoid arthritis, with the assumption that an ESR or CRP test may have been ordered during a hospitalization. **Citations for Evidence:** **Data/sample:** **Analytic Method:** **Testing Results:**
28 (2e)	**Risk Adjustment Testing** *Summarize the testing used to determine the need (or no need) for risk adjustment and the statistical performance of the risk adjustment method.* **Data/sample:** **Analytic Method:** **Testing Results:** ►**If outcome or resource use measure not risk adjusted, provide rationale:** There is no need to risk

	adjust results from this measure. To the extent that the measure applies only to patients in a particular risk category, that has been taken into account in the specifications for the denominator or exclusions for this measure.
29 (2g)	**Testing comparability of results when more than 1 data method is specified** (*e.g., administrative claims or chart abstraction*) **Data/sample:** **Analytic Method:** **Results:**
30 (2f)	**Provide Measure Results from Testing or Current Use** Results from current use **Data/sample:** Group Insurance Commission (GIC): In 2003, the Massachusetts Group Insurance Commission GIC launched the Clinical Performance Improvement initiative, requiring health plans under contract with the GIC to incorporate provider "tiering"—differential payments based on value—into their GIC product. For this initiative, RHI evaluates physician performance on a set of quality measures using administrative claims data from approximately 2.2 million health plan members. **Methods to identify statistically significant and practically/meaningfully differences in performance:** We have developed a hierarchical logistic regression model with expert biostatisticians at the Johns Hopkins School of Public Health that enables one to produce a probability distribution around a point estimate of the "quality score" for a given physician. This model has shown that there is no minimum sample size that is required to produce a quality score which has a comparatively "tight" probability distribution. Rather, the number of required observations depends on how a given physician performs on particular measures compared to how all other MDs perform on those measures. We recommend that a minimum of 10 observations be required, however, because of the normality assumption that underlies the model and for public "face validity". We have employed this statistical approach in the MD quality profiling we performed on the experience of more than 2 million members of 6 health plans participating in the Massachusetts Group Insurance Commission Clinical Performance Improvement Initiative in 2008. **Results:** pooled: num denom proportion --- 841 1,127 74.62%
31 (2h)	**Identification of Disparities** ►If measure is stratified by factors related to disparities (i.e. race/ethnicity, primary language, gender, SES, health literacy), **provide stratified results:** ►If disparities have been reported/identified, but measure is not specified to detect disparities, provide rationale:
	USABILITY
32 (3)	**Current Use** Testing completed **If in use, how widely used** (select one) ► If "other," please describe: ☐ Used in a public reporting initiative, name of initiative: Sample report attached ☐ **OR** Web page URL:
33 (3a)	**Testing of Interpretability** (*Testing that demonstrates the results are understood by the potential users for public reporting and quality improvement*) **Data/sample:** We have tested this measure on several patient populations, including, in total, more than

	30 million people enrolled in 18 different health plans. **Methods:** The results have been provided to the medical directors of the 18 health plans, all of whom have indicated that they understand the particular aspect of care that the measure addresses and how to interpret the result for a physician. In addition, results have been presented to HR directors from >60 national employers. **Results:** Both the health plan medical directors and the HR personnel from the employers have indicated that they understand the particular aspect of care that the measure addresses and how to interpret the result for a physician. We do not have data on the extent to which individual physicians understand the measure result, but we presume that, since health plan medical directors and non-medical personnel from employers understand the result, that physicians and lay people will also so long that adequate explanation is provided.
34 (3b, 3c)	**Relation to other NQF-endorsed™ measures** ►Is this measure similar or related to measure(s) already endorsed by NQF (on the same topic or the same target population)? *Measures can be found at **www.qualityforum.org** under Core Documents.* *Check all that apply* ☐ Have not looked at other NQF measures ☐ Other measure(s) on same topic ☐ Other measure(s) for same target population ☒ No similar or related measures **Name of similar or related NQF-endorsed™ measure(s):** **Are the measure specifications harmonized with existing NQF-endorsed™ measures?** (select one) If not fully harmonized, provide rationale: **Describe the distinctive, improved, or additive value this measure provides to existing NQF-endorsed measures:** This measure can be used exclusively with enriched administrative data
	FEASIBILITY
35 (4a)	**How are the required data elements generated?** *Check all that apply* ☐ Data elements are generated concurrent with and as a byproduct of care processes during care delivery (e.g., blood pressure or other assessment recorded by personnel conducting the assessment) ☐ Data elements are generated from a patient survey (e.g., CAHPS) ☒ Data elements are generated through coding performed by someone other than the person who obtained the original information (e.g., DRG or ICD-9 coding on claims) ☐ Other, Please describe:
36 (4b)	**Electronic Sources** All data elements ►**If all data elements are not in electronic sources, specify the near-term path to electronic collection by most providers:** ►**Specify the data elements for the electronic health record:**
37 (4c)	**Do the specified exclusions require additional data sources beyond what is required for the other specifications?** (select one) ►**If yes, provide justification:**
38 (4d)	**Identify susceptibility to inaccuracies, errors, or unintended consequences of the measure:** As with any type of clinical performance measure, and with any source of data used to operationalize the measure, there will be some instances in which the data used to compute the measure are incomplete or inaccurate. We try to minimize the impact of such errors or omissions through the way we have constructed the technical specifications for the measure. There is no data source for performance measurement that is completely accurate. Two studies have shown that physician performance tends to be better when assessed using claims data compared to via chart abstraction. **Describe how could these potential problems be audited:** Potential data errors of omission or commission could be audited through chart abstraction, or feedback from physicians and patients.

	However, as mentioned above, each of these alternative sources of information also are susceptible to error and thus are not true gold standards. **Did you audit for these potential problems during testing?** Yes **If yes, provide results:** Through feedback from physicians whose performance has been evaluated
39 (4e)	**Testing feasibility** Describe what have you learned/modified as a result of testing and/or operational use of the measure regarding data collection, availability of data/missing data, timing/frequency of data collection, patient confidentiality, time/cost of data collection, other feasibility/ implementation issues:
	CONTACT INFORMATION
40	**Web Page URL for Measure Information** *Describe where users (implementers) should go for more details on specifications of measures, or assistance in implementing the measure.* **Web page URL:** *www.resolutionhealth.com*
41	**Measure Intellectual Property Agreement Owner Point of Contact** **First Name:** Alan **MI:** **Last Name:** Lefkowitz **Credentials (MD, MPH, etc.):** **Organization:** Resolution Health **Street Address:** 10490 Little Patuxent Parkway **City:** Columbia **State:** MD **ZIP:** 21044 **Email:** alefkowitz@resolutionhealth.com **Telephone:** 240-295-5834 ext:
42	**Measure Submission Point of Contact** **If different than IP Owner Contact** **First Name:** Darren **MI:** M **Last Name:** Schulte **Credentials (MD, MPH, etc.):** MD, MPP **Organization:** Resolution Health **Street Address:** 10490 Little Patuxent Parkway **City:** Columbia **State:** MD **ZIP:** 21044 **Email:** dschulte@resolutionhealth.com **Telephone:** 650-773-3308 ext:
43	**Measure Developer Point of Contact** **If different than IP Owner Contact** **First Name:** Darren **MI:** M **Last Name:** Schulte **Credentials (MD, MPH, etc.):** MD, MPP **Organization:** Resolution Health **Street Address:** 10490 Little Patuxent Parkway **City:** Columbia **State:** MD **ZIP:** 21044 **Email:** dschulte@resolutionhealth.com **Telephone:** 650-773-3308 ext:
44	**Measure Steward Point of Contact** **If different than IP Owner Contact** *Identifies the organization that will take responsibility for updating the measure and assuring it is consistent with the scientific evidence and current coding schema; the steward of the measure may be different than the developer.* **First Name:** Darren **MI:** M **Last Name:** Schulte **Credentials (MD, MPH, etc.):** MD, MPP **Organization:** Resolution Health **Street Address:** 10490 Little Patuxent Parkway **City:** Columbia **State:** MD **ZIP:** 21044 **Email:** dschulte@resolutionhealth.com **Telephone:** 650-773-3308 ext:
	ADDITIONAL INFORMATION
45	**Workgroup/Expert Panel involved in measure development** Workgroup/panel used ►If workgroup used, describe the members' role in measure development: Over the past several years, two formal workgroups -- one organized by the Care Focused Purchasing initiative and one organized by the Massachusetts Group Insurance Commission Clinical Performance Improvement Initiative -- and several ad hoc experts have provided useful input to our measure development and refinement processes. In each case, we have provided the Work Group Members with details regarding each of our performance measures and members of the work group (not always all members) have provided feedback on the validity of the clinical practice guideline underlying the measure and suggestions regarding potential ways to improve the technical specifications for the measure. In some instances, we have eliminated measures based on feedback from the work groups. In other instances, work group members have proposed new measures. We try to get feedback from work group members and selected clinical experts on an annual

	basis. ►Provide a list of workgroup/panel members' names and organizations: **Care Focused Purchasing Clinical Advisory Panel** Bobbie Berg -BCBS -IL Dow Briggs - BCBS- AL Joe Calderella - Cigna Carl Cameron - Preferred Care Steven Goldberg – Humana Tom James – Humana Don Liss – Aetna Catherine MacLean – WellPoint Zak Ramadan-Jradi – Regence Fred Volkman – Avidyn Health Constance Hwang – Resolution Health Darren Schulte - Resolution Health Earl Steinberg – Resolution Health **Massachusetts Group Insurance Commission Physician Advisory Panel** Jim Glauber – Neighborhood Health Plan Lyn Laurenco - Neighborhood Health Plan Anton Dodek - Tufts Barbara Chase - Fallon Jonathan Scott Coblyn – Brigham and Women's Hospital Tom Ebert - Health New England Elaine Wilson - Harvard Pilgrim Health Care Jennifer St. Thomas – Tufts Jennifer Lavigne – Fallon Michael O'Shea - Baycare Health Neil Minkoff - Harvard Pilgrim Health Care Paul Mendis- Neighborhood Health Plan Bob Jordan - Neighborhood Health Plan Bob Sorrenti – Unicare Constance Williams – Unicare Laura Syron - Neighborhood Health Plan Susan Tiffany – Unicare Constance Hwang – Resolution Health Darren Schulte - Resolution Health Earl Steinberg – Resolution Health David Gregg – Mercer Russ Robinson - Mercer
46	**Measure Developer/Steward Updates and Ongoing Maintenance** Year the measure was first released: 2008 Month and Year of most recent revision: October 2008 What is the frequency for review/update of this measure? Annual Review When is the next scheduled review/update for this measure? Summer 2009
47	**Copyright statement/disclaimers:** Copyright © 2008 – Resolution Health, Inc. All rights reserved. The material submitted is confidential and proprietary. No use of this material is permitted other than in accordance with the Agreement with Measure Stewards between National Quality Forum and Resolution Health, Inc.
48	**Additional Information:** None
49	**I have checked that the submission is complete and any blank fields indicate that no information is provided.** ☒
50	**Date of Submission** (*MM/DD/YY*)**:** 11/20/2008

PATIENT & FAMILY ENGAGEMENT

PRIORITY STATEMENT: Engage Patients and Their Families in Managing Their Health and Making Decisions About Their Care

1.1. All providers will routinely solicit and publicly report on their patients' perspectives of care

1.2. All providers will work collaboratively with their patients to assist them in making informed decisions about treatment options consistent with their values and preferences

POPULATION HEALTH

PRIORITY STATEMENT: IMPROVE THE HEALTH OF THE U.S. POPULATION

2.1. The population will be up to date on all high-priority age- and gender-appropriate evidence-based clinical preventive services

2.2. The population will receive recommended evidence-based interventions to improve targeted healthy lifestyle behaviors

2.3. All communities will demonstrate a 10% improvement in their community index of health

2.4. Americans will have all recommended high priority healthy lifestyle behaviors under control

SAFETY

PRIORITY STATEMENT: IMPROVE THE SAFETY OF THE U.S. HEALTH CARE SYSTEM

3.1. All providers will drive all preventable healthcare-associated infections (HAI) to zero

3.2. All providers will drive the incidence of preventable NQF Serious Reportable Events (SRE) to zero

3.3. All hospitals will reduce preventable and premature mortality rates to best-in-class

3.4. All hospitals and their community partners will reduce 30-day mortality rates following hospitalization for select conditions to best-in-class

PALLIATIVE CARE

PRIORITY STATEMENT: GUARANTEE APPROPRIATE AND COMPASSIONATE CARE FOR PATIENTS WITH LIFE-LIMITING ILLNESSES

4.1. All providers will identify, document, and effectively treat physical symptoms (e.g. pain, shortness of breath, constipation, others) at levels acceptable to patients with a life-limiting illness

4.2. All providers will effectively address the psychosocial and spiritual needs of patients with life-limiting illnesses and their families according to their preferences

4.3. All eligible patients will receive high quality palliative care and hospice services

CARE COORDINATION

PRIORITY STATEMENT: ENSURE PATIENTS RECEIVE WELL-COORDINATED CARE ACROSS ALL PROVIDERS, SETTINGS, AND LEVELS OF CARE

5.1. All providers will accurately and completely reconcile medications across the continuum of care (i.e. admission, transfer within and between care providers, discharge, and outpatient appointments) and ensure communication with the next provider of services

5.2. All inpatient and outpatient providers will assess the patient's perspective of the coordination of their care using a validated care coordination survey tool

5.3. All providers will reduce 30-day all-cause readmission rates resulting from poorly coordinated care to best-in-class

5.4. All providers will reduce preventable emergency department (i.e. those that could be avoided with timely access to primary care) visits resulting from poorly coordinated care by 50%

PATIENT-FOCUSED CARE

PRIORITY STATEMENT: GUARANTEE HIGH VALUE CARE ACROSS ACUTE AND CHRONIC EPISODES

6.1. All patients will receive high-value care over the course of their acute or chronic illness

OVERUSE

PRIORITY STATEMENT: ELIMINATE WASTE WHILE ENSURING THE DELIVERY OF APPROPRIATE CARE

7.1. Reduce wasteful and inappropriate care for the top ten targeted areas by 50%

THE NATIONAL QUALITY FORUM

MEASURE SUBMISSION FORM VERSION 3.0
August 2008

The measure information you submit will be shared with NQF's Steering Committees and Technical Advisory Panels to evaluate measures against the NQF criteria of importance to measure and report, scientific acceptability of measure properties, usability, and feasibility. Four conditions (as indicated below) must be met before proposed measures may be considered and evaluated for suitability as voluntary consensus standards. Not all acceptable measures will be strong—or equally strong—among each set of criteria. The assessment of each criterion is a matter of degree; however, all measures must be judged to have met the first criterion, importance to measure and report, in order to be evaluated against the remaining criteria. References to the specific measure evaluation criteria are provided in parentheses following the item numbers. Please refer to the *Measure Evaluation Criteria* for more information at ***www.qualityforum.org*** under Core Documents. Additional guidance is being developed and when available will be posted on the NQF website.

Use the tab or arrow (↓→) keys to move the cursor to the next field (or back ←↑). There are three types of response fields:

- drop-down menus - select one response;
- check boxes – check as many as apply; and
- text fields – you can copy and paste text into these fields or enter text; these fields are not limited in size, but in most cases, we ask that you summarize the requested information.

Please note that URL hyperlinks do not work in the form; you will need to type them into your web browser.

Be sure to answer all questions. Fields that are left blank will be interpreted as no or none. Information must be provided in this form. Attachments are not allowed except when specifically requested or to provide additional detail or source documents for information that is summarized in this form. If you have important information that is not addressed by the questions, they can be entered into item #48 near the end of the form.

For questions about this form, please contact the NQF Project Director listed in the corresponding call for measures.

	CONDITIONS FOR CONSIDERATION BY NQF
	Four conditions must be met before proposed measures may be considered and evaluated for suitability as voluntary consensus standards.
A (A)	***Public domain or Intellectual Property Agreement signed:*** *IP Agreement signed and submitted (If no, do not submit)* *Template for the Intellectual Property Agreement is available at* ***www.qualityforum.org*** *under Core Documents.*
B (B)	***Measure steward/maintenance:*** *Is there an identified responsible entity and process to maintain and update the measure on a schedule commensurate with clinical innovation, but at least every 3 years?* *Yes, information provided in contact section (If no, do not submit)*
C (C)	***Intended use:*** *Does the intended use of the measure include BOTH public reporting AND quality improvement? Yes (If no, do not submit)*
D ***(D)***	***Fully developed and tested:*** *Is the measure fully developed AND tested? Yes, fully developed and tested (If not tested and no plans for testing within 24 months, do not submit)*

THE NATIONAL QUALITY FORUM

MEASURE SUBMISSION FORM VERSION 3.0
August 2008

	(for NQF staff use) ***NQF Review #:*** *EC-213-08* ***NQF Project:*** *National Voluntary Consensus Standards for Ambulatory Care Using Clinically Enriched Administrative Data*
	MEASURE SPECIFICATIONS & DESCRIPTIVE INFORMATION
1	***Information current as of*** *(date- MM/DD/YY):* *6/25/09*
2	***Title of Measure:*** *Steroid Use - Osteoporosis Screening*
3	**Brief description of measure [1]:** Percentage of patients, 18 and older, who have been on chronic steroids for at least 180 days in the past 9 months and who had a bone density evaluation or osteoporosis treatment
4 (2a)	**Numerator Statement:** Patients who have had a bone density evaluation or osteoporosis treatment. **Time Window:** At least 2 years, but will evaluate all available historical data for the presence of bone density evaluation **Numerator Details** (Definitions, codes with description): see attached
5 (2a)	**Denominator Statement:** Patients, 18 and older, who have been on chronic steroids for at least 180 days **Time Window:** 9 months **Denominator Details** (Definitions, codes with description): see attached
6 (2a, 2d)	**Denominator Exclusions:** Specific exclusions: - Corticoadrenal Insufficiency - Pregnancy if female General exclusions: - Evidence of metastatic disease or active treatment of malignancy (chemotherapy or radiation therapy) in the last 6 months - Patients who have been in a skilled nursing facility in the last 3 months **Denominator Exclusion Details** (Definitions, codes with description): see attached
7 (2a, 2h)	**Stratification** Do the measure specifications require the results to be stratified? No ► If "other" describe: **Identification of stratification variable(s):** **Stratification Details** (Definitions, codes with description):
8 (2a, 2e)	**Risk Adjustment** Does the measure require risk adjustment to account for differences in patient severity before the onset of care? No ► **If yes,** (select one) ► Is there a separate proprietary owner of the risk model? (select one) **Identify Risk Adjustment Variables:** **Detailed risk model:** attached ☐ **OR** Web page URL:
9	**Type of Score:** Rate/proportion **Calculation Algorithm:** attached ☒ **OR** Web page URL:

[1] Example of measure description: Percentage of adult patients with diabetes aged 18-75 years receiving one or more A1c test(s) per year.

