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)

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	(for NQF staff use) **NQF Review #:** EC-039-08 **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:** Diabetes and Pregnancy: Avoidance of Oral Hypoglycemic Agents
3	**Brief description of measure [1]:** This measure identifies pregnant women with diabetes who are not taking an oral hypoglycemic agent.
4 (2a)	**Numerator Statement:** Patients in the denominator who are not taking an oral hypoglycemic agent **Time Window:** **Numerator Details** (Definitions, codes with description): No Rx claims for diabetic oral agent from 90 days after pregnancy onset date to 120 days after pregnancy onset date Diabetic Oral Agents (Medispan Drug) ==========

Type	GPI Code	Description
GPI	27200010000305	Acetohexamide Tab 250 MG
GPI	27200010000310	Acetohexamide Tab 500 MG
GPI	27200020000305	Chlorpropamide Tab 100 MG
GPI	27200020000310	Chlorpropamide Tab 250 MG
GPI	27200027000310	Glimepiride Tab 1 MG
GPI	27200027000320	Glimepiride Tab 2 MG
GPI	27200027000340	Glimepiride Tab 4 MG
GPI	27200030000305	Glipizide Tab 5 MG
GPI	27200030000310	Glipizide Tab 10 MG
GPI	27200030002900	Glipizide Powder
GPI	27200030007505	Glipizide Tab SR 24HR 2.5 MG
GPI	27200030007510	Glipizide Tab SR 24HR 5 MG
GPI	27200030007520	Glipizide Tab SR 24HR 10 MG
GPI	27200040000305	Glyburide Tab 1.25 MG
GPI	27200040000310	Glyburide Tab 2.5 MG
GPI	27200040000315	Glyburide Tab 5 MG
GPI	27200040002900	Glyburide Powder
GPI	27200040100310	Glyburide Micronized Tab 1.5 MG
GPI	27200040100320	Glyburide Micronized Tab 3 MG
GPI	27200040100330	Glyburide Micronized Tab 4.5 MG
GPI	27200040100340	Glyburide Micronized Tab 6 MG
GPI	27200050000305	Tolazamide Tab 100 MG
GPI	27200050000310	Tolazamide Tab 250 MG
GPI	27200050000315	Tolazamide Tab 500 MG
GPI	27200060000310	Tolbutamide Tab 500 MG
GPI	27234050000320	Nateglinide Tab 60 MG
GPI	27234050000330	Nateglinide Tab 120 MG
GPI	27250050000320	Metformin HCl Tab 500 MG