(2a) **Interpretation of Score** (*Classifies interpretation of score according to whether better quality is associated with a higher score, a lower score, a score falling within a defined interval, or a passing score*)
Better quality = Higher score ► If "Other", please describe:

10 **Identify the required data elements**(e.g., primary diagnosis, lab values, vital signs): ICD9, CPT, pharmacy claims, lab values, patient-derived data

(2a. 4a, 4b) **Data dictionary/code table** attached ☒ **OR** Web page URL:
Data Quality (2a) *Check all that apply*
☒ Data are captured from an authoritative/accurate source (e.g., lab values from laboratory personnel)
☒ Data are coded using recognized data standards
☒ Method of capturing data electronically fits the workflow of the authoritative source
☐ Data are available in EHRs
☐ Data are auditable

11 **Data Source and Data Collection Methods** *Identifies the data source(s) necessary to implement the measure specifications. Check all that apply*

(2a, 4b)

☐ Electronic Health/Medical Record	☐ Paper Medical Record
☐ Electronic Clinical Database, Name:	☐ Standardized clinical instrument, Name:
☐ Electronic Clinical Registry, Name:	☐ Standardized patient survey, Name:
☒ Electronic Claims	☐ Standardized clinician survey, Name:
☒ Electronic Pharmacy data	☐ Other, Describe:
☒ Electronic Lab data	
☐ Electronic source – other, Describe:	Instrument/survey attached ☐ **OR** Web page URL:

12 **Sampling** *If measure is based on a sample, provide instructions and guidance on sample size.*
Minimum sample size:

(2a)
Instructions:

13 **Type of Measure:** Process ► If "Other", please describe:

(2a) ► If part of a composite or paired with another measure, please identify composite or paired measure

14 **Unit of Measurement/Analysis** (*Who or what is being measured*) *Check all that apply.*

(2a)

☒ Can be measured at all levels	☐ Integrated delivery system
☐ Individual clinician (e.g., physician, nurse)	☐ Health plan
☐ Group of clinicians (e.g., facility department/unit, group practice)	☐ Community/Population
☐ Facility (e.g., hospital, nursing home)	☐ Other (*Please describe*):

15 **Applicable Care Settings** *Check all that apply*

(2a)

☐ Can be used in all healthcare settings	☐ Hospice
☒ Ambulatory Care (office/clinic)	☐ Hospital
☐ Behavioral Healthcare	☐ Long term acute care hospital
☒ Community Healthcare	☒ Nursing home/ Skilled Nursing Facility (SNF)
☐ Dialysis Facility	☐ Prescription Drug Plan
☐ Emergency Department	☐ Rehabilitation Facility
☐ EMS emergency medical services	☐ Substance Use Treatment Program/Center
☒ Health Plan	☐ Other (*Please describe*):
☐ Home Health	

IMPORTANCE TO MEASURE AND REPORT

Note: This is a threshold criterion. If a measure is not judged to be sufficiently important to measure and report, it will not be evaluated against the remaining criteria.

16 **Addresses a Specific National Priority Partners Goal** *Enter the numbers of the specific goals related to this measure (see list of goals on last page)*: 2.1,2.2

(1a)

17 (1a)	**If not related to NPP goal, identify high impact aspect of healthcare** (select one) **Summary of Evidence:** **Citations[2] for Evidence:**
18 (1b)	**Opportunity for Improvement** *Provide evidence that demonstrates considerable variation, or overall poor performance, across providers.* **Summary of Evidence:** In 2004 the US Surgeon General issued a report regarding bone health and osteoporosis. In this report they discussed the healthcare gaps regarding screening for and treatment of osteoporosis: "Several studies have documented disparities in the screening of patients for osteoporosis. Fractures due to bone disease are common, costly, and often become a chronic burden on individuals and society. An estimated 1.5 million individuals suffer a bone disease-related fracture each year. Four out of every 10 White women age 50 or older in the United States will experience a hip, spine, or wrist fracture sometime during the remainder of their lives." "Studies show that physicians frequently fail to diagnose and treat osteoporosis, even in elderly patients who have suffered a fracture. For example, in a recent study of four well-established Midwestern health systems, only one-eighth to a quarter of patients who had a hip fracture were tested for their bone density; fewer than a quarter were given calcium and vitamin D supplements; and fewer than one-tenth were treated with effective antiresorptive drugs. Other studies have found low usage rates for testing and treatment among the high-risk population, including BMD testing (which ranged from 3–23 percent), calcium and vitamin D supplementation (11–44 percent), and antiresorptive therapy (12–16 percent). In fact, according to the report from the Surgeon General, most physicians do not even discuss osteoporosis with their patients, even after a fracture. Finally, even when physicians do suggest therapy it often does not conform with recommended practice; for example, many patients with low BMD are not treated while others with high BMD are." Morris CA. et al. reviewed 22 studies which addressed the rates of BMD screening in high risk populations including chronic glucocorticoid users. BMD testing rates ranged from 1% to 32% of postfracture patients and 1% to 47% of oral glucocorticoid users.The weighted average screening rates were 8% in the postfracture population and 9% in patients using oral glucocorticoids. In the three studies that examined physician characteristics for performing BMD testing, the percentage of doctors ordering bone densitometry as a screening test for osteoporosis varied from 38% to 62%. Fourteen studies examined potential predictors of bone densitometry and 8 presented data that were adjusted for covariates. Female gender and having care provided by a rheumatologist were found to predict BMD testing in at least 2 studies. Neither patient age nor presence of comorbidities was associated with BMD testing. Female physicians and doctors caring for larger numbers of postmenopausal women associated with higher rates of use of bone densitometry in 2 studies, while physician age and years since medical school graduation were not associated with rates of bone density testing. One article found higher rates of BMD testing in areas with more bone densitometers. Several studies have looked specifically at osteoporosis screening and treatment patterns in patients receiving chronic steroids. One recent study characterized glucocorticoid use and osteoporosis screening and treatment patterns within a large U.S. health maintenance organization (HMO). This retrospective cohort study (n =3,031) used the HMO s electronic medical record and databases to identify patients who were dispensed the equivalent of >5 mg of prednisone per day for at least 90 days from January 2000 through December 2001. It assessed the primary outcomes, the percent who received a bone mineral density (BMD) measurement from January 1996 through 6 months after the index glucocorticoid prescription and the percent dispensed an osteoporosis medication within 6 months before or after the index glucocorticoid prescription. The participants mean age was 61.4 years, 60% were women, and the mean daily dose of corticosteroids was 20.0 mg of prednisone equivalents. The most frequent diagnoses associated with glucocorticoid use were chronic obstructive pulmonary disease, 25.8%; asthma, 21.4%; rheumatoid arthritis, 17.2%. Overall, only 9.8% of the population received a BMD measurement—13% of

[2] Citations can include, but are not limited to journal articles, reports, web pages (URLs).

	women and 4.9% of men; 38% were dispensed osteoporosis medications—57.1% of women and 8.9% of men; only 14.5% received treatment with antiresorptive medications other than hormone replacement therapy—18.3% of women and 8.9% of men. The researchers concluded that a substantial proportion of patients receiving long-term glucocorticoid therapy did not receive BMD measurement or preventive therapy for osteoporosis, as recommended in GIOP practice guidelines. **Citations for Evidence:** 1. Morris CA et al. Patterns of Bone Mineral Density Testing. Current Guidelines, Testing Rates, and Interventions. J. Gen Intern Med. July; 19(7): 783–790. 2. U.S. Department of Health and Human Services. Bone Health and Osteoporosis: A Report of the Surgeon General. Rockville, MD: U.S. Department of Health and Human Services, Office of the Surgeon General, 2004. 3. National Health and Nutrition Survey III National Health and Nutrition Survey III http://www.cdc.gov/nchs/products/elec_prods/subject/nhanes3.htm 4. Practice patterns in patients at risk for glucocorticoid-induced osteoporosis. Osteoporos Int (2005) 16: 2168–2174.
19 (1b)	**Disparities** *Provide evidence that demonstrates disparity in care/outcomes related to the measure focus among populations.* **Summary of Evidence:** Several studies have documented disparities in the screening of patients for osteoporosis. Osteoporosis often goes undiagnosed and untreated in black patients with fragility fractures. Fragility fractures, the result of low-impact falls that would ordinarily not fracture healthy bones, are the hallmark of osteoporosis (decreased bone mass). They affect all U.S. racial and ethnic groups, but blacks suffer more complications and deaths from these fractures than whites. This may be because the diagnosis of osteoporosis is often missed as the underlying cause of fragility fractures among black patients, according to a recent study which was supported in part by the AHRQ. Researchers found that for 91 percent of black patients with low-impact fragility fractures, osteoporosis was not recognized, diagnosed, or treated before or after hospitalization. This increases the risk of future fractures and the likelihood of disability or even nursing home entry, caution the researchers. For the study, the researchers reviewed the medical records of middle-aged men and women with fragility fractures who had been seen at Howard University Hospital—a teaching hospital that treats predominantly black patients—from 1992 through 2002. Of the 58,841 patients who were admitted during the study period, 2.1 percent had fractures. Of these, 65 percent had fractures secondary to low-impact falls, but only 9 percent were diagnosed with osteoporosis. Of those diagnosed with osteoporosis, only five (19 percent) were discharged on antiosteoporotic medications, and only one was discharged with a bisphosphonate therapy for bone loss. None of the patients had bone density scans to diagnose osteoporosis, which is recommended for patients with fragility fractures. The 2004 Report from the Surgeon General on bone health and osteoporosis also discussed the disparities in care in underserved populations in regards to bone health: " Some of the most important barriers relate to men and racial and ethnic minorities. Osteoporosis and fragility fractures are often mistakenly viewed by both the public and health care practitioners as only being a problem for older White women. This commonly held but incorrect view may delay prevention and even treatment in men and minority women who are not seen as being at risk for osteoporosis. While a relatively small percentage of the total number of people affected, these populations still represent millions of Americans who are suffering the debilitating effects of bone disease." For the poor (especially the low-income elderly population), individuals with disabilities, individuals living in rural areas, and other underserved populations, timely access to care represents an additional important barrier." "Underserved populations not only have difficulty in accessing care, but there are also concerns about the quality of those services they do receive. A recent study by the Institute of Medicine concluded that racial and ethnic minorities tend to receive lower-quality health care than does the majority population, even after accounting for access-related factors. These disparities are consistent across a wide range of services, including those critical to bone health. Moreover, in a large study of older adults who had suffered a hip or wrist fracture, certain groups of patients—including men, older persons, non-Whites, and

	those with co-morbid conditions—were less likely than White women to receive treatment for their bone disease after their fractures." **Citations for evidence:** 1. Agency for Healthcare Research and Quality (AHRQ) http://www.ahrq.gov/RESEARCH/apr05/0405RA19.htm (accessed online 10-31-08) 2. Osteoporotic fragility fractures in African Americans: Under-recognized and undertreated. Journal of the National Medical Association. 2004. 96(12), pp. 1640-1645. 3. Report of the Surgeon General's Workshop on Osteoporosis and Bone Health; 2002 Dec 12-13;Washington (DC) [report on the Internet]: U.S. Department of Health and Human Services. http://www.surgeongeneral.gov/topics/bonehealth/.(accessed online 10-08) 4. U.S. Department of Health and Human Services. Bone Health and Osteoporosis: A Report of the Surgeon General. Rockville, MD: U.S. Department of Health and Human Services, Office of the Surgeon General, 2004. 5. National Health and Nutrition Survey III National Health and Nutrition Survey III http://www.cdc.gov/nchs/products/elec_prods/subject/nhanes3.htm
20 (1c)	**If measuring an Outcome** Describe relevance to the national health goal/priority, condition, population, and/or care being addressed: Patients on chronic glucocorticosteroids are at an increased risk of having osteoporosis and are at an increased risk of subsequent fracture. Screening for osteoporosis in these patients may lead to earlier treatment of osteoporosis with reduction of adverse events including additional fragility fractures. **If not measuring an outcome, provide evidence supporting this measure topic and grade the strength of the evidence** *Summarize the evidence (including citations to source) supporting the focus of the measure as follows:* • Intermediate outcome – evidence that the measured intermediate outcome (e.g., blood pressure, Hba1c) leads to improved health/avoidance of harm or cost/benefit. • Process – evidence that the measured clinical or administrative process leads to improved health/avoidance of harm and if the measure focus is on one step in a multi-step care process, it measures the step that has the greatest effect on improving the specified desired outcome(s). • Structure – evidence that the measured structure supports the consistent delivery of effective processes or access that lead to improved health/avoidance of harm or cost/benefit. • Patient experience – evidence that an association exists between the measure of patient experience of health care and the outcomes, values and preferences of individuals/ the public. • Access – evidence that an association exists between access to a health service and the outcomes of, or experience with, care. • Efficiency– demonstration of an association between the measured resource use and level of performance with respect to one or more of the other five IOM aims of quality. **Type of Evidence** *Check all that apply* ☒ Evidence-based guideline ☐ Quantitative research studies ☒ Meta-analysis ☐ Qualitative research studies ☒ Systematic synthesis of research ☐ Other (*Please describe*): **Overall Grade for Strength of the Evidence**[3] (*Use the USPSTF system, or if different, also describe how it relates to the USPSTF system)*: Evidence for the osteoporosis screening in this osteoporosis risk group is not specifically graded in the NOF 2008 guidelines; USPSTF grade A would most likely apply, as randomized

[3]The strength of the body of evidence for the specific measure focus should be systematically assessed and rated, e.g., USPSTF grading system **www.ahrq.gov/clinic/uspstmeth.htm**: **A -** The USPSTF recommends the service. There is high certainty that the net benefit is substantial. **B -** The USPSTF recommends the service. There is high certainty that the net benefit is moderate or there is moderate certainty that the net benefit is moderate to substantial. **C -** The USPSTF recommends against routinely providing the service. There may be considerations that support providing the service in an individual patient. There is at least moderate certainty that the net benefit is small. Offer or provide this service only if other considerations support the offering or providing the service in an individual patient. **D -** The USPSTF recommends against the service. There is moderate or high certainty that the service has no net benefit or that the harms outweigh the benefits. **I -** The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of the service. Evidence is lacking, of poor quality, or conflicting, and the balance of benefits and harms cannot be determined.

	controlled trials have demonstrated the benefit of osteoporosis management in these patients, although not specifically BMD screening. **Summary of Evidence** (*provide guideline information below*)**:** Several studies have looked at the relationship between chronic steroid use and osteoporosis. Long term therapy with oral gluco-corticosteroids often results in bone loss and glucocorticoid-induced osteoporosis (GIOP). GIOP is thought to be only second in frequency only to the osteoporosis that occurs after menopause and is the most common form of drug-induced osteoporosis. Lukert and Raisz have estimated that over 50% of chronic glucocorticoid users will develop bone loss leading to fracture. Studies have shown that bone loss is greatest in the first 12 months of steroid use, continues at a lower rate thereafter. Bone mineral density (BMD) at the lumbar spine has been shown to decrease by 8% after 20 weeks of treatment with prednisone at an average daily dose of 7.5 mg reductions in vertebral trabecular BMD approaching 40% have also been reported. Bisphosphonates are effective in the prevention and treatment of GIOP. The American College of Rheumatology recommends obtaining a baseline measurement of bone mineral density (BMD) at the lumbar spine and/or hip when initiating long-term (i.e., >6 months) glucocorticoid therapy. Longitudinal measurements may be repeated as often as every 6 months for monitoring glucocorticoid-treated patients to detect bone loss. In patients who are receiving therapy to prevent bone loss, annual followup measurements are probably sufficient. This Recommendation is not graded. The NOF recommends BMD Testing in adults with a condition (e.g., rheumatoid arthritis) or taking a medication (e.g., glucocorticoids, ≥5 mg/day for ≥3 months) associated with low bone mass or bone loss postmenopausal, or have been on chronic corticosteroid therapy (>3months). This Recommendation is not graded. The NIH recommends that the decision to measure bone density should follow an individualized approach. It should be considered when it will help the patient decide whether to institute treatment to prevent osteoporotic fracture. It should also be considered in patients receiving glucocorticoid therapy for 2 months or more and patients with other conditions that place them at high risk for osteoporotic fracture. **Citations for Evidence:** -Glucocorticoid-induced Osteoporosis. Endocrinol Metab Clin N Am 32(2003) 135-157. -Lukert BP, Raisz LG. Glucocorticoid-induced osteoporosis: pathogenesis and management. Ann Intern Med. 1990 Oct 1;113(7):560. -Endocr Pract | American Association of Clinical Endocrinologists Medical Guidelines for Clinical Practice for the Prevention and Management of Postmenopausal Osteoporosis - 2001 Edition With Selected Updates for 2003 | 2003;9:544-564. -NOF Clinician's Guide to Prevention and Treatment of Osteoporosis. 2008. (Accessed online 09-2009) http://www.nof.org/professionals/cliniciansguide_form.asp - Recommendations for the Prevention and Treatment of Glucocorticoid-Induced Osteoporosis, ACR 2001 Update. Arthritis Rheum. 2001;44:1496-1503. -National Institutes of Health. Osteoporosis Prevention, Diagnosis and Therapy. NIH Consensus Statement. March 2000;17:1-45.
21 (1c)	**Clinical Practice Guideline** *Cite the guideline reference; quote the specific guideline recommendation related to the measure and the guideline author's assessment of the strength of the evidence; and summarize the rationale for using this guideline over others.* **Guideline Citation:** Recommendations for the Prevention and Treatment of Glucocorticoid-Induced Osteoporosis, ACR 2001 Update. Arthritis Rheum. 2001;44:1496-1503. **Specific guideline recommendation:** The American College of Rheumatology recommends obtaining a

	baseline measurement of bone mineral density (BMD) at the lumbar spine and/or hip when initiating long-term (i.e., >6 months) glucocorticoid therapy. Longitudinal measurements may be repeated as often as every 6 months for monitoring glucocorticoid-treated patients to detect bone loss. In patients who are receiving therapy to prevent bone loss, annual followup measurements are probably sufficient. This Recommendation is not graded **Guideline author's rating of strength of evidence** (*If different from USPSTF, also describe it and how it relates to USPSTF)*: Strengh of evidence for the osteoporosis screening in this osteoporosis risk group is not specifically graded in the ACR 2001 guidelines; USPSTF grade A would most likely apply, as randomized controlled trials have demonstrated the benefit of osteoporosis management in these patients, although not specifically BMD screening. **Rationale for using this guideline over others:** Nationally recognized guideline in osteoporosis
22 (1c)	**Controversy/Contradictory Evidence** *Summarize any areas of controversy, contradictory evidence, or contradictory guidelines and provide citations.* **Summary:** **Citations:**
23 (1)	**Briefly describe how this measure (as specified) will facilitate significant gains in healthcare quality related to the specific priority goals and quality problems identified above:** Patients on chronic glucocorticosteroids are at an increased risk of having osteoporosis and are at an increased risk of subsequent fracture. Screening for osteoporosis in these patients may lead to earlier treatment of osteoporosis with reduction of adverse events including additional fragility fractures.
	SCIENTIFIC ACCEPTABILITY OF MEASURE PROPERTIES
	Note: Testing and results should be summarized in this form. However, additional detail and reports may be submitted as supplemental information or provided as a web page URL. If a measure has not been tested, it is only potentially eligible for time-limited endorsement.
24	**Supplemental Testing Information:** attached ☐ **OR** Web page URL:
25 (2b)	**Reliability Testing** **Data/sample:** **Analytic Method:** **Testing Results:**
26 (2c)	**Validity Testing** **Data/sample:** **Analytic Method:** **Testing Results:**
27 (2d)	**Measure Exclusions** *Provide evidence to justify exclusion(s) and analysis of impact on measure results during testing.* **Summary of Evidence supporting exclusion(s):** **Citations for Evidence:** **Data/sample:** **Analytic Method:**

	Testing Results:
28 (2e)	**Risk Adjustment Testing** *Summarize the testing used to determine the need (or no need) for risk adjustment and the statistical performance of the risk adjustment method.* **Data/sample:** **Analytic Method:** **Testing Results:** ►**If outcome or resource use measure not risk adjusted, provide rationale:**
29 (2g)	**Testing comparability of results when more than 1 data method is specified** (*e.g., administrative claims or chart abstraction*) **Data/sample:** **Analytic Method:** **Results:**
30 (2f)	**Provide Measure Results from Testing or Current Use** Results from testing **Data/sample:** We measured a commercial population of 459,196 members. **Methods to identify statistically significant and practically/meaningfully differences in performance:** Compliance to the performance measure is measured using an analysis of the claims data; in this case looking for evidence of bone mineral density evaluation or osteoporosis treatment. In addition, where appropriate we analyse patient data collected either from the patient's PHR or during a disease management program. **Results:** We found that of the 837 members who satisfied the demominator, 578 members were in the numerator, indicating a compliance rate of 69%.
31 (2h)	**Identification of Disparities** ►If measure is stratified by factors related to disparities (i.e. race/ethnicity, primary language, gender, SES, health literacy), **provide stratified results:** ►If disparities have been reported/identified, but measure is not specified to detect disparities, provide rationale:
	USABILITY
32 (3)	***Current Use*** *Testing completed* ***If in use, how widely used*** *Health plan or sytem* ► *If "other," please describe:* ☐ *Used in a public reporting initiative, name of initiative:* *Sample report attached* ☐ ***OR*** *Web page URL:*
33 (3a)	**Testing of Interpretability** (*Testing that demonstrates the results are understood by the potential users for public reporting and quality improvement*) **Data/sample:** Administrative claims database from health plans; lab results data; patient derived data. **Methods:** The performance measure is similar in message to a clinical alert that has been operational since 2000. Compliance to the clinical alert is measured using an analysis of subsequent claims, in this case the appearance of claims for bone mineral density evaluation or osteoporosis treatment. In addition, a feedback tool accompanies every clinical alert message, and includes options indicating agreement or disagreement with the message. **Results:** In practice, fewer than 1% of the respondents disagreed with the medical literature, and more than 20 % showed objective evidence of compliance with the clinical alert.