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

	GPI	27250050000340	Metformin HCl Tab 850 MG
	GPI	27250050000350	Metformin HCl Tab 1000 MG
	GPI	27250050002020	Metformin HCl Oral Soln 500 MG/5ML
	GPI	27250050007520	Metformin HCl Tab SR 24HR 500 MG
	GPI	27250050007530	Metformin HCl Tab SR 24HR 750 MG
	GPI	27250050007560	Metformin HCl Tab SR 24HR Osmotic 500 MG
	GPI	27250050007570	Metformin HCl Tab SR 24HR Osmotic 1000 MG
	GPI	27250050007580	Metformin HCl Tab SR 24HR Modified Release 500 MG
	GPI	27250050007590	Metformin HCl Tab SR 24HR Modified Release 1000 MG
	GPI	27280060000310	Repaglinide Tab 0.5 MG
	GPI	27280060000320	Repaglinide Tab 1 MG
	GPI	27280060000330	Repaglinide Tab 2 MG
	GPI	27500010000310	Acarbose Tab 25 MG
	GPI	27500010000320	Acarbose Tab 50 MG
	GPI	27500010000340	Acarbose Tab 100 MG
	GPI	27500050000310	Miglitol Tab 25 MG
	GPI	27500050000320	Miglitol Tab 50 MG
	GPI	27500050000340	Miglitol Tab 100 MG
	GPI	27550070100320	Sitagliptin Phosphate Tab 25 MG (Base Equiv)
	GPI	27550070100330	Sitagliptin Phosphate Tab 50 MG (Base Equiv)
	GPI	27550070100340	Sitagliptin Phosphate Tab 100 MG (Base Equiv)
	GPI	27607050100320	Pioglitazone HCl Tab 15 MG (Base Equiv)
	GPI	27607050100330	Pioglitazone HCl Tab 30 MG (Base Equiv)
	GPI	27607050100340	Pioglitazone HCl Tab 45 MG (Base Equiv)
	GPI	27607060100320	Rosiglitazone Maleate Tab 2 MG (Base Equiv)
	GPI	27607060100330	Rosiglitazone Maleate Tab 4 MG (Base Equiv)
	GPI	27607060100340	Rosiglitazone Maleate Tab 8 MG (Base Equiv)
	GPI	27992502700320	Sitagliptin-Metformin HCl Tab 50-500 MG
	GPI	27992502700340	Sitagliptin-Metformin HCl Tab 50-1000 MG
	GPI	27997002350320	Glipizide-Metformin HCl Tab 2.5-250 MG
	GPI	27997002350325	Glipizide-Metformin HCl Tab 2.5-500 MG
	GPI	27997002350340	Glipizide-Metformin HCl Tab 5-500 MG
	GPI	27997002400310	Glyburide-Metformin Tab 1.25-250 MG
	GPI	27997002400320	Glyburide-Metformin Tab 2.5-500 MG
	GPI	27997002400330	Glyburide-Metformin Tab 5-500 MG
	GPI	27997802400320	Pioglitazone HCl-Glimepiride Tab 30-2 MG
	GPI	27997802400340	Pioglitazone HCl-Glimepiride Tab 30-4 MG
	GPI	27997802600310	Rosiglitazone Maleate-Glimepiride Tab 4-1 MG
	GPI	27997802600320	Rosiglitazone Maleate-Glimepiride Tab 4-2 MG
	GPI	27997802600340	Rosiglitazone Maleate-Glimepiride Tab 4-4 MG
	GPI	27997802600355	Rosiglitazone Maleate-Glimepiride Tab 8-2 MG
	GPI	27997802600360	Rosiglitazone Maleate-Glimepiride Tab 8-4 MG
	GPI	27998002400320	Pioglitazone HCl-Metformin HCl Tab 15-500 MG
	GPI	27998002400340	Pioglitazone HCl-Metformin HCl Tab 15-850 MG
	GPI	27998002600320	Rosiglitazone Maleate-Metformin HCl Tab 1-500 MG
	GPI	27998002600330	Rosiglitazone Maleate-Metformin HCl Tab 2-500 MG
	GPI	27998002600335	Rosiglitazone Maleate-Metformin HCl Tab 2-1000 MG
	GPI	27998002600350	Rosiglitazone Maleate-Metformin HCl Tab 4-500 MG
	GPI	27998002600355	Rosiglitazone Maleate-Metformin HCl Tab 4-1000 MG
	GPI	27999002506320	*Metformin HCl Tab 500 MG & Dietary Management Cap Pack***
5	**Denominator Statement:** Pregnant women with a diagnosis of non-gestational diabetes prior to pregnancy		
(2a)	**Time Window:**		
	Denominator Details (Definitions, codes with description): - Females only		

- AND meet criteria for RHI's pregnancy Rule (Pregnancy_PMH_PQP)
  - Age >= 12 and <=60
  - >= 2 claims for 'Pregnancy' in any position coming from physician services with an activity gap of 30 days
  - OR have >=1 claim for 'Pregnancy' in any position from a hospital
  - Where the pregnancy onset date is defined as the earliest medical pregnancy claim

- AND date of onset of pregnancy occurred between 730 and 120 days prior to end of measurement year
- AND have Rx eligibility between 90 to 120 days after pregnancy onset date
- AND have a diagnosis of diabetes mellitus prior to pregnancy onset date, as defined by the following RHI criteria (DM_PMH_PQP):
  - >= 2 eligible claims for 'Diabetes' in any position coming from physician services from start of data to AAOD with a 60 day activity gap
  - OR have >=1 claims for 'Diabetes' coming from a hospital from start of data to AAOD with a 60 day activity gap
  - OR >=1 eligible claim for 'Diabetes in any position coming from physician services AND >=2 Rx for 'insulin' or 'oral diabetic agents' from start of data to AAOD
  - AND No claims for 'gestational diabetes' or 'polycystic ovaries'

Diabetes (Diagnosis)

Type	Code	Description
ICD9	250	DIABETES MELLITUS
ICD9	2500	DM WITHOUT MENTION OF COMPLICATION
ICD9	25000	DB W/O COMP TYPE II/UNS NOT UNCNTRL
ICD9	25001	DB W/O COMP TYPE I NOT UNCNTRL
ICD9	25002	DB W/O COMP TYPE II/UNS UNCNTRL
ICD9	25003	DB W/O COMP TYPE I TYPE UNCNTRL
ICD9	2501	DIABETES WITH KETOACIDOSIS
ICD9	25010	DB W/KA TYPE II/UNS NOT UNCNTRL
ICD9	25011	DB W/KETOACIDOS TYPE I NOT UNCNTRL
ICD9	25012	DB W/KETOACIDOS TYPE II/UNS UNCNTRL
ICD9	25013	DB W/KETOACIDOS TYPE I UNCNTRL
ICD9	2502	DIABETES WITH HYPEROSMOLARITY
ICD9	25020	DB W/HYPEROSMLR TYPE II NOT UNCNTRL
ICD9	25021	DB W/HYPEROSMOLR TYPE I NOT UNCNTRL
ICD9	25022	DB W/HYPEROSMLR TYPE II/UNS UNCNTRL
ICD9	25023	DB W/HYPEROSMOLAR TYPE I UNCNTRL
ICD9	2503	DIABETES WITH OTHER COMA
ICD9	25030	DB OTH COMA TYPE II/UNS NOT UNCNTRL
ICD9	25031	DB W/OTH COMA TYPE I NOT UNCNTRL
ICD9	25032	DB W/OTH COMA TYPE II/UNS UNCNTRL
ICD9	25033	DB W/OTH COMA TYPE I UNCNTRL
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	2505	DIAB W/OPHTHALMIC MANIFESTATIONS
ICD9	25050	DB W/OPHTH TYPE II/UNS NOT UNCNTRL
ICD9	25051	DB W/OPHTH TYPE I [JUV] NOT UNCNTRL
ICD9	25052	DB W/OPHTH TYPE II/UNS TYPE UNCNTRL
ICD9	25053	DB W/OPHTH TYPE I [JUV] UNCNTRL
ICD9	2506	DIAB W/NEUROLOGICAL MANIFESTATIONS
ICD9	25060	DB W/NEURO TYPE II/UNS NOT UNCNTRL
ICD9	25061	DB W/NEURO TYPE I [JUV] NOT UNCNTRL
ICD9	25062	DB W/NEURO TYPE II/UNS TYPE UNCNTRL

ICD9	25063	DB W/NEURO TYPE I [JUV] UNCNTRL
ICD9	2507	DIAB W/PERIPHERAL CIRC DISORDERS
ICD9	25070	DB PERIPH CIRC TYPE II NOT UNCNTRL
ICD9	25071	DB W/PERIPH CIRC TYPE I NOT UNCNTRL
ICD9	25072	DB PERIPH CIRC TYPE II/UNS UNCNTRL
ICD9	25073	DB W/PERIPH CIRC D/O TYPE I UNCNTRL
ICD9	2508	DIABETES W/OTH SPEC MANIFESTATIONS
ICD9	25080	DB W/OTH MANIFST TYPE II/UNS NOT UN
ICD9	25081	DB W/OTH MANIFST TYPE I NOT UNCNTRL
ICD9	25082	DB W/OTH MANIFST TYPE II/UNS UNCNTR
ICD9	25083	DB W/OTH MANIFEST TYPE I UNCNTRL
ICD9	2509	DIABETES W/UNSPECIFIED COMPLICATION
ICD9	25090	DB UNS COMP TYPE II/UNS NOT UNCNTRL
ICD9	25091	DB W/UNS COMP TYPE I NOT UNCNTRL
ICD9	25092	DB W/UNS COMP TYPE II/UNS UNCNTRL
ICD9	25093	DB W/UNS COMP TYPE I [JUV] UNCNTRL
ICD9	3572	POLYNEUROPATHY IN DIABETES
ICD9	3620	DIABETIC RETINOPATHY
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	36641	DIABETIC CATARACT
ICD9	6480	DIABETES MELLIT IN PREG
ICD9	64800	MAT DM COMPL PG BRTH/PP UNS EOC
ICD9	64801	MATERNAL DM WITH DELIVERY
ICD9	64802	MATERNAL DM W/DELIV W/CURRENT PPC
ICD9	64803	MATERNAL DM ANTEPARTUM
ICD9	64804	MTRN DM PREVIOUS POSTPARTUM COND
ICD9	V4585	INSULIN PUMP STATUS
ICD9	V5867	LONG-TERM USE OF INSULIN