34 (3b, 3c)	**Relation to other NQF-endorsed™ measures** ►Is this measure similar or related to measure(s) already endorsed by NQF (on the same topic or the same target population)? *Measures can be found at **www.qualityforum.org** under Core Documents.* *Check all that apply* ☐ Have not looked at other NQF measures ☒ Other measure(s) on same topic ☐ Other measure(s) for same target population ☐ No similar or related measures **Name of similar or related NQF-endorsed™ measure(s):** 1. Osteoporosis testing in older women (NCQA) 2. Osteoporosis: Communication with the Physician Managing Ongoing Care Post-Fracture (AAFP/AAOS/AACE/AC Rheum/AMA PCPI2/NCQA) 3. Osteoporosis: Management Following Fracture (AAFP/AAOS/AACE/ACRheum/AMA PCPI2/NCQA) 4. Osteoporosis: Screening or Therapy for Women Aged 65 Years and Older (AAFP/AAOS/AACE/ACRheum/AMA PCPI2/NCQA) 5.Osteoporosis: Pharmacologic Therapy (AAFP/AAOS/AACE/ACRheum/AMA PCPI2/NCQA) 6.Osteoporosis management in women who had a fracture (NCQA) **Are the measure specifications harmonized with existing NQF-endorsed™ measures?** Not harmonized ►If not fully harmonized, provide rationale: We use different data sources such as electronic administrative data and patient derived data. **Describe the distinctive, improved, or additive value this measure provides to existing NQF-endorsed measures:** The improved value is feasibility and low burden for data collection
	FEASIBILITY
35 (4a)	***How are the required data elements generated?*** *Check all that apply* ☒ *Data elements are generated concurrent with and as a byproduct of care processes during care delivery (e.g., blood pressure or other assessment recorded by personnel conducting the assessment)* ☐ *Data elements are generated from a patient survey (e.g., CAHPS)* ☒ *Data elements are generated through coding performed by someone other than the person who obtained the original information (e.g., DRG or ICD-9 coding on claims)* ☒ *Other, Please describe: Data obtained through electronic personal health records and telephonic, nurse-driven disease management programs*
36 (4b)	***Electronic Sources*** *All data elements* ►***If all data elements are not in electronic sources, specify the near-term path to electronic collection by most providers:*** ►***Specify the data elements for the electronic health record:***
37 (4c)	***Do the specified exclusions require additional data sources beyond what is required for the other specifications?*** *No* ►***If yes, provide justification:***
38 (4d)	***Identify susceptibility to inaccuracies, errors, or unintended consequences of the measure:*** *Generally, the use of claims data has inherent errors and inaccuracies related to incorrect coding, or missing data, which can result in less specificity in the definition of denominator and /or the numerator. To minimize these errors and inaccuracies, we use clinically enriched data (laboratory results, medication lists) to augment the claims data. In addition where possible, to corroborate the claims data, we solicit feedback from both providers via a feedback form and patients from a personal health record or from a disease management program.* *We do not anticipate significant unintended consequences from the implementation of the measure. Our measures are all developed from evidence-based literature or from clinical guidelines and are designed to encourage appropriate care of the patient.* ***Describe how could these potential problems be audited:*** *The inclusion of patient-derived data from a personal health record or through a disease management program may be used to confirm the presence*

	or absence of a medication; ultimately the data sources may be tested against a sample of medical charts. ***Did you audit for these potential problems during testing?*** *No* ***If yes, provide results:***
39 (4e)	***Testing feasibility*** *Describe what have you learned/modified as a result of testing and/or operational use of the measure regarding data collection, availability of data/missing data, timing/frequency of data collection, patient confidentiality, time/cost of data collection, other feasibility/ implementation issues:* *Multiple sources of corroborating clinical data are necessary to correctly identify patients in the denominator. Earlier testing efforts using specifications similar to HEDIS were more sensitive yet nonspecific. The addition of supporting information for certain diagnostic conditions (e.g., diabetic medications and supplies in addition to ICD9 codes for diabetes) significantly decreased the number identified in the denominator, yet the analysis led to a much higher compliance rate, likely because of the exclusion of fewer false positives in the denominator.*
	CONTACT INFORMATION
40	***Web Page URL for Measure Information*** *Describe where users (implementers) should go for more details on specifications of measures, or assistance in implementing the measure.* ***Web page URL:*** *www.activehealth.net*
41	**Measure Intellectual Property Agreement Owner Point of Contact** **First Name:** Madhavi **MI:** **Last Name:** Vemireddy **Credentials (MD, MPH, etc.):** MD **Organization:** ActiveHealth Management **Street Address:** 102 Madison Avenue **City:** New York **State:** NY **ZIP:** 10016 **Email:** mvemireddy@activehealth.net **Telephone:** 212-651-8200 ext:
42	**Measure Submission Point of Contact** **If different than IP Owner Contact** **First Name:** **MI:** **Last Name:** **Credentials (MD, MPH, etc.):** **Organization:** **Street Address:** **City:** **State:** **ZIP:** **Email:** **Telephone:** ext:
43	**Measure Developer Point of Contact** **If different than IP Owner Contact** **First Name:** **MI:** **Last Name:** **Credentials (MD, MPH, etc.):** **Organization:** **Street Address:** **City:** **State:** **ZIP:** **Email:** **Telephone:** ext:
44	**Measure Steward Point of Contact** **If different than IP Owner Contact** *Identifies the organization that will take responsibility for updating the measure and assuring it is consistent with the scientific evidence and current coding schema; the steward of the measure may be different than the developer.* **First Name:** **MI:** **Last Name:** **Credentials (MD, MPH, etc.):** **Organization:** **Street Address:** **City:** **State:** **ZIP:** **Email:** **Telephone:** ext
	ADDITIONAL INFORMATION
45	**Workgroup/Expert Panel involved in measure development** No workgroup or panel used ►If workgroup used, describe the members' role in measure development: ►Provide a list of workgroup/panel members' names and organizations:
46	***Measure Developer/Steward Updates and Ongoing Maintenance*** *Year the measure was first released: 2000* *Month and Year of most recent revision: 4/2009* *What is the frequency for review/update of this measure? Biennially* *When is the next scheduled review/update for this measure? 2011*
47	**Copyright statement/disclaimers:** This information, including any attachments hereto, is the sole,

	exclusive, proprietary and confidential property of Active Health Management, Inc., and is for the exclusive use of The National Quality Forum. Any use, copying, disclosure, dissemination or distribution by anyone other than the National Quality Forum is strictly prohibited.
48	**Additional Information:**
49	**I have checked that the submission is complete and any blank fields indicate that no information is provided.** ☒
50	**Date of Submission** (*MM/DD/YY*)**:** 2/9/09

PATIENT & FAMILY ENGAGEMENT

PRIORITY STATEMENT: Engage Patients and Their Families in Managing Their Health and Making Decisions About Their Care

1.1. All providers will routinely solicit and publicly report on their patients' perspectives of care

1.2. All providers will work collaboratively with their patients to assist them in making informed decisions about treatment options consistent with their values and preferences

POPULATION HEALTH

PRIORITY STATEMENT: IMPROVE THE HEALTH OF THE U.S. POPULATION

2.1. The population will be up to date on all high-priority age- and gender-appropriate evidence-based clinical preventive services

2.2. The population will receive recommended evidence-based interventions to improve targeted healthy lifestyle behaviors

2.3. All communities will demonstrate a 10% improvement in their community index of health

2.4. Americans will have all recommended high priority healthy lifestyle behaviors under control

SAFETY

PRIORITY STATEMENT: IMPROVE THE SAFETY OF THE U.S. HEALTH CARE SYSTEM

3.1. All providers will drive all preventable healthcare-associated infections (HAI) to zero

3.2. All providers will drive the incidence of preventable NQF Serious Reportable Events (SRE) to zero

3.3. All hospitals will reduce preventable and premature mortality rates to best-in-class

3.4. All hospitals and their community partners will reduce 30-day mortality rates following hospitalization for select conditions to best-in-class

PALLIATIVE CARE

PRIORITY STATEMENT: GUARANTEE APPROPRIATE AND COMPASSIONATE CARE FOR PATIENTS WITH LIFE-LIMITING ILLNESSES

4.1. All providers will identify, document, and effectively treat physical symptoms (e.g. pain, shortness of breath, constipation, others) at levels acceptable to patients with a life-limiting illness

4.2. All providers will effectively address the psychosocial and spiritual needs of patients with life-limiting illnesses and their families according to their preferences

4.3. All eligible patients will receive high quality palliative care and hospice services

CARE COORDINATION

PRIORITY STATEMENT: ENSURE PATIENTS RECEIVE WELL-COORDINATED CARE ACROSS ALL PROVIDERS, SETTINGS, AND LEVELS OF CARE

5.1. All providers will accurately and completely reconcile medications across the continuum of care (i.e. admission, transfer within and between care providers, discharge, and outpatient appointments) and ensure communication with the next provider of services

5.2. All inpatient and outpatient providers will assess the patient's perspective of the coordination of their care using a validated care coordination survey tool

5.3. All providers will reduce 30-day all-cause readmission rates resulting from poorly coordinated care to best-in-class

5.4. All providers will reduce preventable emergency department (i.e. those that could be avoided with timely access to primary care) visits resulting from poorly coordinated care by 50%

PATIENT-FOCUSED CARE

PRIORITY STATEMENT: GUARANTEE HIGH VALUE CARE ACROSS ACUTE AND CHRONIC EPISODES

6.1. All patients will receive high-value care over the course of their acute or chronic illness

OVERUSE

PRIORITY STATEMENT: ELIMINATE WASTE WHILE ENSURING THE DELIVERY OF APPROPRIATE CARE

7.1. Reduce wasteful and inappropriate care for the top ten targeted areas by 50%

PERFORMANCE MEASURE RULE:
Steroid Use - Osteoporosis Screening

DENOMINATOR:

All of the following are correct:

1. If patient age ≥ 18

2. One of the following is correct:

    a. Presence of STEROIDS >/ 5MG PREDNISONE 180 total days supply in the past 9 months
    b. Presence of patient data confirming at least 1 PDD- STEROID USE (6 MTHS OR MORE) in the past 6 months

DENOMINATOR EXCLUSIONS

One of the following is correct:

1. Presence of at least 2 CORTICOADRENAL INSUFFICIENCY diagnosis in the past 3 years
2. All of the following are correct:
    a. Gender is female
    b. Pregnancy Exclusion Validation Rule is confirmed for the member (see below)

NUMERATOR:

All of the following are correct:

1. Denominator is true

2. Osteoporosis Screening Anytime Validation is confirmed for the member (see below)

Pregnancy Exclusion Validation

One of the following is correct:

1. Presence of at least 1 HCG (LOINC) Labs Result Value >100 in the past 6 months
2. Presence of patient data confirming at least 1 PDD- PREGNANCY in the past 6 months
3. Presence of at least 1 PREGNANCY diagnosis in the past 6 months
4. Presence of at least 1 PREGNANCY RELATED PROCEDURE in the past 6 months

Exclusion - If one of the following is correct:

1. Presence of at least 1 DELIVERY AND ABORTION (ICD9) diagnosis in the past 3 months
2. Presence of at least 1 HYSTERECTOMY procedure in the past 3 months
3. Presence of at least 1 DELIVERY AND ABORTION (CPT) procedure in the past 3 months
4. Presence of at least 1 refill UTEROTONICS in the past 3 months
5. Presence of at least 1 NONVIABLE PREGNANCY diagnosis in the past 3 months

---

Osteoporosis Screening Anytime Validation

One of the following is correct:

1. Presence of at least 1 BONE MINERAL DENSITY STUDIES procedure in the past anytime
2. Presence of at least 1 BONE IMAGING-WHOLE BODY procedure in the past anytime
3. Presence of at least 1 refill OSTEOPOROSIS THERAPY in the past anytime
4. Presence of patient data confirming at least 1 PDD- OSTEOPOROSIS TREATMENT in the past anytime
5. Presence of patient data confirming at least 1 PDD- OSTEOPOROSIS in the past anytime
6. Presence of patient data confirming PDD- BONE DENSITY TEST in the past anytime
7. Presence of at least 1 OSTEOPOROSIS diagnosis in the past anytime
8. Presence of patient data confirming at least 1 refill OSTEOPOROSIS THERAPY drug in the past anytime
9. Presence of at least 1 ZOLEDRONIC ACID- RECLAST(CPT) procedure in the past anytime
10. Presence of at least 1 TERIPARATIDE (HCPCS) procedure in the past anytime

Note: A 3 month time window has been added to certain timeframes to account for the inherent delay in the acquisition of administrative claims data.

Note: A current refill is defined as a refill in which the day supply of a drug extends into the end of the measurement window plus a grace period of 30 days.

.

THE NATIONAL QUALITY FORUM

MEASURE SUBMISSION FORM VERSION 3.0
August 2008

The measure information you submit will be shared with NQF's Steering Committees and Technical Advisory Panels to evaluate measures against the NQF criteria of importance to measure and report, scientific acceptability of measure properties, usability, and feasibility. Four conditions (as indicated below) must be met before proposed measures may be considered and evaluated for suitability as voluntary consensus standards. Not all acceptable measures will be strong—or equally strong—among each set of criteria. The assessment of each criterion is a matter of degree; however, all measures must be judged to have met the first criterion, importance to measure and report, in order to be evaluated against the remaining criteria. References to the specific measure evaluation criteria are provided in parentheses following the item numbers. Please refer to the *Measure Evaluation Criteria* for more information at ***www.qualityforum.org*** under Core Documents. Additional guidance is being developed and when available will be posted on the NQF website.

Use the tab or arrow (↓→) keys to move the cursor to the next field (or back ←↑). There are three types of response fields:

- drop-down menus - select one response;
- check boxes – check as many as apply; and
- text fields – you can copy and paste text into these fields or enter text; these fields are not limited in size, but in most cases, we ask that you summarize the requested information.

Please note that URL hyperlinks do not work in the form; you will need to type them into your web browser.

Be sure to answer all questions. Fields that are left blank will be interpreted as no or none. Information must be provided in this form. Attachments are not allowed except when specifically requested or to provide additional detail or source documents for information that is summarized in this form. If you have important information that is not addressed by the questions, they can be entered into item #48 near the end of the form.

For questions about this form, please contact the NQF Project Director listed in the corresponding call for measures.

	CONDITIONS FOR CONSIDERATION BY NQF
	Four conditions must be met before proposed measures may be considered and evaluated for suitability as voluntary consensus standards.
A (A)	***Public domain or Intellectual Property Agreement signed:*** *IP Agreement signed and submitted (If no, do not submit)* *Template for the Intellectual Property Agreement is available at* ***www.qualityforum.org*** *under Core Documents.*
B (B)	***Measure steward/maintenance:*** *Is there an identified responsible entity and process to maintain and update the measure on a schedule commensurate with clinical innovation, but at least every 3 years? Yes, information provided in contact section (If no, do not submit)*
C (C)	***Intended use:*** *Does the intended use of the measure include BOTH public reporting AND quality improvement? Yes (If no, do not submit)*
D ***(D)***	***Fully developed and tested:*** *Is the measure fully developed AND tested? Yes, fully developed and tested (If not tested and no plans for testing within 24 months, do not submit)*

THE NATIONAL QUALITY FORUM

MEASURE SUBMISSION FORM VERSION 3.0
August 2008

	(for NQF staff use) ***NQF Review #:*** *EC-281-08* ***NQF Project:*** *National Voluntary Consensus Standards for Ambulatory Care Using Clinically Enriched Administrative Data*
	MEASURE SPECIFICATIONS & DESCRIPTIVE INFORMATION
1	***Information current as of*** *(date- MM/DD/YY):* *06/25/09*
2	***Title of Measure:*** *Osteopenia and Chronic Steroid Use - Treatment to Prevent Osteoporosis*
3	**Brief description of measure [1]:** Percentage of patients, who are female and 55 years and older or male and 50 years and older, who have a diagnosis of osteopenia, are on long-term steroids (> 6 months) and who are on osteoporosis therapy.
4 (2a)	**Numerator Statement:** The number of patients who are on osteoporosis therapy. **Time Window:** 12 months **Numerator Details** (Definitions, codes with description): See attached
5 (2a)	**Denominator Statement:** All patients, who are female and 55 years and older or male and 50 years and older, who have a diagnosis of osteopenia and are on long-term steroids. **Time Window:** 12 months **Denominator Details** (Definitions, codes with description): See attached
6 (2a, 2d)	**Denominator Exclusions:** Specific Exclusions • Patients who have osteoporosis General exclusions: • Evidence of metastatic disease or active treatment of malignancy (chemotherapy or radiation therapy) in the last 6 months; • Patients who have been in a skilled nursing facility in the last 3 months • Patient or provider feedback indicating allergy or intolerance to the drug in the past • Patient or provider feedback indicating that there is a contraindication to adding the drug **Denominator Exclusion Details** (Definitions, codes with description): See attached
7 (2a, 2h)	**Stratification** Do the measure specifications require the results to be stratified? No ► If "other" describe: **Identification of stratification variable(s):** **Stratification Details** (Definitions, codes with description):
8 (2a, 2e)	**Risk Adjustment** Does the measure require risk adjustment to account for differences in patient severity before the onset of care? No ► **If yes,** (select one) ► Is there a separate proprietary owner of the risk model? (select one) **Identify Risk Adjustment Variables:** **Detailed risk model:** attached ☐ **OR** Web page URL:

[1] Example of measure description: Percentage of adult patients with diabetes aged 18-75 years receiving one or more A1c test(s) per year.