Insulin (Medispan Drug)

Type	GPI Code	Description
GPI	27103010002010	Insulin Regular (Pork) Inj 100 Unit/ML
GPI	27103020001810	Insulin Isophane (Pork) Inj 100 Unit/ML
GPI	27103040001810	Insulin Zinc (Pork) Inj 100 Unit/ML
GPI	27104002002020	Insulin Aspart Inj 100 Unit/ML
GPI	27104003002020	Insulin Glargine Inj 100 Unit/ML
GPI	27104004002020	Insulin Glulisine Subcutaneous Inj 100 Unit/ML
GPI	27104004002022	Insulin Glulisine Inj 100 Unit/ML
GPI	27104005002020	Insulin Lispro (Human) Inj 100 Unit/ML
GPI	27104006002020	Insulin Detemir Inj 100 Unit/ML
GPI	27104010002005	Insulin Regular (Human) Inj 100 Unit/ML
GPI	27104010002015	Insulin Regular (Human) Inj 500 Unit/ML
GPI	27104010002920	Insulin Regular (Human) Inhalation Powder 1 MG/BLISTER
GPI	27104010002930	Insulin Regular (Human) Inhalation Powder 3 MG/BLISTER
GPI	27104010002960	Insulin Regular (Human) Inhalation Powder 1 & 3 MG/BLISTER
GPI	27104015002005	Insulin Regular (Human) Inj Buffered 100 Unit/ML
GPI	27104020001805	Insulin Isophane (Human) Inj 100 Unit/ML
GPI	27104030001805	Insulin Zinc (Human) Inj 100 Unit/ML

GPI	27104050001805	Insulin Zinc, Extended (Human) Inj 100 Unit/ML
GPI	27104070001820	Insulin Aspart Prot & Aspart (Human) Inj 100 Unit/ML (70-30)
GPI	27104080001820	Insulin Lispro Prot & Lispro (Human) Inj 100 Unit/ML (75-25)
GPI	27104080001840	Insulin Lispro Prot & Lispro (Human) Inj 100 Unit/ML (50-50)
GPI	27104090001810	Insulin Isophane & Regular (Human) Inj 100 Unit/ML (70-30)
GPI	27104090001820	Insulin Isophane & Regular (Human) Inj 100 Unit/ML (50-50)

Diabetic Oral Agents (Medispan Drug)

Type	GPI Code	Description
GPI	27200010000305	Acetohexamide Tab 250 MG
GPI	27200010000310	Acetohexamide Tab 500 MG
GPI	27200020000305	Chlorpropamide Tab 100 MG
GPI	27200020000310	Chlorpropamide Tab 250 MG
GPI	27200027000310	Glimepiride Tab 1 MG
GPI	27200027000320	Glimepiride Tab 2 MG
GPI	27200027000340	Glimepiride Tab 4 MG
GPI	27200030000305	Glipizide Tab 5 MG
GPI	27200030000310	Glipizide Tab 10 MG
GPI	27200030002900	Glipizide Powder
GPI	27200030007505	Glipizide Tab SR 24HR 2.5 MG
GPI	27200030007510	Glipizide Tab SR 24HR 5 MG
GPI	27200030007520	Glipizide Tab SR 24HR 10 MG
GPI	27200040000305	Glyburide Tab 1.25 MG
GPI	27200040000310	Glyburide Tab 2.5 MG
GPI	27200040000315	Glyburide Tab 5 MG
GPI	27200040002900	Glyburide Powder
GPI	27200040100310	Glyburide Micronized Tab 1.5 MG
GPI	27200040100320	Glyburide Micronized Tab 3 MG
GPI	27200040100330	Glyburide Micronized Tab 4.5 MG
GPI	27200040100340	Glyburide Micronized Tab 6 MG
GPI	27200050000305	Tolazamide Tab 100 MG
GPI	27200050000310	Tolazamide Tab 250 MG
GPI	27200050000315	Tolazamide Tab 500 MG
GPI	27200060000310	Tolbutamide Tab 500 MG
GPI	27234050000320	Nateglinide Tab 60 MG
GPI	27234050000330	Nateglinide Tab 120 MG
GPI	27250050000320	Metformin HCl Tab 500 MG
GPI	27250050000340	Metformin HCl Tab 850 MG
GPI	27250050000350	Metformin HCl Tab 1000 MG
GPI	27250050002020	Metformin HCl Oral Soln 500 MG/5ML
GPI	27250050007520	Metformin HCl Tab SR 24HR 500 MG
GPI	27250050007530	Metformin HCl Tab SR 24HR 750 MG
GPI	27250050007560	Metformin HCl Tab SR 24HR Osmotic 500 MG
GPI	27250050007570	Metformin HCl Tab SR 24HR Osmotic 1000 MG
GPI	27250050007580	Metformin HCl Tab SR 24HR Modified Release 500 MG
GPI	27250050007590	Metformin HCl Tab SR 24HR Modified Release 1000 MG
GPI	27280060000310	Repaglinide Tab 0.5 MG
GPI	27280060000320	Repaglinide Tab 1 MG
GPI	27280060000330	Repaglinide Tab 2 MG
GPI	27500010000310	Acarbose Tab 25 MG
GPI	27500010000320	Acarbose Tab 50 MG
GPI	27500010000340	Acarbose Tab 100 MG
GPI	27500050000310	Miglitol Tab 25 MG
GPI	27500050000320	Miglitol Tab 50 MG

	GPI	27500050000340	Miglitol Tab 100 MG
	GPI	27550070100320	Sitagliptin Phosphate Tab 25 MG (Base Equiv)
	GPI	27550070100330	Sitagliptin Phosphate Tab 50 MG (Base Equiv)
	GPI	27550070100340	Sitagliptin Phosphate Tab 100 MG (Base Equiv)
	GPI	27607050100320	Pioglitazone HCl Tab 15 MG (Base Equiv)
	GPI	27607050100330	Pioglitazone HCl Tab 30 MG (Base Equiv)
	GPI	27607050100340	Pioglitazone HCl Tab 45 MG (Base Equiv)
	GPI	27607060100320	Rosiglitazone Maleate Tab 2 MG (Base Equiv)
	GPI	27607060100330	Rosiglitazone Maleate Tab 4 MG (Base Equiv)
	GPI	27607060100340	Rosiglitazone Maleate Tab 8 MG (Base Equiv)
	GPI	27992502700320	Sitagliptin-Metformin HCl Tab 50-500 MG
	GPI	27992502700340	Sitagliptin-Metformin HCl Tab 50-1000 MG
	GPI	27997002350320	Glipizide-Metformin HCl Tab 2.5-250 MG
	GPI	27997002350325	Glipizide-Metformin HCl Tab 2.5-500 MG
	GPI	27997002350340	Glipizide-Metformin HCl Tab 5-500 MG
	GPI	27997002400310	Glyburide-Metformin Tab 1.25-250 MG
	GPI	27997002400320	Glyburide-Metformin Tab 2.5-500 MG
	GPI	27997002400330	Glyburide-Metformin Tab 5-500 MG
	GPI	27997802400320	Pioglitazone HCl-Glimepiride Tab 30-2 MG
	GPI	27997802400340	Pioglitazone HCl-Glimepiride Tab 30-4 MG
	GPI	27997802600310	Rosiglitazone Maleate-Glimepiride Tab 4-1 MG
	GPI	27997802600320	Rosiglitazone Maleate-Glimepiride Tab 4-2 MG
	GPI	27997802600340	Rosiglitazone Maleate-Glimepiride Tab 4-4 MG
	GPI	27997802600355	Rosiglitazone Maleate-Glimepiride Tab 8-2 MG
	GPI	27997802600360	Rosiglitazone Maleate-Glimepiride Tab 8-4 MG
	GPI	27998002400320	Pioglitazone HCl-Metformin HCl Tab 15-500 MG
	GPI	27998002400340	Pioglitazone HCl-Metformin HCl Tab 15-850 MG
	GPI	27998002600320	Rosiglitazone Maleate-Metformin HCl Tab 1-500 MG
	GPI	27998002600330	Rosiglitazone Maleate-Metformin HCl Tab 2-500 MG
	GPI	27998002600335	Rosiglitazone Maleate-Metformin HCl Tab 2-1000 MG
	GPI	27998002600350	Rosiglitazone Maleate-Metformin HCl Tab 4-500 MG
	GPI	27998002600355	Rosiglitazone Maleate-Metformin HCl Tab 4-1000 MG
	GPI	27999002506320	*Metformin HCl Tab 500 MG & Dietary Management Cap Pack***