9 **Type of Score:** Rate/proportion **Calculation Algorithm:** attached ☒ **OR** Web page URL:

(2a) **Interpretation of Score** (*Classifies interpretation of score according to whether better quality is associated with a higher score, a lower score, a score falling within a defined interval, or a passing score*)
Better quality = Higher score ► If "Other", please describe:

10 **Identify the required data elements**(e.g., primary diagnosis, lab values, vital signs)**:** ICD9, CPT, pharmacy claims

(2a. 4a, 4b) **Data dictionary/code table** attached ☒ **OR** Web page URL:
Data Quality (2a) *Check all that apply*
☒ Data are captured from an authoritative/accurate source (e.g., lab values from laboratory personnel)
☒ Data are coded using recognized data standards
☒ Method of capturing data electronically fits the workflow of the authoritative source
☒ Data are available in EHRs
☐ Data are auditable

11 **Data Source and Data Collection Methods** *Identifies the data source(s) necessary to implement the measure specifications. Check all that apply*

(2a, 4b)
☒ Electronic Health/Medical Record
☐ Electronic Clinical Database, Name:
☐ Electronic Clinical Registry, Name:
☒ Electronic Claims
☒ Electronic Pharmacy data
☐ Electronic Lab data
☒ Electronic source – other, Describe: Personal Health Record
☐ Paper Medical Record
☐ Standardized clinical instrument, Name:
☐ Standardized patient survey, Name:
☐ Standardized clinician survey, Name:
☒ Other, Describe: Telephonic data collection from nurse-delivered disease management program

Instrument/survey attached ☐ **OR** Web page URL:

12 **Sampling** *If measure is based on a sample, provide instructions and guidance on sample size.*
Minimum sample size:

(2a)
Instructions:

13 **Type of Measure:** Process ► If "Other", please describe:

(2a) ► If part of a composite or paired with another measure, please identify composite or paired measure

14 **Unit of Measurement/Analysis** (*Who or what is being measured*) *Check all that apply.*

(2a)
☐ Can be measured at all levels
☒ Individual clinician (e.g., physician, nurse)
☒ Group of clinicians (e.g., facility department/unit, group practice)
☒ Facility (e.g., hospital, nursing home)
☐ Integrated delivery system
☒ Health plan
☒ Community/Population
☐ Other (*Please describe*):

15 **Applicable Care Settings** *Check all that apply*

(2a)
☐ Can be used in all healthcare settings
☒ Ambulatory Care (office/clinic)
☐ Behavioral Healthcare
☒ Community Healthcare
☐ Dialysis Facility
☐ Emergency Department
☐ EMS emergency medical services
☒ Health Plan
☐ Home Health
☐ Hospice
☐ Hospital
☐ Long term acute care hospital
☒ Nursing home/ Skilled Nursing Facility (SNF)
☐ Prescription Drug Plan
☐ Rehabilitation Facility
☐ Substance Use Treatment Program/Center
☐ Other (*Please describe*):

IMPORTANCE TO MEASURE AND REPORT

Note: This is a threshold criterion. If a measure is not judged to be sufficiently important to measure and report, it will not be evaluated against the remaining criteria.

16 **Addresses a Specific National Priority Partners Goal** *Enter the numbers of the specific goals related*

(1a)	*to this measure (see list of goals on last page)*: 2.1, 2.2, 6.1
17 (1a)	**If not related to NPP goal, identify high impact aspect of healthcare** (select one) **Summary of Evidence:** **Citations[2] for Evidence:**
18 (1b)	**Opportunity for Improvement** *Provide evidence that demonstrates considerable variation, or overall poor performance, across providers.* **Summary of Evidence:** There is evidence that confirms that patients are not receiving the approproate screening for osteporosis nor appropriate treatment if they have osteoporosis. In one study (Lafata, 2007) found that osteoporosis screening rates were 10.8% in usual care, 24.1% in mailed reminder, and 28.9% in mailed reminder with physician prompt." In addition they found that treatment rates in all three groups were very low 5.2% in usual care, 8.4% in mailed reminders, and 9.1% in mailed reminders with prompt. In another study (Solomon, 2004) they demonstrated that there was wide variabiltiy in the implementation of guidelines across patients, physicians and practice sites in patients are risk. the study found that in patients at risk for fragility fracture that between 17% to 71% of patients had either the appropriate testing or osteoporosis medications. **Citations for Evidence:** Lafata JE, Kolk D, Peterson EL, McCarthy BD, Weiss TW, Chen Y, Muma BK. Improving Osteoporosis Screening: Results from a Randomized Cluster Trial. General Internal Medicine 2007;22:346–351. Solomon DH, Brookhart MA, Gandhi TK, Karson A, Gharib S, Orav EJ, Shaykevich S, Licari A, Cabral D, Bates DW. Adherence with osteoporosis practice guidelines: a multilevel analysis of patient, physician, and practice setting characteristics. Am J Med. 2004 Dec 15;117(12):919-24.
19 (1b)	**Disparities** *Provide evidence that demonstrates disparity in care/outcomes related to the measure focus among populations.* **Summary of Evidence:** Osteoporosis often goes undiagnosed and untreated in black patients with fragility fractures. Fragility fractures, as a result of low-impact falls that would ordinarily not fracture healthy bones, are the hallmark of osteoporosis. Fragility fracture affect all U.S. racial and ethnic groups, but blacks suffer more complications and deaths from these fractures than whites. This may be because the diagnosis of osteoporosis is often missed as the underlying cause of fragility fractures among black patients, according to a recent study which was supported in part by the AHRQ. Researchers found that for 91 percent of black patients with low-impact fragility fractures, osteoporosis was not recognized, diagnosed, or treated before or after hospitalization. **Citations for evidence:** Agency for Healthcare Research and Quality (AHRQ). http://www.ahrq.gov/RESEARCH/apr05/0405RA19.htm (accessed online 10-20-08)
20 (1c)	**If measuring an Outcome** Describe relevance to the national health goal/priority, condition, population, and/or care being addressed: **If not measuring an outcome, provide evidence supporting this measure topic and grade the strength of the evidence** *Summarize the evidence (including citations to source) supporting the focus of the measure as follows:* • Intermediate outcome – evidence that the measured intermediate outcome (e.g., blood pressure, Hba1c) leads to improved health/avoidance of harm or cost/benefit. • Process – evidence that the measured clinical or administrative process leads to improved health/avoidance of harm and if the measure focus is on one step in a multi-step care process, it measures the step that has the greatest effect on improving the specified desired outcome(s). • Structure – evidence that the measured structure supports the consistent delivery of effective processes or access that lead to improved health/avoidance of harm or cost/benefit. • Patient experience – evidence that an association exists between the measure of patient experience of

[2] Citations can include, but are not limited to journal articles, reports, web pages (URLs).

health care and the outcomes, values and preferences of individuals/ the public.

- Access – evidence that an association exists between access to a health service and the outcomes of, or experience with, care.
- Efficiency– demonstration of an association between the measured resource use and level of performance with respect to one or more of the other five IOM aims of quality.

Type of Evidence *Check all that apply*

☒ Evidence-based guideline	☐ Quantitative research studies
☐ Meta-analysis	☐ Qualitative research studies
☐ Systematic synthesis of research	☐ Other (*Please describe*):

Overall Grade for Strength of the Evidence[3] (*Use the USPSTF system, or if different, also describe how it relates to the USPSTF system)*: Similar to the USPSTF system, the ACP rates its evidence and recommendations base on the Grading of Recommendations, Assessment, Development, and Evaluation (GRADE) system.

Summary of Evidence (*provide guideline information below*): The American College of Physicians (ACP, 2008) recently issued updated recommendations for the use of pharmacological therapy in patient with and abnormal T scores. Their recommendations state in part that clinicians consider pharmacologic treatment for men and women who are at risk for developing osteoporosis (Grade: weak recommendation; moderate-quality evidence).

Evidence supports the treatment of selected patients who are at risk for osteoporosis but who do not have a T-score on DXA less than -2.5. Evidence supporting preventive treatment is stronger for patients who are at moderate risk for osteoporosis, which includes patients who have a T-score from -1.5 to -2.5, are receiving glucocorticoids, or are older than 62 years of age.

Factors that increase the risk for osteoporosis in men include age (>70 years), low body weight (body mass index <20 to 25 kg/m2), weight loss (>10% [compared with the usual young or adult weight or weight loss in recent years]), physical inactivity (no physical activities performed regularly, such as walking, climbing stairs, carrying weights, housework, or gardening), corticosteroid use, and androgen deprivation therapy (4). Risk factors for women include lower body weight, the single best predictor of low bone mineral density; smoking; weight loss; family history; decreased physica l activity; alcohol or caffeine use; and low calcium and vitamin D intake. In certain circumstances, a single risk factor (for example, androgen deprivation therapy in men) is enough for clinicians to consider pharmacologic treatment.

Special Populations:
Populations with Long-Term Glucocorticoid Use
Evidence from 3 studies included in a systematic review showed a possible reduction in vertebral fracture rate with bisphosphonate treatment. Six additional trials have been published since this systematic review. Three of these randomized trials showed that bisphosphonates reduced the fracture rate. Results from 2 studies also showed that risedronate treatment led to a statistically significant reduction in the absolute risk (11%) and RR (70%) of incident radiographic vertebral fractures after 1 year and in vertebral fractures. In another trial, alendronate was associated with a reduction in the risk for incident radiographic vertebral fractures. However, 3 additional trials showed no significant effect on fracture risk for etidronate , from calcium, between calcium and a combination of etidronate and calcium, or between calcium and pamidronate.

To summarize the overall fracture reduction benefits of drug treatments in special populations in different

[3]The strength of the body of evidence for the specific measure focus should be systematically assessed and rated, e.g., USPSTF grading system **www.ahrq.gov/clinic/uspstmeth.htm**: **A -** The USPSTF recommends the service. There is high certainty that the net benefit is substantial. **B -** The USPSTF recommends the service. There is high certainty that the net benefit is moderate or there is moderate certainty that the net benefit is moderate to substantial. **C -** The USPSTF recommends against routinely providing the service. There may be considerations that support providing the service in an individual patient. There is at least moderate certainty that the net benefit is small. Offer or provide this service only if other considerations support the offering or providing the service in an individual patient. **D -** The USPSTF recommends against the service. There is moderate or high certainty that the service has no net benefit or that the harms outweigh the benefits. **I -** The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of the service. Evidence is lacking, of poor quality, or conflicting, and the balance of benefits and harms cannot be determined.

	risk groups, a SERM (raloxifene) and vitamin D both reduced the risk for vertebral fracture in low-risk patients. Far fewer men than women have been included in these trials, resulting in less evidence about the effectiveness of treatment in men. In men, risedronate decreased hip fractures and calcitonin decreased vertebral fractures. Teriparatide decreased total fractures and possibly vertebral fractures. In patients with a previous hip fracture, zoledronic acid reduced the risk for vertebral and nonvertebral fractures. Risedronate reduced the hip and nonvertebral fracture risk among patients with Alzheimer disease. Bisphosphonates (risedronate and alendronate) also reduced the clinical and radiographic fracture rate in patients receiving glucocorticoids." In addition, the American College of Rheumatology (2001) published recommendations for the prevention and treatment of glucocorticoid-induced osteoporosis. Specifically they recommend that patients with an abnormal bone mineral density test should start therapy for osteoporosis. **Citations for Evidence:** Qaseem A, Snow V, Shekelle P, Hopkins R Jr, Forciea MA, Owens DK; Clinical Efficacy Assessment Subcommittee of the American College of Physicians. Pharmacologic Treatment of Low Bone Density or Osteoporosis to Prevent Fractures: A Clinical Practice Guideline from the American College of Physicians Ann Intern Med. 2008;149:404-415. ACR 2001 Arthritis Rheum. Recommendations for the Prevention and Treatment of Glucocorticoid-Induced Osteoporosis, ACR 2001 Update. 2001;44:1496-1503.
21 (1c)	**Clinical Practice Guideline** *Cite the guideline reference; quote the specific guideline recommendation related to the measure and the guideline author's assessment of the strength of the evidence; and summarize the rationale for using this guideline over others.* **Guideline Citation:** Qaseem A, Snow V, Shekelle P, Hopkins R Jr, Forciea MA, Owens DK; Clinical Efficacy Assessment Subcommittee of the American College of Physicians. Pharmacologic Treatment of Low Bone Density or Osteoporosis to Prevent Fractures: A Clinical Practice Guideline from the American College of Physicians. Ann Intern Med. 2008;149:404-415. **Specific guideline recommendation:** Recommendation 2: ACP recommends that clinicians consider pharmacologic treatment for men and women who are at risk for developing osteoporosis (Grade: weak recommendation; moderate-quality evidence). **Guideline author's rating of strength of evidence** (*If different from USPSTF, also describe it and how it relates to USPSTF)*: Similar to the USPSTF system, the ACP rates its evidence and recommendations base on the Grading of Recommendations, Assessment, Development, and Evaluation (GRADE) system. **Rationale for using this guideline over others:** This is the most recent guideline that talks to this subject.
22 (1c)	**Controversy/Contradictory Evidence** *Summarize any areas of controversy, contradictory evidence, or contradictory guidelines and provide citations.* **Summary:** **Citations:**
23 (1)	**Briefly describe how this measure (as specified) will facilitate significant gains in healthcare quality related to the specific priority goals and quality problems identified above:** Osteoporosis represents a major public health problem. It significantly increases the risk for osteoporosis-related fractures, which create a heavy economic burden. Osteoporosis-related fractures cause more than 432,000 hospital admissions, almost 2.5 million medical office visits and about 180,000 nursing home admissions annually in the US with a cost to the healthcare system at $17 billion for 2005; Due to the aging population, the Surgeon General estimates that the number of hip fractures and their associated costs could double or triple by the year 2040.

	Key to minimizing the clinical and economic impact of osteoporosis is identification of risk factors, early diagnosis, and the use of effective therapy. In general, the more risk factors that are present, the greater the risk of fracture.
	SCIENTIFIC ACCEPTABILITY OF MEASURE PROPERTIES
	Note: Testing and results should be summarized in this form. However, additional detail and reports may be submitted as supplemental information or provided as a web page URL. If a measure has not been tested, it is only potentially eligible for time-limited endorsement.
24	**Supplemental Testing Information:** attached ☐ **OR** Web page URL:
25 (2b)	**Reliability Testing** **Data/sample:** **Analytic Method:** **Testing Results:**
26 (2c)	**Validity Testing** **Data/sample:** **Analytic Method:** **Testing Results:**
27 (2d)	**Measure Exclusions** *Provide evidence to justify exclusion(s) and analysis of impact on measure results during testing.* **Summary of Evidence supporting exclusion(s):** **Citations for Evidence:** **Data/sample:** **Analytic Method:** **Testing Results:**
28 (2e)	**Risk Adjustment Testing** *Summarize the testing used to determine the need (or no need) for risk adjustment and the statistical performance of the risk adjustment method.* **Data/sample:** **Analytic Method:** **Testing Results:** ►**If outcome or resource use measure not risk adjusted, provide rationale:**
29 (2g)	**Testing comparability of results when more than 1 data method is specified** (*e.g., administrative claims or chart abstraction*) **Data/sample:** **Analytic Method:** **Results:**
30 (2f)	**Provide Measure Results from Testing or Current Use** Results from testing **Data/sample:** We measured a commercial population of 459,196 members.

	Methods to identify statistically significant and practically/meaningfully differences in performance: Compliance to the performance measure is measured using an analysis of the claims data; in this case looking for evidence of osteoporosis prevention treatment. In addition, where appropriate we analyze patient data collected either from the patient's PHR or during a disease management program. **Results:** We found that of the 7 members who satisfied the denominator, 5 were in the numerator, indicating a compliance rate of 71%.
31 (2h)	**Identification of Disparities** ►If measure is stratified by factors related to disparities (i.e. race/ethnicity, primary language, gender, SES, health literacy), **provide stratified results:** ►If disparities have been reported/identified, but measure is not specified to detect disparities, provide rationale:
	USABILITY
32 (3)	***Current Use*** *Testing completed* ***If in use, how widely used*** *Health plan or sytem* ► *If "other," please describe:* ☐ *Used in a public reporting initiative, name of initiative:* *Sample report attached* ☒ ***OR*** *Web page URL:*
33 (3a)	**Testing of Interpretability** (*Testing that demonstrates the results are understood by the potential users for public reporting and quality improvement*) **Data/sample:** Administrative claims database from health plans; pharmacy data; lab results data **Methods:** The performance measure is similar in message to a clinical alert that has been operational since 2005. Compliance to the clinical alert is measured using an analysis of subsequent claims, in this instance evidence of osteoporosis therapy. In addition, a feedback tool accompanies every clinical alert message, and includes options indicating agreement or disagreement with the message. **Results:** In practice, fewer than 1% of the respondents disagreed with the medical literature. Since this alert depends on patient feedback, only a small number of alerts were sent.
34 (3b, 3c)	**Relation to other NQF-endorsed™ measures** ►Is this measure similar or related to measure(s) already endorsed by NQF (on the same topic or the same target population)? *Measures can be found at* ***www.qualityforum.org*** *under Core Documents.* *Check all that apply* ☐ Have not looked at other NQF measures ☐ Other measure(s) on same topic ☐ Other measure(s) for same target population ☒ No similar or related measures **Name of similar or related NQF-endorsed™ measure(s):** **Are the measure specifications harmonized with existing NQF-endorsed™ measures?** (select one) ►If not fully harmonized, provide rationale: **Describe the distinctive, improved, or additive value this measure provides to existing NQF-endorsed measures:**
	FEASIBILITY
35 (4a)	***How are the required data elements generated?*** *Check all that apply* ☐ *Data elements are generated concurrent with and as a byproduct of care processes during care delivery (e.g., blood pressure or other assessment recorded by personnel conducting the assessment)* ☐ *Data elements are generated from a patient survey (e.g., CAHPS)* ☒ *Data elements are generated through coding performed by someone other than the person who obtained the original information (e.g., DRG or ICD-9 coding on claims)*

	☒ *Other, Please describe: Data obtained through electronic personal health records and telephonic, nurse-driven disease management programs.*
36 (4b)	***Electronic Sources*** *All data elements* ►***If all data elements are not in electronic sources, specify the near-term path to electronic collection by most providers:*** ►***Specify the data elements for the electronic health record:*** *ICD9, CPT, NDC and LOINC codes*
37 (4c)	***Do the specified exclusions require additional data sources beyond what is required for the other specifications?*** *No* ►***If yes, provide justification:***
38 (4d)	***Identify susceptibility to inaccuracies, errors, or unintended consequences of the measure:*** *Generally, the use of claims data has inherent errors and inaccuracies related to incorrect coding, or missing data, which can result in less specificity in the definition of denominator and /or the numerator. To minimize these errors and inaccuracies, we use clinically enriched data (laboratory results, medication lists) to augment the claims data. In addition where possible, to corroborate the claims data, we solicit feedback from both providers via a feedback form and patients from a personal health record or from a disease management program.* *We do not anticipate significant unintended consequences from the implementation of the measure. Our measures are all developed from evidence-based literature or from clinical guidelines and are designed to encourage appropriate care of the patient.* ***Describe how could these potential problems be audited:*** *The inclusion of patient-derived data from a personal health record or through a disease management program may be used to confirm the presence or absence of a medication; ultimately the data sources may be tested against a sample of medical charts.* ***Did you audit for these potential problems during testing?*** *No* ***If yes, provide results:***
39 (4e)	***Testing feasibility*** *Describe what have you learned/modified as a result of testing and/or operational use of the measure regarding data collection, availability of data/missing data, timing/frequency of data collection, patient confidentiality, time/cost of data collection, other feasibility/ implementation issues:* *Multiple sources of corroborating clinical data are necessary to correctly identify patients in the denominator. Earlier testing efforts using specifications similar to HEDIS were more sensitive yet nonspecific. The addition of supporting information for certain diagnostic conditions (e.g., diabetic medications and supplies in addition to ICD-9 codes for diabetes) significantly decreased the number identified in the denominator, yet the analysis led to a much higher compliance rate, likely because of the exclusion of fewer false positives in the denominator.*
	CONTACT INFORMATION
40	***Web Page URL for Measure Information*** *Describe where users (implementers) should go for more details on specifications of measures, or assistance in implementing the measure.* ***Web page URL:*** *www.activehealth.net*
41	**Measure Intellectual Property Agreement Owner Point of Contact** **First Name:** Greg **MI:** **Last Name:** Steinberg **Credentials (MD, MPH, etc.):** MD **Organization:** ActiveHealth Management **Street Address:** 102 Madison Avenue **City:** New York **State:** NY **ZIP:** 10016 **Email:** gsteinberg@activehealth.net **Telephone:** 212-651-8200 ext:
42	**Measure Submission Point of Contact** **If different than IP Owner Contact** **First Name:** **MI:** **Last Name:** **Credentials (MD, MPH, etc.):** **Organization:** **Street Address:** **City:** **State:** **ZIP:** **Email:** **Telephone:** ext:

43	**Measure Developer Point of Contact** If different than IP Owner Contact **First Name:** **MI:** **Last Name:** **Credentials (MD, MPH, etc.):** **Organization:** **Street Address:** **City:** **State:** **ZIP:** **Email:** **Telephone:** ext:
44	**Measure Steward Point of Contact** If different than IP Owner Contact *Identifies the organization that will take responsibility for updating the measure and assuring it is consistent with the scientific evidence and current coding schema; the steward of the measure may be different than the developer.* **First Name:** **MI:** **Last Name:** **Credentials (MD, MPH, etc.):** **Organization:** **Street Address:** **City:** **State:** **ZIP:** **Email:** **Telephone:** ext
	ADDITIONAL INFORMATION
45	**Workgroup/Expert Panel involved in measure development** No workgroup or panel used ►If workgroup used, describe the members' role in measure development: ►Provide a list of workgroup/panel members' names and organizations:
46	***Measure Developer/Steward Updates and Ongoing Maintenance*** *Year the measure was first released: 2005* *Month and Year of most recent revision: 6/08* *What is the frequency for review/update of this measure? Biennially* *When is the next scheduled review/update for this measure? 2010*
47	**Copyright statement/disclaimers:** This information, including any attachments hereto, is the sole, exclusive, proprietary and confidential property of Active Health Management, Inc., and is for the exclusive use of The National Quality Forum. Any use, copying, disclosure, dissemination or distribution by anyone other than the National Quality Forum is strictly prohibited.
48	**Additional Information:**
49	**I have checked that the submission is complete and any blank fields indicate that no information is provided.** ☒
50	**Date of Submission** (*MM/DD/YY*)**:** 02/09/09

PATIENT & FAMILY ENGAGEMENT

PRIORITY STATEMENT: Engage Patients and Their Families in Managing Their Health and Making Decisions About Their Care

1.1. All providers will routinely solicit and publicly report on their patients' perspectives of care

1.2. All providers will work collaboratively with their patients to assist them in making informed decisions about treatment options consistent with their values and preferences

POPULATION HEALTH

PRIORITY STATEMENT: IMPROVE THE HEALTH OF THE U.S. POPULATION

2.1. The population will be up to date on all high-priority age- and gender-appropriate evidence-based clinical preventive services

2.2. The population will receive recommended evidence-based interventions to improve targeted healthy lifestyle behaviors

2.3. All communities will demonstrate a 10% improvement in their community index of health

2.4. Americans will have all recommended high priority healthy lifestyle behaviors under control

SAFETY

PRIORITY STATEMENT: IMPROVE THE SAFETY OF THE U.S. HEALTH CARE SYSTEM

3.1. All providers will drive all preventable healthcare-associated infections (HAI) to zero

3.2. All providers will drive the incidence of preventable NQF Serious Reportable Events (SRE) to zero

3.3. All hospitals will reduce preventable and premature mortality rates to best-in-class

3.4. All hospitals and their community partners will reduce 30-day mortality rates following hospitalization for select conditions to best-in-class

PALLIATIVE CARE

PRIORITY STATEMENT: GUARANTEE APPROPRIATE AND COMPASSIONATE CARE FOR PATIENTS WITH LIFE-LIMITING ILLNESSES

4.1. All providers will identify, document, and effectively treat physical symptoms (e.g. pain, shortness of breath, constipation, others) at levels acceptable to patients with a life-limiting illness

4.2. All providers will effectively address the psychosocial and spiritual needs of patients with life-limiting illnesses and their families according to their preferences

4.3. All eligible patients will receive high quality palliative care and hospice services

CARE COORDINATION

PRIORITY STATEMENT: ENSURE PATIENTS RECEIVE WELL-COORDINATED CARE ACROSS ALL PROVIDERS, SETTINGS, AND LEVELS OF CARE

5.1. All providers will accurately and completely reconcile medications across the continuum of care (i.e. admission, transfer within and between care providers, discharge, and outpatient appointments) and ensure communication with the next provider of services

5.2. All inpatient and outpatient providers will assess the patient's perspective of the coordination of their care using a validated care coordination survey tool

5.3. All providers will reduce 30-day all-cause readmission rates resulting from poorly coordinated care to best-in-class

5.4. All providers will reduce preventable emergency department (i.e. those that could be avoided with timely access to primary care) visits resulting from poorly coordinated care by 50%

PATIENT-FOCUSED CARE

PRIORITY STATEMENT: GUARANTEE HIGH VALUE CARE ACROSS ACUTE AND CHRONIC EPISODES

6.1. All patients will receive high-value care over the course of their acute or chronic illness

OVERUSE

PRIORITY STATEMENT: ELIMINATE WASTE WHILE ENSURING THE DELIVERY OF APPROPRIATE CARE

7.1. Reduce wasteful and inappropriate care for the top ten targeted areas by 50%

PERFORMANCE MEASURE RULE:
Osteopenia and Chronic Steroid Use - Treatment to Prevent Osteoporosis

Denominator

All of the following are correct:

1. Presence of patient data confirming at least 1 PDD- OSTEOPENIA in the past 12 months

2. One of the following is correct:

    a. Patient age ≥ 55 years and the gender is female

    b. Patient age ≥ 50 years and the gender is male

3. Presence of patient data confirming at least 1 PDD- STEROID USE (6 MTHS OR MORE in the past 6 months

Denominator Exclusions

The following is correct:

1. Osteoporosis validation is confirmed for the member (see below)

Numerator

All of the following are correct:

1. The denominator is confirmed

2. One of the following is correct:

    a. Presence of patient data confirming at least 1 refill of OSTEOPOROSIS THERAPY in the past 12 months with

    b. Presence of at least 1 refill of OSTEOPOROSIS THERAPY in the past 12 months

    c. Presence of at least 1 refill of TESTOSTERONE in the past 6 months

    d. Presence of patient data confirming at least 1 refill of TESTOSTERONE on the past 6 months

Osteoporosis Validation

One of the following is correct:

1. All of the following are correct:
    a. Presence of at least 1 OSTEOPOROSIS Diagnosis in the past 5 years
    b. One of the following is correct:
        i. Presence of at least 1 refill OSTEOPOROSIS THERAPY in the past 12 months
        ii. Presence of at least 1 ZOLEDRONIC ACID- RECLAST(CPT) procedure in the past 12 months
        iii. Presence of at least 1 refill ZOLEDRONIC ACID (RECLAST) in the past 12 months
        iv. Presence of at least 1 TERIPARATIDE (HCPCS) procedure in the past 12 months
2. Presence of at least 4 claims for OSTEOPOROSIS diagnosis in the past 5 years with at least a 3 month separation between claims
3. Presence of patient data confirming at least 1 PDD- OSTEOPOROSIS in the past
4. Presence of patient data confirming at least 1 PDD- OSTEOPOROSIS TREATMENT in the past 12 months

Osteoporosis Validation Exclusion

The following is correct:

Presence of Patient Data Confirming At Least 1 PDD- BMD NEGATES OSTEOPOROSIS Result in the past 12 months

THE NATIONAL QUALITY FORUM

MEASURE SUBMISSION FORM VERSION 3.0
August 2008

The measure information you submit will be shared with NQF's Steering Committees and Technical Advisory Panels to evaluate measures against the NQF criteria of importance to measure and report, scientific acceptability of measure properties, usability, and feasibility. Four conditions (as indicated below) must be met before proposed measures may be considered and evaluated for suitability as voluntary consensus standards. Not all acceptable measures will be strong—or equally strong—among each set of criteria. The assessment of each criterion is a matter of degree; however, all measures must be judged to have met the first criterion, importance to measure and report, in order to be evaluated against the remaining criteria. References to the specific measure evaluation criteria are provided in parentheses following the item numbers. Please refer to the *Measure Evaluation Criteria* for more information at ***www.qualityforum.org*** under Core Documents. Additional guidance is being developed and when available will be posted on the NQF website.

Use the tab or arrow (↓→) keys to move the cursor to the next field (or back ←↑). There are three types of response fields:

- drop-down menus - select one response;
- check boxes – check as many as apply; and
- text fields – you can copy and paste text into these fields or enter text; these fields are not limited in size, but in most cases, we ask that you summarize the requested information.

Please note that URL hyperlinks do not work in the form; you will need to type them into your web browser.

Be sure to answer all questions. Fields that are left blank will be interpreted as no or none. Information must be provided in this form. Attachments are not allowed except when specifically requested or to provide additional detail or source documents for information that is summarized in this form. If you have important information that is not addressed by the questions, they can be entered into item #48 near the end of the form.

For questions about this form, please contact the NQF Project Director listed in the corresponding call for measures.

	CONDITIONS FOR CONSIDERATION BY NQF
	Four conditions must be met before proposed measures may be considered and evaluated for suitability as voluntary consensus standards.
A (A)	***Public domain or Intellectual Property Agreement signed:*** *IP Agreement signed and submitted (If no, do not submit)* *Template for the Intellectual Property Agreement is available at* ***www.qualityforum.org*** *under Core Documents.*
B (B)	***Measure steward/maintenance:*** *Is there an identified responsible entity and process to maintain and update the measure on a schedule commensurate with clinical innovation, but at least every 3 years? Yes, information provided in contact section (If no, do not submit)*
C (C)	***Intended use:*** *Does the intended use of the measure include BOTH public reporting AND quality improvement? Yes (If no, do not submit)*
D ***(D)***	***Fully developed and tested:*** *Is the measure fully developed AND tested? Yes, fully developed and tested (If not tested and no plans for testing within 24 months, do not submit)*

THE NATIONAL QUALITY FORUM

MEASURE SUBMISSION FORM VERSION 3.0
August 2008

	(for NQF staff use) ***NQF Review #:*** *EC-283-08* ***NQF Project:*** *National Voluntary Consensus Standards for Ambulatory Care Using Clinically Enriched Administrative Data*
	MEASURE SPECIFICATIONS & DESCRIPTIVE INFORMATION
1	***Information current as of*** *(date- MM/DD/YY):* *06/25/09*
2	***Title of Measure:*** *Osteoporosis - Use of Pharmacological Treatment*
3	**Brief description of measure [1]:** Percentage of patients who have osteoporosis and are on osteoporosis therapy.
4 (2a)	**Numerator Statement:** All patients who are on osteoporosis therapy. **Time Window:** All available historical data for the presence of osteoporosis therapy **Numerator Details** (Definitions, codes with description): see attached
5 (2a)	**Denominator Statement:** Women aged 55 and over or men aged 50 and over with a diagnosis of osteoporosis **Time Window:** 24 months **Denominator Details** (Definitions, codes with description): see attached
6 (2a, 2d)	**Denominator Exclusions:** Specific Exclusions • Patients who state that their bone mineral density test was normal General exclusions: • Evidence of metastatic disease or active treatment of malignancy (chemotherapy or radiation therapy) in the last 6 months; • Patients who have been in a skilled nursing facility in the last 3 months **Denominator Exclusion Details** (Definitions, codes with description): see attached
7 (2a, 2h)	**Stratification** Do the measure specifications require the results to be stratified? No ► If "other" describe: **Identification of stratification variable(s):** **Stratification Details** (Definitions, codes with description):
8 (2a, 2e)	**Risk Adjustment** Does the measure require risk adjustment to account for differences in patient severity before the onset of care? No ► **If yes,** (select one) ► Is there a separate proprietary owner of the risk model? (select one) **Identify Risk Adjustment Variables:** **Detailed risk model:** attached ☐ **OR** Web page URL:
9 (2a)	**Type of Score:** Rate/proportion **Calculation Algorithm:** attached ☒ **OR** Web page URL: **Interpretation of Score** (*Classifies interpretation of score according to whether better quality is*

[1] Example of measure description: Percentage of adult patients with diabetes aged 18-75 years receiving one or more A1c test(s) per year.

	associated with a higher score, a lower score, a score falling within a defined interval, or a passing score) Better quality = Higher score ► If "Other", please describe:
10 (2a. 4a, 4b)	**Identify the required data elements**(e.g., primary diagnosis, lab values, vital signs)**:** pharmacy claims, ICD-9 codes. **Data dictionary/code table** attached ☒ **OR** Web page URL: **Data Quality** (2a) *Check all that apply* ☒ Data are captured from an authoritative/accurate source (e.g., lab values from laboratory personnel) ☒ Data are coded using recognized data standards ☒ Method of capturing data electronically fits the workflow of the authoritative source ☒ Data are available in EHRs ☐ Data are auditable
11 (2a, 4b)	**Data Source and Data Collection Methods** *Identifies the data source(s) necessary to implement the measure specifications. Check all that apply* ☒ Electronic Health/Medical Record ☐ Electronic Clinical Database, Name: ☐ Electronic Clinical Registry, Name: ☒ Electronic Claims ☒ Electronic Pharmacy data ☐ Electronic Lab data ☐ Electronic source – other, Describe: ☐ Paper Medical Record ☐ Standardized clinical instrument, Name: ☐ Standardized patient survey, Name: ☐ Standardized clinician survey, Name: ☐ Other, Describe: Instrument/survey attached ☐ **OR** Web page URL:
12 (2a)	**Sampling** *If measure is based on a sample, provide instructions and guidance on sample size.* **Minimum sample size:** **Instructions:**
13 (2a)	**Type of Measure:** Process ► If "Other", please describe: ► If part of a composite or paired with another measure, please identify composite or paired measure
14 (2a)	**Unit of Measurement/Analysis** (*Who or what is being measured*) *Check all that apply.* ☒ Can be measured at all levels ☐ Individual clinician (e.g., physician, nurse) ☐ Group of clinicians (e.g., facility department/unit, group practice) ☐ Facility (e.g., hospital, nursing home) ☐ Integrated delivery system ☐ Health plan ☐ Community/Population ☐ Other (*Please describe*):
15 (2a)	**Applicable Care Settings** *Check all that apply* ☐ Can be used in all healthcare settings ☒ Ambulatory Care (office/clinic) ☐ Behavioral Healthcare ☒ Community Healthcare ☐ Dialysis Facility ☐ Emergency Department ☐ EMS emergency medical services ☒ Health Plan ☐ Home Health ☐ Hospice ☐ Hospital ☐ Long term acute care hospital ☒ Nursing home/ Skilled Nursing Facility (SNF) ☐ Prescription Drug Plan ☐ Rehabilitation Facility ☐ Substance Use Treatment Program/Center ☐ Other (*Please describe*):
	IMPORTANCE TO MEASURE AND REPORT
	Note: This is a threshold criterion. If a measure is not judged to be sufficiently important to measure and report, it will not be evaluated against the remaining criteria.
16 (1a)	**Addresses a Specific National Priority Partners Goal** *Enter the numbers of the specific goals related to this measure (see list of goals on last page)*: 2.1, 2.2, 6.1
17	**If not related to NPP goal, identify high impact aspect of healthcare** (select one)

(1a)	**Summary of Evidence:** **Citations[2] for Evidence:**
18 (1b)	**Opportunity for Improvement** *Provide evidence that demonstrates considerable variation, or overall poor performance, across providers.* **Summary of Evidence:** There is evidence that confirms that patients are not receiving the appropriate screening for osteporosis nor appropriate treatment if they have osteoporosis. In one study (Lafata, 2007) found that osteoporosis screening rates were 10.8% in usual care, 24.1% in mailed reminder, and 28.9% in mailed reminder with physician prompt." In addition, they found that treatment rates in all three groups were very low 5.2% in usual care, 8.4% in mailed reminders, and 9.1% in mailed reminders with prompt. In another study (Solomon, 2004) they demonstrated that there was wide variabiltiy in the implementation of guidelines across patients, physicians and practice sites in patients are risk. The study found that in patients at risk for fragility fracture that between 17% to 71% of patients had either the appropriate testing or osteoporosis medications. **Citations for Evidence:** Lafata JE, Kolk D, Peterson EL, McCarthy BD, Weiss TW, Chen Y, Muma BK. Improving Osteoporosis Screening: Results from a Randomized Cluster Trial. General Internal Medicine 2007;22:346–351. Solomon DH, Brookhart MA, Gandhi TK, Karson A, Gharib S, Orav EJ, Shaykevich S, Licari A, Cabral D, Bates DW. Adherence with osteoporosis practice guidelines: a multilevel analysis of patient, physician, and practice setting characteristics. Am J Med. 2004 Dec 15;117(12):919-24.
19 (1b)	**Disparities** *Provide evidence that demonstrates disparity in care/outcomes related to the measure focus among populations.* **Summary of Evidence:** Osteoporosis often goes undiagnosed and untreated in black patients with fragility fractures. Fragility fractures, as a result of low-impact falls that would ordinarily not fracture healthy bones, are the hallmark of osteoporosis. Fragility fracture affect all U.S. racial and ethnic groups, but blacks suffer more complications and deaths from these fractures than whites. This may be because the diagnosis of osteoporosis is often missed as the underlying cause of fragility fractures among black patients, according to a recent study which was supported in part by the AHRQ. Researchers found that for 91 percent of black patients with low-impact fragility fractures, osteoporosis was not recognized, diagnosed, or treated before or after hospitalization. **Citations for evidence:** Agency for Healthcare Research and Quality (AHRQ). http://www.ahrq.gov/RESEARCH/apr05/0405RA19.htm (accessed online 10-20-08)
20 (1c)	**If measuring an Outcome** Describe relevance to the national health goal/priority, condition, population, and/or care being addressed: **If not measuring an outcome, provide evidence supporting this measure topic and grade the strength of the evidence** *Summarize the evidence (including citations to source) supporting the focus of the measure as follows:* • Intermediate outcome – evidence that the measured intermediate outcome (e.g., blood pressure, Hba1c) leads to improved health/avoidance of harm or cost/benefit. • Process – evidence that the measured clinical or administrative process leads to improved health/avoidance of harm and if the measure focus is on one step in a multi-step care process, it measures the step that has the greatest effect on improving the specified desired outcome(s). • Structure – evidence that the measured structure supports the consistent delivery of effective processes or access that lead to improved health/avoidance of harm or cost/benefit. • Patient experience – evidence that an association exists between the measure of patient experience of health care and the outcomes, values and preferences of individuals/ the public. • Access – evidence that an association exists between access to a health service and the outcomes of, or experience with, care.