6

(2a, 2d)

Denominator Exclusions: No claims for gestational diabetes anytime after pregnancy onset date, no diagnosis of miscarriage or abortion anytime after the pregnancy onset date, no claims for polycystic ovaries when determining pre-pregnancy diabetes diagnosis

Denominator Exclusion Details (Definitions, codes with description):
- No claims for 'gestational diabetes' after pregnancy onset date
- No claims for 'miscarriage or abortion' after the pregnancy onset date
- No claims for 'polycystic ovaries' prior to pregnancy onset date

Gestational DM (Diagnosis)

Type	Code	Description
ICD9	6488	ABN MAT GLU TOLRNC COMPL PG BRTH/PP
ICD9	64880	ABN MAT GLU TOLR COMP PG/PP UNS EOC
ICD9	64881	ABNORMAL MTRN GLU TOLERANCE W/DELIV
ICD9	64882	ABN MTRN GLU TOLERNC DEL W/CURR PPC
ICD9	64883	ABNORMAL MTRN GLU TOLERANCE ANTPRTM
ICD9	64884	ABN MTRN GLU TOLERNC PREV PP COND

Miscarriage or Abortion (Diagnosis)

Type	Code	Description

ICD9	630 HYDATIDIFORM MOLE
ICD9	631 OTHER ABNORMAL PRODUCT CONCEPTION
ICD9	632 MISSED ABORTION
ICD9	633 ECTOPIC PREGNANCY
ICD9	6330 ABDOMINAL PREGNANCY
ICD9	63300 ABD PG WITHOUT INTRAUTERINE PG
ICD9	63301 ABD PG W/INTRAUTERINE PG
ICD9	6331 TUBAL PREGNANCY
ICD9	63310 TUBAL PG WITHOUT INTRAUTERINE PG
ICD9	63311 TUBAL PG W/INTRAUTERINE PG
ICD9	6332 OVARIAN PREGNANCY
ICD9	63320 OVARIAN PG WITHOUT INTRAUTERINE PG
ICD9	63321 OVARIAN PG W/INTRAUTERINE PG
ICD9	6338 OTHER ECTOPIC PREGNANCY
ICD9	63380 OTH ECTOPIC PG W/O INTRAUTERINE PG
ICD9	63381 OTH ECTOPIC PG W/INTRAUTERINE PG
ICD9	6339 UNSPECIFIED ECTOPIC PREGNANCY
ICD9	63390 UNS ECTOPIC PG W/O INTRAUTERINE PG
ICD9	63391 UNSPEC ECTOPIC PG W/INTRAUTERINE PG
ICD9	634 SPONTANEOUS ABORTION
ICD9	6340 SPONT AB COMP GENIT TRACT&PELV INF
ICD9	63400 UNSAB COMP GENIT TRACT&PELV INF
ICD9	63401 INCPLAB COMP GENIT TRACT&PELV INF
ICD9	63402 CMPLAB COMP GENIT TRACT&PELV INF