[2] Citations can include, but are not limited to journal articles, reports, web pages (URLs).

	• Efficiency- demonstration of an association between the measured resource use and level of performance with respect to one or more of the other five IOM aims of quality. **Type of Evidence** *Check all that apply* ☒ Evidence-based guideline ☐ Quantitative research studies ☐ Meta-analysis ☐ Qualitative research studies ☐ Systematic synthesis of research ☐ Other (*Please describe*): **Overall Grade for Strength of the Evidence**[3] (*Use the USPSTF system, or if different, also describe how it relates to the USPSTF system)*: Similar to the USPSTF system, the ACP rates its evidence and recommendations base on the Grading of Recommendations, Assessment, Development, and Evaluation (GRADE) system. **Summary of Evidence** (*provide guideline information below*): According to the guidelines: "Osteoporosis can be diagnosed by the occurrence of fragility fracture. In patients without fragility fracture, osteoporosis is often diagnosed by low bone density. Good evidence supports the treatment of patients who have osteoporosis to prevent further loss of bone and to reduce the risk for initial or subsequent fracture. Randomized, controlled trials offer good evidence that, compared with placebo, alendronate, ibandronate, risedronate, calcitonin, teriparatide, and raloxifene prevent vertebral fractures. Evidence is also good that teriparatide prevents nonvertebral fractures compared with placebo and that risedronate and alendronate prevent both nonvertebral and hip fractures compared with placebo. Estrogen has been shown to be associated with reduced vertebral, nonvertebral, and hip fractures. The evidence on use of calcium with or without vitamin D is mixed, and the effectiveness is modest. Because most trials of other pharmacologic therapy included their use, we recommend adding calcium and vitamin D to osteoporosis treatment regimens. Evidence is insufficient to determine the appropriate duration of therapy." **Citations for Evidence:** Qaseem A, Snow V, Shekelle P, Hopkins R Jr, Forciea MA, Owens DK; Clinical Efficacy Assessment Subcommittee of the American College of Physicians. Pharmacologic Treatment of Low Bone Density or Osteoporosis to Prevent Fractures: A Clinical Practice Guideline from the American College of Physicians. Ann Intern Med. 2008;149:404-415.
21 (1c)	**Clinical Practice Guideline** *Cite the guideline reference; quote the specific guideline recommendation related to the measure and the guideline author's assessment of the strength of the evidence; and summarize the rationale for using this guideline over others.* **Guideline Citation:** Qaseem A, Snow V, Shekelle P, Hopkins R Jr, Forciea MA, Owens DK; Clinical Efficacy Assessment Subcommittee of the American College of Physicians. Pharmacologic Treatment of Low Bone Density or Osteoporosis to Prevent Fractures: A Clinical Practice Guideline from the American College of Physicians. Ann Intern Med. 2008;149:404-415. **Specific guideline recommendation:** The American College of Physicians (ACP) recommends that clinicians offer pharmacologic treatment to men and women who have known osteoporosis and to those who have experienced fragility fractures (Grade: strong recommendation; high-quality evidence). **Guideline author's rating of strength of evidence** (*If different from USPSTF, also describe it and how it*

[3]The strength of the body of evidence for the specific measure focus should be systematically assessed and rated, e.g., USPSTF grading system **www.ahrq.gov/clinic/uspstmeth.htm**: **A -** The USPSTF recommends the service. There is high certainty that the net benefit is substantial. **B -** The USPSTF recommends the service. There is high certainty that the net benefit is moderate or there is moderate certainty that the net benefit is moderate to substantial. **C -** The USPSTF recommends against routinely providing the service. There may be considerations that support providing the service in an individual patient. There is at least moderate certainty that the net benefit is small. Offer or provide this service only if other considerations support the offering or providing the service in an individual patient. **D -** The USPSTF recommends against the service. There is moderate or high certainty that the service has no net benefit or that the harms outweigh the benefits. **I -** The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of the service. Evidence is lacking, of poor quality, or conflicting, and the balance of benefits and harms cannot be determined.

	relates to USPSTF): Grade: strong recommendation; high-quality evidence. Similar to the USPSTF system, the ACP rates its evidence and recommendations base on the Grading of Recommendations, Assessment, Development, and Evaluation (GRADE) system. **Rationale for using this guideline over others:** This is the most recent guideline that talks to this subject.
22 (1c)	**Controversy/Contradictory Evidence** *Summarize any areas of controversy, contradictory evidence, or contradictory guidelines and provide citations.* **Summary:** **Citations:**
23 (1)	**Briefly describe how this measure (as specified) will facilitate significant gains in healthcare quality related to the specific priority goals and quality problems identified above:** Osteoporosis represents a major public health problem. It significantly posses an increased risk for osteoporosis-related fractures, which create a heavy economic burden. Osteoporosis-related fractures cause more than 432,000 hospital admissions, almost 2.5 million medical office visits and about 180,000 nursing home admissions annually in the US with a cost to the healthcare system at $17 billion for 2005; Due to the aging population, the Surgeon General estimates that the number of hip fractures and their associated costs could double or triple by the year 2040. Key to minimizing the clinical and economic impact of osteoporosis is identification of risk factors, early diagnosis, and the use of effective therapy. In general, the more risk factors that are present, the greater the risk of fracture.
	SCIENTIFIC ACCEPTABILITY OF MEASURE PROPERTIES
	Note: Testing and results should be summarized in this form. However, additional detail and reports may be submitted as supplemental information or provided as a web page URL. If a measure has not been tested, it is only potentially eligible for time-limited endorsement.
24	**Supplemental Testing Information:** attached ☐ **OR** Web page URL:
25 (2b)	**Reliability Testing** **Data/sample:** **Analytic Method:** **Testing Results:**
26 (2c)	**Validity Testing** **Data/sample:** **Analytic Method:** **Testing Results:**
27 (2d)	**Measure Exclusions** *Provide evidence to justify exclusion(s) and analysis of impact on measure results during testing.* **Summary of Evidence supporting exclusion(s):** **Citations for Evidence:** **Data/sample:** **Analytic Method:** **Testing Results:**

28 (2e)	**Risk Adjustment Testing** *Summarize the testing used to determine the need (or no need) for risk adjustment and the statistical performance of the risk adjustment method.* **Data/sample:** **Analytic Method:** **Testing Results:** ►**If outcome or resource use measure not risk adjusted, provide rationale:**
29 (2g)	**Testing comparability of results when more than 1 data method is specified** (*e.g., administrative claims or chart abstraction*) **Data/sample:** **Analytic Method:** **Results:**
30 (2f)	**Provide Measure Results from Testing or Current Use** Results from testing **Data/sample:** We measured a commercial population of 459,196 members. **Methods to identify statistically significant and practically/meaningfully differences in performance:** Compliance to the performance measure is measured using an analysis of the claims data; in this case looking for evidence of osteoporosis therapy. In addition, where appropriate we analyze patient data collected either from the patient's PHR or during a disease management program. **Results:** We found that of the 5656 members who satisfied the denominator, 4113 were in the numerator, indicating a compliance rate of 73%
31 (2h)	**Identification of Disparities** ►If measure is stratified by factors related to disparities (i.e. race/ethnicity, primary language, gender, SES, health literacy), **provide stratified results:** ►If disparities have been reported/identified, but measure is not specified to detect disparities, provide rationale:
	USABILITY
32 (3)	***Current Use*** *Testing completed* ***If in use, how widely used*** *Health plan or sytem* ► *If "other," please describe:* ☐ *Used in a public reporting initiative, name of initiative:* *Sample report attached* ☐ ***OR*** *Web page URL:*
33 (3a)	**Testing of Interpretability** (*Testing that demonstrates the results are understood by the potential users for public reporting and quality improvement*) **Data/sample:** Administrative claims database from health plans; lab results data; patient derived data. **Methods:** This performance measure is similar in message to a clinical alert that has been operational since 2005. Compliance to the clinical alert is measured using an analysis of subsequent claims, in this case the appearance of pharmacy claims for osteoporosis therapy. In addition, a feedback tool accompanies every clinical alert message, and includes options indicating agreement or disagreement with the message. **Results:** In practice, fewer than 1% of the respondents disagreed with the medical literature. Since this alert depends on patient feedback, only a small number of alerts were sent.
34	**Relation to other NQF-endorsed™ measures** ►Is this measure similar or related to measure(s) already endorsed by NQF (on the same topic or the same

(3b, 3c)	target population)? *Measures can be found at **www.qualityforum.org** under Core Documents.* *Check all that apply* ☐ Have not looked at other NQF measures ☒ Other measure(s) on same topic ☐ Other measure(s) for same target population ☐ No similar or related measures **Name of similar or related NQF-endorsed™ measure(s):** Osteoporosis: Pharmacologic Therapy **Are the measure specifications harmonized with existing NQF-endorsed™ measures?** Not harmonized ►If not fully harmonized, provide rationale: This measure uses information supplied by the patient to increase its specificity. **Describe the distinctive, improved, or additive value this measure provides to existing NQF-endorsed measures:** This measure uses an automated method to analyze enriched claims data to identify numerator and the denominator. Enriched claims data increase the specificity of this measure.
	FEASIBILITY
35 (4a)	***How are the required data elements generated?*** *Check all that apply* ☐ *Data elements are generated concurrent with and as a byproduct of care processes during care delivery (e.g., blood pressure or other assessment recorded by personnel conducting the assessment)* ☐ *Data elements are generated from a patient survey (e.g., CAHPS)* ☒ *Data elements are generated through coding performed by someone other than the person who obtained the original information (e.g., DRG or ICD-9 coding on claims)* ☒ *Other, Please describe: Data obtained through electronic personal health records and telephonic, nurse-driven disease management programs*
36 (4b)	***Electronic Sources*** *All data elements* ►***If all data elements are not in electronic sources, specify the near-term path to electronic collection by most providers:*** ►***Specify the data elements for the electronic health record:*** *ICD-9, CPT, NDC codes*
37 (4c)	***Do the specified exclusions require additional data sources beyond what is required for the other specifications?*** *No* ►***If yes, provide justification:***
38 (4d)	***Identify susceptibility to inaccuracies, errors, or unintended consequences of the measure:*** *Generally, the use of claims data has inherent errors and inaccuracies related to incorrect coding, or missing data, which can result in less specificity in the definition of denominator and /or the numerator. To minimize these errors and inaccuracies, we use clinically enriched data (laboratory results, medication lists) to augment the claims data. In addition where possible, to corroborate the claims data, we solicit feedback from both providers via a feedback form and patients from a personal health record or from a disease management program.* *We do not anticipate significant unintended consequences from the implementation of the measure. Our measures are all developed from evidence-based literature or from clinical guidelines and are designed to encourage appropriate care of the patient.* ***Describe how could these potential problems be audited:*** *The inclusion of patient-derived data from a personal health record or through a disease management program may be used to confirm the presence or absence of a medication; ultimately the data sources may be tested against a sample of medical charts.* ***Did you audit for these potential problems during testing?*** *No* ***If yes, provide results:***
39 (4e)	***Testing feasibility*** *Describe what have you learned/modified as a result of testing and/or operational use of the measure regarding data collection, availability of data/missing data, timing/frequency of data collection, patient confidentiality, time/cost of data collection, other feasibility/ implementation issues:*

	Multiple sources of corroborating clinical data are necessary to correctly identify patients in the denominator. Earlier testing efforts using specifications similar to HEDIS were more sensitive yet nonspecific. The use of clinically enriched claims (e.g., ICD-9 codes for diabetes with medications for diabetes or LOINC codes for HbA1C) significantly decreases the number of false positves in the denominator. Increasing the specificity of the demoninatory led to a much higher compliance rate.
	CONTACT INFORMATION
40	***Web Page URL for Measure Information*** *Describe where users (implementers) should go for more details on specifications of measures, or assistance in implementing the measure.* ***Web page URL:*** *www.activehealth.net*
41	**Measure Intellectual Property Agreement Owner Point of Contact** **First Name:** Madhavi **MI:** **Last Name:** Vemireddy **Credentials (MD, MPH, etc.):** MD **Organization:** ActiveHealth Management **Street Address:** 102 Madison Avenue **City:** New York **State:** NY **ZIP:** 10016 **Email:** mvemireddy@activehealth.net **Telephone:** 212-651-8200 ext:
42	**Measure Submission Point of Contact** **If different than IP Owner Contact** **First Name:** **MI:** **Last Name:** **Credentials (MD, MPH, etc.):** **Organization:** **Street Address:** **City:** **State:** **ZIP:** **Email:** **Telephone:** ext:
43	**Measure Developer Point of Contact** **If different than IP Owner Contact** **First Name:** **MI:** **Last Name:** **Credentials (MD, MPH, etc.):** **Organization:** **Street Address:** **City:** **State:** **ZIP:** **Email:** **Telephone:** ext:
44	**Measure Steward Point of Contact** **If different than IP Owner Contact** *Identifies the organization that will take responsibility for updating the measure and assuring it is consistent with the scientific evidence and current coding schema; the steward of the measure may be different than the developer.* **First Name:** **MI:** **Last Name:** **Credentials (MD, MPH, etc.):** **Organization:** **Street Address:** **City:** **State:** **ZIP:** **Email:** **Telephone:** ext
	ADDITIONAL INFORMATION
45	**Workgroup/Expert Panel involved in measure development** No workgroup or panel used ►If workgroup used, describe the members' role in measure development: ►Provide a list of workgroup/panel members' names and organizations:
46	***Measure Developer/Steward Updates and Ongoing Maintenance*** *Year the measure was first released: 6/2005* *Month and Year of most recent revision: 3/2009* *What is the frequency for review/update of this measure? Biennially* *When is the next scheduled review/update for this measure? 2011*
47	**Copyright statement/disclaimers:** This information, including any attachments hereto, is the sole, exclusive, proprietary and confidential property of Active Health Management, Inc., and is for the exclusive use of The National Quality Forum. Any use, copying, disclosure, dissemination or distribution by anyone other than the National Quality Forum is strictly prohibited.
48	**Additional Information:**
49	**I have checked that the submission is complete and any blank fields indicate that no information is provided.** ☒
50	**Date of Submission** (*MM/DD/YY*)**:** 02/09/09

PATIENT & FAMILY ENGAGEMENT

PRIORITY STATEMENT: Engage Patients and Their Families in Managing Their Health and Making Decisions About Their Care

1.1. All providers will routinely solicit and publicly report on their patients' perspectives of care

1.2. All providers will work collaboratively with their patients to assist them in making informed decisions about treatment options consistent with their values and preferences

POPULATION HEALTH

PRIORITY STATEMENT: IMPROVE THE HEALTH OF THE U.S. POPULATION

2.1. The population will be up to date on all high-priority age- and gender-appropriate evidence-based clinical preventive services

2.2. The population will receive recommended evidence-based interventions to improve targeted healthy lifestyle behaviors

2.3. All communities will demonstrate a 10% improvement in their community index of health

2.4. Americans will have all recommended high priority healthy lifestyle behaviors under control

SAFETY

PRIORITY STATEMENT: IMPROVE THE SAFETY OF THE U.S. HEALTH CARE SYSTEM

3.1. All providers will drive all preventable healthcare-associated infections (HAI) to zero

3.2. All providers will drive the incidence of preventable NQF Serious Reportable Events (SRE) to zero

3.3. All hospitals will reduce preventable and premature mortality rates to best-in-class

3.4. All hospitals and their community partners will reduce 30-day mortality rates following hospitalization for select conditions to best-in-class

PALLIATIVE CARE

PRIORITY STATEMENT: GUARANTEE APPROPRIATE AND COMPASSIONATE CARE FOR PATIENTS WITH LIFE-LIMITING ILLNESSES

4.1. All providers will identify, document, and effectively treat physical symptoms (e.g. pain, shortness of breath, constipation, others) at levels acceptable to patients with a life-limiting illness

4.2. All providers will effectively address the psychosocial and spiritual needs of patients with life-limiting illnesses and their families according to their preferences

4.3. All eligible patients will receive high quality palliative care and hospice services

CARE COORDINATION

PRIORITY STATEMENT: ENSURE PATIENTS RECEIVE WELL-COORDINATED CARE ACROSS ALL PROVIDERS, SETTINGS, AND LEVELS OF CARE

5.1. All providers will accurately and completely reconcile medications across the continuum of care (i.e. admission, transfer within and between care providers, discharge, and outpatient appointments) and ensure communication with the next provider of services

5.2. All inpatient and outpatient providers will assess the patient's perspective of the coordination of their care using a validated care coordination survey tool

5.3. All providers will reduce 30-day all-cause readmission rates resulting from poorly coordinated care to best-in-class

5.4. All providers will reduce preventable emergency department (i.e. those that could be avoided with timely access to primary care) visits resulting from poorly coordinated care by 50%

PATIENT-FOCUSED CARE

PRIORITY STATEMENT: GUARANTEE HIGH VALUE CARE ACROSS ACUTE AND CHRONIC EPISODES

6.1. All patients will receive high-value care over the course of their acute or chronic illness

OVERUSE

PRIORITY STATEMENT: ELIMINATE WASTE WHILE ENSURING THE DELIVERY OF APPROPRIATE CARE

7.1. Reduce wasteful and inappropriate care for the top ten targeted areas by 50%

PERFORMANCE MEASURE RULE:

Osteoporosis - Use of Pharmacological Treatment

Denominator

All of the following are correct:

1. One of the following is correct:
    a. Patient age ≥ 55 Years and female
    b. Patient age ≥ 50 Years and male
    c. Presence of at least 2 MENOPAUSE diagnosis codes in the past
    d. Presence of patient data confirming at least 1 PDD - MENOPAUSE in the past
2. One of the following is correct:
    a. Presence of at least 2 OSTEOPOROSIS diagnosis codes in the past 24 months
    b. Presence of patient data confirming at least 1 PDD - OSTEOPOROSIS in the past 12 months

Denominator Exclusions

The following is correct:

1. Presence of patient data confirming at least 1 PDD - BMD NEGATES OSTEOPOROSIS in the past 12 months
2. Provider data indicating patient declined therapy

Numerator

All of the following are correct:

1. Denominator is true
2. One of the following is correct:
    a. Presence of at least 1 refill of OSTEOPOROSIS THERAPY in the past
    b. Presence of Patient Data Confirming At Least 1 Refill OSTEOPOROSIS THERAPY Drug In the past 6 Months

c. Presence of patient data confirming at least 1 PDD - OSTEOPOROSIS TREATMENT in the past

d. Presence of At Least 1 Refill TESTOSTERONE in the past 6 Months

e. Presence of patient data 1 Refill TESTOSTERONE in the past 6 Months

f. The presence of 1 ZOLEDRONIC ACID - RECLAST(CPT) procedure in the past

g. The presence of 1 TERIPARATIDE (HCPCS) procedure in the past

h. The presence of 1 refill ZOLEDRONIC ACID (RECLAST) in the past

Note: A 3 month time window has been added to certain timeframes in order to account for the inherent delay in the acquisition of administrative claims data.

Note: A current refill is defined as a refill in which the day supply of a drug extends into the end of the measurement window plus a grace period of 30 days.

THE NATIONAL QUALITY FORUM

MEASURE SUBMISSION FORM VERSION 3.0
August 2008

The measure information you submit will be shared with NQF's Steering Committees and Technical Advisory Panels to evaluate measures against the NQF criteria of importance to measure and report, scientific acceptability of measure properties, usability, and feasibility. Four conditions (as indicated below) must be met before proposed measures may be considered and evaluated for suitability as voluntary consensus standards. Not all acceptable measures will be strong—or equally strong—among each set of criteria. The assessment of each criterion is a matter of degree; however, all measures must be judged to have met the first criterion, importance to measure and report, in order to be evaluated against the remaining criteria. References to the specific measure evaluation criteria are provided in parentheses following the item numbers. Please refer to the *Measure Evaluation Criteria* for more information at ***www.qualityforum.org*** under Core Documents. Additional guidance is being developed and when available will be posted on the NQF website.

Use the tab or arrow (↓→) keys to move the cursor to the next field (or back ←↑). There are three types of response fields:

- drop-down menus - select one response;
- check boxes – check as many as apply; and
- text fields – you can copy and paste text into these fields or enter text; these fields are not limited in size, but in most cases, we ask that you summarize the requested information.

Please note that URL hyperlinks do not work in the form; you will need to type them into your web browser.

Be sure to answer all questions. Fields that are left blank will be interpreted as no or none. Information must be provided in this form. Attachments are not allowed except when specifically requested or to provide additional detail or source documents for information that is summarized in this form. If you have important information that is not addressed by the questions, they can be entered into item #48 near the end of the form.

For questions about this form, please contact the NQF Project Director listed in the corresponding call for measures.

	CONDITIONS FOR CONSIDERATION BY NQF
	Four conditions must be met before proposed measures may be considered and evaluated for suitability as voluntary consensus standards.
A (A)	***Public domain or Intellectual Property Agreement signed:*** *IP Agreement signed and submitted (If no, do not submit)* *Template for the Intellectual Property Agreement is available at* ***www.qualityforum.org*** *under Core Documents.*
B (B)	***Measure steward/maintenance:*** *Is there an identified responsible entity and process to maintain and update the measure on a schedule commensurate with clinical innovation, but at least every 3 years? Yes, information provided in contact section (If no, do not submit)*
C (C)	***Intended use:*** *Does the intended use of the measure include BOTH public reporting AND quality improvement? Yes (If no, do not submit)*
D ***(D)***	***Fully developed and tested:*** *Is the measure fully developed AND tested? Yes, fully developed and tested (If not tested and no plans for testing within 24 months, do not submit)*

THE NATIONAL QUALITY FORUM

MEASURE SUBMISSION FORM VERSION 3.0
August 2008

	(for NQF staff use) ***NQF Review #:*** *EC-285-08* ***NQF Project:*** *National Voluntary Consensus Standards for Ambulatory Care Using Clinically Enriched Administrative Data*
	MEASURE SPECIFICATIONS & DESCRIPTIVE INFORMATION
1	***Information current as of*** *(date- MM/DD/YY):* *06/25/09*
2	***Title of Measure:*** *Chronic Liver Disease - Hepatitis A Vaccination*
3	**Brief description of measure [1]:** Percentage of patients with chronic liver disease who have received a hepatitis A vaccine
4 (2a)	**Numerator Statement:** All patients with chronic liver disease who have received a hepatitis A vaccine **Time Window:** Past 12 months **Numerator Details** (Definitions, codes with description): see attached
5 (2a)	**Denominator Statement:** All patients, ages 18 and older, diagnosed with chronic liver disease **Time Window:** Past 12 months **Denominator Details** (Definitions, codes with description): see attached
6 (2a, 2d)	**Denominator Exclusions:** Previous history of viral hepatitis A **Denominator Exclusion Details** (Definitions, codes with description): see attached
7 (2a, 2h)	**Stratification** Do the measure specifications require the results to be stratified? No ► If "other" describe: **Identification of stratification variable(s):** **Stratification Details** (Definitions, codes with description):
8 (2a, 2e)	**Risk Adjustment** Does the measure require risk adjustment to account for differences in patient severity before the onset of care? No ► **If yes,** (select one) ► Is there a separate proprietary owner of the risk model? (select one) **Identify Risk Adjustment Variables:** **Detailed risk model:** attached ☐ **OR** Web page URL:
9 (2a)	**Type of Score:** Rate/proportion **Calculation Algorithm:** attached ☒ **OR** Web page URL: **Interpretation of Score** (*Classifies interpretation of score according to whether better quality is associated with a higher score, a lower score, a score falling within a defined interval, or a passing score*) Better quality = Higher score ► If "Other", please describe:
10 (2a. 4a,	**Identify the required data elements**(e.g., primary diagnosis, lab values, vital signs)**:** ICD9, CPT, pharmacy claims, lab values, patient-derived data **Data dictionary/code table** attached ☒ **OR** Web page URL: **Data Quality** (2a) *Check all that apply*

[1] Example of measure description: Percentage of adult patients with diabetes aged 18-75 years receiving one or more A1c test(s) per year.

4b)	☒ Data are captured from an authoritative/accurate source (e.g., lab values from laboratory personnel) ☒ Data are coded using recognized data standards ☒ Method of capturing data electronically fits the workflow of the authoritative source ☐ Data are available in EHRs ☐ Data are auditable
11 (2a, 4b)	**Data Source and Data Collection Methods** *Identifies the data source(s) necessary to implement the measure specifications. Check all that apply* ☐ Electronic Health/Medical Record ☐ Electronic Clinical Database, Name: ☐ Electronic Clinical Registry, Name: ☒ Electronic Claims ☒ Electronic Pharmacy data ☒ Electronic Lab data ☐ Electronic source – other, Describe: ☐ Paper Medical Record ☐ Standardized clinical instrument, Name: ☐ Standardized patient survey, Name: ☐ Standardized clinician survey, Name: ☐ Other, Describe: Instrument/survey attached ☐ **OR** Web page URL:
12 (2a)	**Sampling** *If measure is based on a sample, provide instructions and guidance on sample size.* **Minimum sample size:** **Instructions:**
13 (2a)	**Type of Measure:** Process ► If "Other", please describe: ► If part of a composite or paired with another measure, please identify composite or paired measure
14 (2a)	**Unit of Measurement/Analysis** (*Who or what is being measured*) *Check all that apply.* ☒ Can be measured at all levels ☐ Individual clinician (e.g., physician, nurse) ☐ Group of clinicians (e.g., facility department/unit, group practice) ☐ Facility (e.g., hospital, nursing home) ☐ Integrated delivery system ☐ Health plan ☐ Community/Population ☐ Other (*Please describe*):
15 (2a)	**Applicable Care Settings** *Check all that apply* ☐ Can be used in all healthcare settings ☒ Ambulatory Care (office/clinic) ☐ Behavioral Healthcare ☒ Community Healthcare ☒ Dialysis Facility ☐ Emergency Department ☐ EMS emergency medical services ☒ Health Plan ☐ Home Health ☐ Hospice ☐ Hospital ☐ Long term acute care hospital ☒ Nursing home/ Skilled Nursing Facility (SNF) ☐ Prescription Drug Plan ☐ Rehabilitation Facility ☐ Substance Use Treatment Program/Center ☐ Other (*Please describe*):
	IMPORTANCE TO MEASURE AND REPORT
	Note: This is a threshold criterion. If a measure is not judged to be sufficiently important to measure and report, it will not be evaluated against the remaining criteria.
16 (1a)	**Addresses a Specific National Priority Partners Goal** *Enter the numbers of the specific goals related to this measure (see list of goals on last page)*: 2.1,2.2,6.1
17 (1a)	**If not related to NPP goal, identify high impact aspect of healthcare** (select one) **Summary of Evidence:** **Citations[2] for Evidence:**
18	**Opportunity for Improvement** *Provide evidence that demonstrates considerable variation, or overall*

[2] Citations can include, but are not limited to journal articles, reports, web pages (URLs).

(1b)

poor performance, across providers.

Summary of Evidence: The NIDDK recommends several higher-risk groups as candidates for Hepatitis A Vaccination, including those in areas with high incidence, travelers, men who have sex with men, illegal drug users, people with chronic liver disease, and people who may be exposured to hepatitis A virus at work. Tedaldi et al. (2004) have noted that despite national reccomendations existing for years, adherence remains poor. In a trospective review of data from 9 clinic sites in 7 US cities, in the HIV Outpatient Study (HOPS), among 716 patients eligible for HAV vaccination, only 23.3% had received at least one dose. The study also examined hepatitis B vaccination and found only 32% of 612 patients eligible for HBV vaccination had received at least 1 dose. An related study by Pathman et al. (1996), based on questionnaires to over 3,000 family physicians in 9 states, suggested that adherence to hepatitis B vaccination in infants was around 30%, despite seemingly high awareness of guidelines (98.4%), agreement (70.4%), and adoption (77.7%).

The American College for Gastroenterology notes the following recommendations for vaccination: American College of Gastroenterology. Chronic Liver Disease: A Primer for Vaccinations.

- Fifty to 60% of chronic liver disease is due to chronic hepatitis C (HCV), approximately 30% is caused by alcohol, around 10% can be attributed to hepatitis B, and up to 5% is cause by autoimmune hepatitis and primary biliary cirrhosis...Superinfection of hepatitis C with hepatitis A may cause fulminant liver failure; superinfection of hepatitis C with hepatitis B increases the rate of progression of liver disease. Due to the shared risk factors among people acquiring hepatitis A, B, and C and the serious consequences of superinfection, the NIH and the US Veterans Health Administration have recommended that all current chronic hepatitis C patients that have not shown immunity to hepatitis A or B be vaccinated.
- Several studies have determined that fulminant hepatitis A is more common in patients with pre-existing chronic liver disease, especially in those patients with chronic hepatitis B or C.
- Likewise, hepatitis B is thought to be more problematic in chronic liver disease patients especially those with chronic hepatitis C. In the chronic hepatitis C patient, superinfection with hepatitis B is thought to accelerate the course of disease.

In a prospective study of hepatitis B vaccination in patients with hepatitis C, Wong et al. (1996) found that, in a study of 126 consecutive patients with hepatitis C attending a hepatology clinic, the majority (75) had not been offered hepatitis B vaccination -- despite having been seen by an average of two doctors. Only nine of the 126 patients said that they had been advised to be vaccinated against hepatitis B, and of these, only seven had followed that advice.

In another study of a methadone clinic population, Carter et al. (2001) found 84% of the studied patients positive for antibody to hepatitis C, and 49.7% having evidence of dual exposure. This dual exposure suggests that, for patients with hepatitis C due to IV drug use, they remain at particularly high risk of exposure to hepatitis B.

The NIDDK recommends the following as candidates for Hepatitis A Vaccination:

- Candidates for Hepatitis A Vaccination
- Children living in areas with high incidence rates of hepatitis A (above the national average). Check with your health department to see if this applies to your area.
- High-Risk Populations
- Travelers to developing countries with high rates of hepatitis A, including Mexico
- Men who have sex with men
- Users of illegal drugs
- People who work with hepatitis A virus in research settings
- People who work with infected nonhuman primates
- Recipients of clotting factor concentrates
- People with chronic liver disease (because of risk of fulminant hepatitis A)

Citations for Evidence: 1. ACG Chronic Liver Disease: A Primer for Vaccinations www.acg.gi.org (accessed January 2005)

2. N Engl J Med Prevention of Hepatitis A with the Hepatitis A Vaccine 2004;350:476-481
3. NIDDK Vaccinations for Hepatitis A and B www.digestive.niddk.nih.gov
4. Wong V, Wreghitt TG, Alexander GJ. Prospective study of hepatitis B vaccination in patients with chronic hepatitis C. BMJ. 1996 May 25;312(7042):1336-7.

19 (1b) **Disparities** *Provide evidence that demonstrates disparity in care/outcomes related to the measure focus among populations.*

Summary of Evidence: Disparities for vaccination specifically for patients with viral hepatitis appear to be poorly-studied, as for vaccination for patients with any chronic liver disease. Still, Wooten et al. (2007) note, in an analysis of the National Immunization Survey data, significant dispairties in childhood vaccination, especially with respect to mother's education and household income.

More generally, the Health People 2010 initiative has also noted that while disparities have historically existed for hepatitis A infection, these disparities, with respect to race and ethnicity, appear to be closing thanks to childhood immunization. What remains less clear, however, are potential disparities for immunization of at-risk adults, who have already passed the age for routine childhood immunization, prior to the introduction of the guideline/practice in 1999.

Citations for evidence:

1. Wooten et al., Am J Health Behav 2007;31(4):434-45.
2. Healthy People 2010 Mid-Course Review. Accessed at http://www.healthypeople.gov/data/midcourse/html/focusareas/FA14ProgressDisparities.htm on 10/24/2008.

20 (1c) **If measuring an Outcome** Describe relevance to the national health goal/priority, condition, population, and/or care being addressed:

If not measuring an outcome, provide evidence supporting this measure topic and grade the strength of the evidence

Summarize the evidence (including citations to source) supporting the focus of the measure as follows:

- Intermediate outcome – evidence that the measured intermediate outcome (e.g., blood pressure, Hba1c) leads to improved health/avoidance of harm or cost/benefit.
- Process – evidence that the measured clinical or administrative process leads to improved health/avoidance of harm and
  if the measure focus is on one step in a multi-step care process, it measures the step that has the greatest effect on improving the specified desired outcome(s).
- Structure – evidence that the measured structure supports the consistent delivery of effective processes or access that lead to improved health/avoidance of harm or cost/benefit.
- Patient experience – evidence that an association exists between the measure of patient experience of health care and the outcomes, values and preferences of individuals/ the public.
- Access – evidence that an association exists between access to a health service and the outcomes of, or experience with, care.
- Efficiency– demonstration of an association between the measured resource use and level of performance with respect to one or more of the other five IOM aims of quality.

Type of Evidence *Check all that apply*

☐ Evidence-based guideline
☐ Meta-analysis
☐ Systematic synthesis of research
☐ Quantitative research studies
☐ Qualitative research studies
☐ Other (*Please describe*):

Overall Grade for Strength of the Evidence[3] (*Use the USPSTF system, or if different, also describe how it relates to the USPSTF system)*: Equivalent to USPSTF B grade

[3]The strength of the body of evidence for the specific measure focus should be systematically assessed and rated, e.g., USPSTF grading system **www.ahrq.gov/clinic/uspstmeth.htm**: **A -** The USPSTF recommends the service. There is high certainty that the net benefit is substantial. **B -** The USPSTF recommends the service. There is high certainty that the net benefit is moderate or there is moderate certainty that the net benefit is moderate to substantial. **C -** The USPSTF recommends against routinely providing the service. There may be considerations that support providing the service in an individual patient. There is at least moderate certainty that the net benefit is small. Offer or provide this service only if

Summary of Evidence (*provide guideline information below*)**:** The evidence from vaccination against hepatitis A in chronic liver disease can drawn largely from the body of literature for vaccination against superinfection in the context of existing viral Hepatitis B or C, which represent major causes of chronic liver disease in the U.S..

In a 2001 review, Koff notes that "because of common risk factors, people with HCV are at risk for exposure to hepatitis A virus (HAV) or hepatitis B virus (HBV)." Koff goes on to cite two seminal articles by Keefe (1999, 1995) noting that " underlying chronic liver disease caused by HBV and HCV infection has been reported to predispose patients to an increased risk of complications from HAV infection. These complications are more severe and more likely to be fatal than those in individuals without preexisting hepatic damage." Particularly concern is the devastation of coinfection with an additional viral hepatitis on existing hepatitis C. Koff cites two studies of hepatitis A superinfection that describe "the deleterious effects of acquiring HAV in the presence of underlying HCV or chronic liver disease" -- namely, a much higher prevalence fatal hepatic failure, with the potential for raid hepatic decompensation -- in these cases, less than 6 weeks after exposure.

In the case of Hepatitis B superinfection in patients with Hepatitis C, Koff also notes that the literature supports worse outcomes for hepatitis B superinfection of Hepatitis C. Co-infection appears, across several studies, to be correlated with significantly more complications (e.g. bleeding varices, encephalopathy, hepatocellular carcinoma, spontaneous bacterial peritonitis) than with hepatitis C infection alone.

Vaccination appears to be effective in Hepatitis B patients as well. Koff notes that "Hepatitis A vaccine (inactivated) (Havrix; SmithKline Beecham Biologicals, Rixensart, Belgium) and hepatitis B vaccine (recombinant) (Engerix-B; SmithKline Beecham Biologicals) have been evaluated in patients with chronic liver disease. A multicenter study compared the safety and immunogenicity of hepatitis A vaccine in 46 subjects with chronic HBV infection, 67 subjects with chronic HCV infection, 60 subjects with nonviral chronic liver disease, and 104 healthy control subjects. A total of 800 doses of hepatitis A vaccine, 1,440 enzyme-linked immunosorbent assay units, were administered intramuscularly at months 0 and 6. Hepatitis A vaccine was highly immunogenic, with seroconversion (defined as previously seronegative patients who achieved HAV antibody titers >=33 mIU/mL) occurring in 94.3% to 97.7% of the subjects with chronic liver disease of all types and in 98.2% of the healthy subjects. Measurable geometric mean antibody titers were achieved in all subjects, and, although mean titers were significantly lower in subjects with chronic hepatitis than in controls, an adequate response was observed for most subjects."

Beyond this, Koff suggests that prevaccination and postvaccination testing are warranted, though evidence is indirect (e.g. seroprotection may be achieved in only 75% of subjects with endstage liver disease with standard vaccine dosage and regimens).

More recently, Jakiche et al. (2007) completed a cost-effectiveness analysis of strategies for vaccinating U.S. veterans with hepatitis C virus against hepatitis A and hepatitis B viruses. Notwithstanding that a cost-effectiveness study itself implies some degree of effectiveness of the intervention, Jakiche found that a selective vaccination strategy was most cost-effective -- that is, based on immunity determined by blood testing first -- but that universal vaccination is more effective overall and the incremental cost-effectiveness ratio is minimal (154 dollars per additional patient immune to HAV and HBV).