ICD9	6341 SPONT AB COMP DELAY/EXCESS HEMORR
ICD9	63410 UNS SPONT AB COMP DELAY/XCESS HEMOR
ICD9	63411 INCPLAB COMP DELAY/XCESS HEMOR
ICD9	63412 CMPLAB COMP DELAY/XCESS HEMOR
ICD9	6342 SPONT AB COMP DAMGE PELV ORGN/TISS
ICD9	63420 UNSAB COMP DAMGE PELV ORGN/TISS
ICD9	63421 INCPLAB COMP DAMGE PELV ORGN/TISS
ICD9	63422 CMPLAB COMP DAMGE PELV ORGN/TISS
ICD9	6343 SPONTANEOUS AB COMP RENAL FAILURE
ICD9	63430 UNSPEC SPONT AB COMP RENAL FAIL
ICD9	63431 INCPL SPONT AB COMP RENAL FAIL
ICD9	63432 COMPLETE SPONT AB COMP RENAL FAIL
ICD9	6344 SPONTANEOUS AB COMP METAB DISORDER
ICD9	63440 UNSPEC SPONT AB COMP METAB DISORDER
ICD9	63441 INCPL SPONT AB COMP METAB DISORDER
ICD9	63442 CMPL SPONT AB COMP METAB DISORDER
ICD9	6345 SPONTANEOUS AB COMPLICATED SHOCK
ICD9	63450 UNSPEC SPONTANEOUS AB COMP SHOCK
ICD9	63451 INCPL SPONTANEOUS AB COMP SHOCK
ICD9	63452 COMPLETE SPONTANEOUS AB COMP SHOCK
ICD9	6346 SPONTANEOUS AB COMPLICATED EMBOLISM
ICD9	63460 UNSPEC SPONTANEOUS AB COMP EMBOLISM
ICD9	63461 INCOMPLETE SPONTANEOUS AB COMP EMBO
ICD9	63462 COMPLETE SPONTANEOUS AB COMP EMBO
ICD9	6347 SPONTANEOUS AB W/OTH SPEC COMPS
ICD9	63470 UNSPEC SPONT AB W/OTH SPEC COMPS
ICD9	63471 INCPL SPONT AB W/OTH SPEC COMPS
ICD9	63472 COMPLETE SPONT AB W/OTH SPEC COMPS
ICD9	6348 SPONTANEOUS AB W/UNSPEC COMP
ICD9	63480 UNSPEC SPONTANEOUS AB W/UNSPEC COMP
ICD9	63481 INCPL SPONTANEOUS AB W/UNSPEC COMP
ICD9	63482 COMPLETE SPONT AB W/UNSPEC COMP
ICD9	6349 SPONTANEOUS AB WITHOUT MENTION COMP
ICD9	63490 UNSPEC SPONT AB W/O MENTION COMP
ICD9	63491 INCPL SPONT AB WITHOUT MENTION COMP
ICD9	63492 COMPLETE SPONT AB W/O MENTION COMP
ICD9	635 LEGALLY INDUCED ABORTION
ICD9	6350 LEGAL AB COMPL GENIT TRACT&PELV INF
ICD9	63500 UNS LEGL AB COMPL GEN TRCT&PELV INF
ICD9	63501 INCMPL LEGL AB COMPL GENIT&PELV INF
ICD9	63502 CMPL LEGL AB COMPL GENITAL&PELV INF
ICD9	6351 LEGL AB COMPL DELAY/EXCESS HEMORR