Citations for Evidence: Koff RS. Risks associated with hepatitis A and hepatitis B in patients with hepatitis C. J Clin Gastroenterol. 2001 Jul;33(1):20-6.
Keeffe EB. Vaccination against hepatitis A and B in chronic liver disease. Viral Hepatitis Rev 1999; 5: 77–88.
Keeffe EB. Is hepatitis A more severe in patients with chronic hepatitis B and other chronic liver diseases? Am J Gastroenterol 1995; 90: 201–5.
Jakiche R, Borrego ME, Raisch DW, Gupchup GV, Pai MA, Jakiche A. The cost-effectiveness of two

other considerations support the offering or providing the service in an individual patient. **D -** The USPSTF recommends against the service. There is moderate or high certainty that the service has no net benefit or that the harms outweigh the benefits. **I -** The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of the service. Evidence is lacking, of poor quality, or conflicting, and the balance of benefits and harms cannot be determined.

	strategies for vaccinating US veterans with hepatitis C virus infection against hepatitis A and hepatitis B viruses. Am J Med Sci. 2007 Jan;333(1):26-34.
21 (1c)	**Clinical Practice Guideline** *Cite the guideline reference; quote the specific guideline recommendation related to the measure and the guideline author's assessment of the strength of the evidence; and summarize the rationale for using this guideline over others.* **Guideline Citation:** CDC Hepatitis A Vaccination Guidelines (accessed on 10/24/2008 at http://www.cdc.gov/hepatitis/HAV/HAVfaq.htm#vaccine) and NIDDK Vaccinations for Hepatitis A and B www.digestive.niddk.nih.gov ACG Chronic Liver Disease: A Primer for Vaccinations www.acg.gi.org (accessed January 2005 **Specific guideline recommendation:** The American College for Gastroenterology notes the following recommendations for vaccination: American College of Gastroenterology. Chronic Liver Disease: A Primer for Vaccinations. • Fifty to 60% of chronic liver disease is due to chronic hepatitis C (HCV), approximately 30% is caused by alcohol, around 10% can be attributed to hepatitis B, and up to 5% is cause by autoimmune hepatitis and primary biliary cirrhosis...Superinfection of hepatitis C with hepatitis A may cause fulminant liver failure; superinfection of hepatitis C with hepatitis B increases the rate of progression of liver disease. Due to the shared risk factors among people acquiring hepatitis A, B, and C and the serious consequences of superinfection, the NIH and the US Veterans Health Administration have recommended that all current chronic hepatitis C patients that have not shown immunity to hepatitis A or B be vaccinated. • Several studies have determined that fulminant hepatitis A is more common in patients with pre-existing chronic liver disease, especially in those patients with chronic hepatitis B or C. • Likewise, hepatitis B is thought to be more problematic in chronic liver disease patients especially those with chronic hepatitis C. In the chronic hepatitis C patient, superinfection with hepatitis B is thought to accelerate the course of disease The CDC has maintained largely similar recommendations since 1999 for Hepatitis A vaccination. Currently, the groups who should be vaccinated against Hepatitis A are as follows: - All children at age 1 year (i.e., 12–23 months). Children who have not been vaccinated by age 2 can be vaccinated at subsequent visits. -- Children and adolescents ages 2–18 who live in states or communities where routine hepatitis A vaccination has been implemented because of high disease incidence.Before 2006, when hepatitis A vaccination was first recommended for all children at age 1 year, vaccination had been targeted to children living in states or communities that had historically high rates of hepatitis A. States, counties, and communities with existing hepatitis A vaccination programs for children aged 2–18 years are encouraged to maintain these programs. In those communities, new efforts focused on routine vaccination of children at age 1 year should enhance, not replace, ongoing programs directed at a broader population of children. - Persons traveling to or working in countries that have high or intermediate rates of hepatitis A. Persons from developed countries who travel to developing countries are at high risk for hepatitis A. The risk for hepatitis A exists even for travelers to urban areas, those who stay in luxury hotels, and those who report that they have good hygiene and that they are careful about what they drink and eat (see Hepatitis A and International Travel for more information). - Men who have sex with men. Sexually active men (both adolescents and adults) who have sex with men should be vaccinated. Hepatitis A outbreaks among men who have sex with men have been reported frequently. Recent outbreaks have occurred in urban areas in the United States, Canada, and Australia. Users of illegal injection and noninjection drugs. During the past two decades, outbreaks of hepatitis A have been reported with increasing frequency among users of both injection and noninjection drugs (e.g., methamphetamine) in North America, Europe, and Australia. - Persons who have occupational risk for infection. Persons who work with HAV-infected primates or with HAV in a research laboratory setting should be vaccinated. No other groups have been shown to be at increased risk for HAV infection because of occupational exposure. - Persons who have chronic liver disease. Persons with chronic liver disease who have never had hepatitis A should be vaccinated, as they have a higher rate of fulminant hepatitis A (i.e., rapid onset of liver

	failure, often leading to death). Persons who are either awaiting or have received liver transplants also should be vaccinated. - Persons who have clotting-factor disorders. Persons who have never had hepatitis A and who are administered clotting-factor concentrates, especially solvent detergent-treated preparations, should be vaccinated. Notably, the CDC has specifically cited "chronic liver disease" in its recommendations: "Vaccination of Persons with Chronic Liver Disease: Susceptible persons with chronic liver disease should be vaccinated. Available data do not indicate a need for routine vaccination of persons with chronic HBV or HCV infections without evidence of chronic liver disease. Susceptible persons who are either awaiting or have received liver transplants should be vaccinated." The NIDDK recommends the following as candidates for Hepatitis A Vaccination: • Candidates for Hepatitis A Vaccination • Children living in areas with high incidence rates of hepatitis A (above the national average). Check with your health department to see if this applies to your area. • High-Risk Populations • Travelers to developing countries with high rates of hepatitis A, including Mexico • Men who have sex with men • Users of illegal drugs • People who work with hepatitis A virus in research settings • People who work with infected nonhuman primates • Recipients of clotting factor concentrates • People with chronic liver disease (because of risk of fulminant hepatitis A) **Guideline author's rating of strength of evidence** (*If different from USPSTF, also describe it and how it relates to USPSTF*)**:** No explicit rating. Consensus opinion based on randomized controlled trials and epidemiological studies, depending on the group at risk. **Rationale for using this guideline over others:** Nationally recognized guidelines in immunization and in hepatology
22 (1c)	**Controversy/Contradictory Evidence** *Summarize any areas of controversy, contradictory evidence, or contradictory guidelines and provide citations.* **Summary:** **Citations:**
23 (1)	**Briefly describe how this measure (as specified) will facilitate significant gains in healthcare quality related to the specific priority goals and quality problems identified above:** Patients with chronic liver disease are at high risk for liver failure and tolerate additional insults, such as Hepatitis A infection, poorly. The increased use of Hepatitis A vaccination in these patients with chronic liver disease may decrease the risk and reduce subsequent complications and cost.
	SCIENTIFIC ACCEPTABILITY OF MEASURE PROPERTIES
	Note: Testing and results should be summarized in this form. However, additional detail and reports may be submitted as supplemental information or provided as a web page URL. If a measure has not been tested, it is only potentially eligible for time-limited endorsement.
24	**Supplemental Testing Information:** attached ☐ **OR** Web page URL:
25 (2b)	**Reliability Testing** **Data/sample:** **Analytic Method:** **Testing Results:**

26 (2c)	**Validity Testing** **Data/sample:** **Analytic Method:** **Testing Results:**
27 (2d)	**Measure Exclusions** *Provide evidence to justify exclusion(s) and analysis of impact on measure results during testing.* **Summary of Evidence supporting exclusion(s):** **Citations for Evidence:** **Data/sample:** **Analytic Method:** **Testing Results:**
28 (2e)	**Risk Adjustment Testing** *Summarize the testing used to determine the need (or no need) for risk adjustment and the statistical performance of the risk adjustment method.* **Data/sample:** **Analytic Method:** **Testing Results:** ►**If outcome or resource use measure not risk adjusted, provide rationale:**
29 (2g)	**Testing comparability of results when more than 1 data method is specified** (*e.g., administrative claims or chart abstraction*) **Data/sample:** **Analytic Method:** **Results:**
30 (2f)	**Provide Measure Results from Testing or Current Use** Results from testing **Data/sample:** We measured a commercial population of 459,196 members. **Methods to identify statistically significant and practically/meaningfully differences in performance:** Compliance to the performance measure is measured using an analysis of the claims data; in this case looking for evidence of hepatitis vaccination or immunity. In addition, where appropriate we analyze patient data collected either from the patient's PHR or during a disease management program. **Results:** We found that of the 290 members who satisfied the denominator, 100 were in the numerator, indicating a compliance rate of 34%.
31 (2h)	**Identification of Disparities** ►If measure is stratified by factors related to disparities (i.e. race/ethnicity, primary language, gender, SES, health literacy), **provide stratified results:** ►If disparities have been reported/identified, but measure is not specified to detect disparities, provide rationale:
	USABILITY
32	***Current Use*** *Testing completed* ***If in use, how widely used*** *Health plan or sytem* ► *If "other," please*

(3)	*describe:* ☐ *Used in a public reporting initiative, name of initiative:* *Sample report attached* ☐ ***OR*** *Web page URL:*
33 (3a)	**Testing of Interpretability** (*Testing that demonstrates the results are understood by the potential users for public reporting and quality improvement*) **Data/sample:** Administrative claims database from health plans; lab results data; patient derived data. **Methods:** The performance measure is similar in message to a clinical alert that has been operational since 2005. Compliance to the clinical alert is measured using an analysis of subsequent claims, in this case the appearance of claims for vaccination. In addition, a feedback tool accompanies every clinical alert message, and includes options indicating agreement or disagreement with the message. **Results:** In practice, fewer than 1% of the respondents disagreed with the medical literature. Roughly 6% showed objective evidence of compliance with the clinical alert.
34 (3b, 3c)	**Relation to other NQF-endorsed™ measures** ►Is this measure similar or related to measure(s) already endorsed by NQF (on the same topic or the same target population)? *Measures can be found at* ***www.qualityforum.org*** *under Core Documents.* *Check all that apply* ☐ Have not looked at other NQF measures ☐ Other measure(s) on same topic ☐ Other measure(s) for same target population ☒ No similar or related measures **Name of similar or related NQF-endorsed™ measure(s):** **Are the measure specifications harmonized with existing NQF-endorsed™ measures?** (select one) ►If not fully harmonized, provide rationale: **Describe the distinctive, improved, or additive value this measure provides to existing NQF-endorsed measures:**
	FEASIBILITY
35 (4a)	***How are the required data elements generated?*** *Check all that apply* ☒ *Data elements are generated concurrent with and as a byproduct of care processes during care delivery (e.g., blood pressure or other assessment recorded by personnel conducting the assessment)* ☐ *Data elements are generated from a patient survey (e.g., CAHPS)* ☒ *Data elements are generated through coding performed by someone other than the person who obtained the original information (e.g., DRG or ICD-9 coding on claims)* ☒ *Other, Please describe: Data obtained through electronic personal health records and telephonic, nurse-driven disease management programs*
36 (4b)	***Electronic Sources*** *All data elements* ►***If all data elements are not in electronic sources, specify the near-term path to electronic collection by most providers:*** ►***Specify the data elements for the electronic health record:***
37 (4c)	***Do the specified exclusions require additional data sources beyond what is required for the other specifications?*** *No* ►***If yes, provide justification:***
38 (4d)	***Identify susceptibility to inaccuracies, errors, or unintended consequences of the measure:*** *Generally, the use of claims data has inherent errors and inaccuracies related to incorrect coding, or missing data, which can result in less specificity in the definition of denominator and /or the numerator. To minimize these errors and inaccuracies, we use clinically enriched data (laboratory results, medication lists) to augment the claims data. In addition where possible, to corroborate the claims data, we solicit feedback from both providers via a feedback form and patients from a personal health record or from a*

	disease management program. *We do not anticipate significant unintended consequences from the implementation of the measure. Our measures are all developed from evidence-based literature or from clinical guidelines and are designed to encourage appropriate care of the patient.* ***Describe how could these potential problems be audited:*** *The inclusion of patient-derived data from a personal health record or through a disease management program may be used to confirm the presence or absence of a medication; ultimately the data sources may be tested against a sample of medical charts.* ***Did you audit for these potential problems during testing?*** *No* ***If yes, provide results:***
39 (4e)	***Testing feasibility*** *Describe what have you learned/modified as a result of testing and/or operational use of the measure regarding data collection, availability of data/missing data, timing/frequency of data collection, patient confidentiality, time/cost of data collection, other feasibility/ implementation issues:* *Multiple sources of corroborating clinical data are necessary to correctly identify patients in the denominator. Earlier testing efforts using specifications similar to HEDIS were more sensitive yet nonspecific. The additional of supporting information for certain diagnostic conditions (e.g., diabetic medications and supplies in addition to ICD9 codes for diabetes) significantly decreased the number identified in the denominator, yet the analysis led to a much higher compliance rate, likely because of the exclusion of fewer false positives in the denominator.*
	CONTACT INFORMATION
40	***Web Page URL for Measure Information*** *Describe where users (implementers) should go for more details on specifications of measures, or assistance in implementing the measure.* ***Web page URL:*** *www.activehealth.net*
41	**Measure Intellectual Property Agreement Owner Point of Contact** **First Name:** Madhavi **MI:** **Last Name:** Vemireddy **Credentials (MD, MPH, etc.):** MD **Organization:** ActiveHealth Management **Street Address:** 102 Madison Avenue **City:** New York **State:** NY **ZIP:** 10016 **Email:** mvemireddy@activehealth.net **Telephone:** 212-651-8200 ext:
42	**Measure Submission Point of Contact** **If different than IP Owner Contact** **First Name:** **MI:** **Last Name:** **Credentials (MD, MPH, etc.):** **Organization:** **Street Address:** **City:** **State:** **ZIP:** **Email:** **Telephone:** ext:
43	**Measure Developer Point of Contact** **If different than IP Owner Contact** **First Name:** **MI:** **Last Name:** **Credentials (MD, MPH, etc.):** **Organization:** **Street Address:** **City:** **State:** **ZIP:** **Email:** **Telephone:** ext:
44	**Measure Steward Point of Contact** **If different than IP Owner Contact** *Identifies the organization that will take responsibility for updating the measure and assuring it is consistent with the scientific evidence and current coding schema; the steward of the measure may be different than the developer.* **First Name:** **MI:** **Last Name:** **Credentials (MD, MPH, etc.):** **Organization:** **Street Address:** **City:** **State:** **ZIP:** **Email:** **Telephone:** ext
	ADDITIONAL INFORMATION
45	**Workgroup/Expert Panel involved in measure development** No workgroup or panel used ►If workgroup used, describe the members' role in measure development:

	►Provide a list of workgroup/panel members' names and organizations:
46	***Measure Developer/Steward Updates and Ongoing Maintenance*** *Year the measure was first released: 2005* *Month and Year of most recent revision: October 2008* *What is the frequency for review/update of this measure? Biennially* *When is the next scheduled review/update for this measure? 2010*
47	**Copyright statement/disclaimers:** This information, including any attachments hereto, is the sole, exclusive, proprietary and confidential property of Active Health Management, Inc., and is for the exclusive use of The National Quality Forum. Any use, copying, disclosure, dissemination or distribution by anyone other than the National Quality Forum is strictly prohibited.
48	**Additional Information:**
49	**I have checked that the submission is complete and any blank fields indicate that no information is provided.** ☒
50	**Date of Submission** (*MM/DD/YY*)**:** 02/09/09

PATIENT & FAMILY ENGAGEMENT

PRIORITY STATEMENT: Engage Patients and Their Families in Managing Their Health and Making Decisions About Their Care

1.1. All providers will routinely solicit and publicly report on their patients' perspectives of care

1.2. All providers will work collaboratively with their patients to assist them in making informed decisions about treatment options consistent with their values and preferences

POPULATION HEALTH

PRIORITY STATEMENT: IMPROVE THE HEALTH OF THE U.S. POPULATION

2.1. The population will be up to date on all high-priority age- and gender-appropriate evidence-based clinical preventive services

2.2. The population will receive recommended evidence-based interventions to improve targeted healthy lifestyle behaviors

2.3. All communities will demonstrate a 10% improvement in their community index of health

2.4. Americans will have all recommended high priority healthy lifestyle behaviors under control

SAFETY

PRIORITY STATEMENT: IMPROVE THE SAFETY OF THE U.S. HEALTH CARE SYSTEM

3.1. All providers will drive all preventable healthcare-associated infections (HAI) to zero

3.2. All providers will drive the incidence of preventable NQF Serious Reportable Events (SRE) to zero

3.3. All hospitals will reduce preventable and premature mortality rates to best-in-class

3.4. All hospitals and their community partners will reduce 30-day mortality rates following hospitalization for select conditions to best-in-class

PALLIATIVE CARE

PRIORITY STATEMENT: GUARANTEE APPROPRIATE AND COMPASSIONATE CARE FOR PATIENTS WITH LIFE-LIMITING ILLNESSES

4.1. All providers will identify, document, and effectively treat physical symptoms (e.g. pain, shortness of breath, constipation, others) at levels acceptable to patients with a life-limiting illness

4.2. All providers will effectively address the psychosocial and spiritual needs of patients with life-limiting illnesses and their families according to their preferences

4.3. All eligible patients will receive high quality palliative care and hospice services

CARE COORDINATION

PRIORITY STATEMENT: ENSURE PATIENTS RECEIVE WELL-COORDINATED CARE ACROSS ALL PROVIDERS, SETTINGS, AND LEVELS OF CARE

5.1. All providers will accurately and completely reconcile medications across the continuum of care (i.e. admission, transfer within and between care providers, discharge, and outpatient appointments) and ensure communication with the next provider of services

5.2. All inpatient and outpatient providers will assess the patient's perspective of the coordination of their care using a validated care coordination survey tool

5.3. All providers will reduce 30-day all-cause readmission rates resulting from poorly coordinated care to best-in-class

5.4. All providers will reduce preventable emergency department (i.e. those that could be avoided with timely access to primary care) visits resulting from poorly coordinated care by 50%

PATIENT-FOCUSED CARE

PRIORITY STATEMENT: GUARANTEE HIGH VALUE CARE ACROSS ACUTE AND CHRONIC EPISODES

6.1. All patients will receive high-value care over the course of their acute or chronic illness

OVERUSE

PRIORITY STATEMENT: ELIMINATE WASTE WHILE ENSURING THE DELIVERY OF APPROPRIATE CARE

7.1. Reduce wasteful and inappropriate care for the top ten targeted areas by 50%

PERFORMANCE MEASURE RULE:
Chronic Liver Disease - Hepatitis A Vaccination

DENOMINATOR

All of the Following are correct:

1. Age >= 18 Years
2. Presence of at least 4 LIVER DISEASE CHRONIC (EXCL HEP A & C) diagnosis in the past 12 months at least 1 month apart

DENOMINATOR EXCLUSIONS

One of the following is correct:

1. Presence of at least 1 HEPATITIS A INFECTION diagnosis in the past
2. If Pregnancy Exclusion Validation is confirmed (see below)

NUMERATOR

One of the following is correct:

1. Presence of at least 1 VACCINE-HEPATITIS A procedure in the past
2. Presence of at least 1 Refill VACCINE-HEP A in the past
3. Presence of patient data confirming at least 1 PDD- HEPATITIS A VAC OBSERVED result in the past
4. Presence of at least 1 HEPATITIS A LABS result in the past
5. Presence of at least 1 HEPATITIS A TESTING procedure in the past

---

Pregnancy Exclusion Validation

One of the following is correct:

1. Presence of at least 1 HCG (LOINC) > 100 in the past 6 months
2. Presence of patient data confirming at least 1 PDD- PREGNANCY in the past 6 months
3. Presence of at least 1 PREGNANCY diagnosis in the past 6 months
4. Presence of at least 1 PREGNANCY RELATED PROCEDURE procedure in the past 6 months

Pregnancy Exclusion Validation Exclusion

One of the following is correct:

1. Presence of at least 1 DELIVERY AND ABORTION (ICD9) diagnosis in the past 3 months
2. Presence of at least 1 HYSTERECTOMY procedure in the past 3 months
3. Presence of at least 1 DELIVERY AND ABORTION (CPT) procedure in the past 3 months
4. Presence of at least 1 refill UTEROTONICS exists in the past 3 months
5. Presence of at least 1 NONVIABLE PREGNANCY diagnosis in the past 3 months

Note: A 3 month time window has been added to certain timeframes in order to account for the inherent delay in the acquisition of administrative claims data.

Note: A current refill is defined as a refill in which the day supply of a drug extends into the end of the measurement window plus a grace period of 30 days.