	ICD9 63510 UNS LEGL AB COMPL DELAY/EXCESS HEM ICD9 63511 INCMPL LEGL AB COMPL DELAY/XCSS HEM ICD9 63512 CMPL LEGL AB COMPL DELAY/EXCESS HEM ICD9 6352 LEGL AB COMPL DAMGE PELV ORGN/TISS ICD9 63520 UNS LEGL AB COMPL DAMGE PELV ORGN ICD9 63521 LEGL AB COMPL DMGE PELV ORGN INCMPL ICD9 63522 CMPL LEGL AB COMPL DAMGE PELV ORGN ICD9 6353 LEGALLY INDUCED AB COMP RENAL FAIL ICD9 63530 UNS LEGL INDUCD AB COMP RENL FAIL ICD9 63531 INCPL LEGL INDUCD AB COMP RENL FAIL ICD9 63532 CMPL LEGL INDUCD AB COMP RENAL FAIL ICD9 6354 LEGL INDUCD AB COMP METAB DISORDER ICD9 63540 UNS LEGL INDUCD AB COMP METAB D/O ICD9 63541 INCPL LEGL INDUCD AB COMP METAB D/O ICD9 63542 CMPL LEGL INDUCD AB COMP METAB D/O ICD9 6355 LEGALLY INDUCED AB COMP SHOCK ICD9 63550 UNSPEC LEGALLY INDUCD AB COMP SHOCK ICD9 63551 LEGALLY INDUCED AB COMP SHOCK INCPL ICD9 63552 COMPLETE LEGL INDUCD AB COMP SHOCK ICD9 6356 LEGALLY INDUCED AB COMP EMBOLISM ICD9 63560 UNSPEC LEGALLY INDUCED AB COMP EMBO ICD9 63561 INCPL LEGALLY INDUCED AB COMP EMBO ICD9 63562 COMPLETE LEGL INDUCD AB COMP EMBO ICD9 6357 LEGALLY INDUCED AB W/OTH SPEC COMPS ICD9 63570 UNS LEGL INDUCD AB W/OTH SPEC COMPS ICD9 63571 INCPL LEGL INDUCD AB W/OTH COMPS ICD9 63572 CMPL LEGL INDUCD AB W/OTH COMPS ICD9 6358 LEGALLY INDUCED AB W/UNSPEC COMP ICD9 63580 UNSPEC LEGL INDUCD AB W/UNSPEC COMP ICD9 63581 INCPL LEGL INDUCD AB W/UNSPEC COMP ICD9 63582 CMPL LEGL INDUCD AB W/UNSPEC COMP ICD9 6359 LEGL INDUCD AB WITHOUT MENTION COMP ICD9 63590 UNS LEGL INDUCD AB W/O MENTION COMP ICD9 63591 INCPL LEGL INDUCD AB W/O COMP ICD9 63592 CMPL LEGL INDUCD AB W/O COMP ICD9 636 ILLEGALLY INDUCED ABORTION ICD9 6360 ILEG AB COMP GENIT TRACT&PELVIC INF ICD9 63600 UNS ILEG AB COMPL GEN TRCT&PELV INF ICD9 63601 INCMPL ILEG AB COMPL GENIT&PELV INF ICD9 63602 CMPL ILEG AB COMPL GENITAL&PELV INF ICD9 6361 ILEG AB COMPL DELAY/EXCESS HEMORR ICD9 63610 UNS ILEG AB COMPL DELAY/EXCESS HEM ICD9 63611 INCMPL ILEG AB COMPL DELAY/XCSS HEM ICD9 63612 CMPL ILEG AB COMPL DELAY/EXCESS HEM ICD9 6362 ILEG AB COMPL DAMGE PELV ORGN/TISS ICD9 63620 UNS ILEG AB COMPL DAMGE PELV ORGN ICD9 63621 INCMPL ILEG AB COMPL DMGE PELV ORGN ICD9 63622 CMPL ILEG AB COMPL DAMGE PELV ORGN ICD9 6363 ILEG INDUCED AB COMP RENAL FAIL ICD9 63630 UNS ILEG INDUCD AB COMP RENL FAIL ICD9 63631 INCPL ILEG INDUCD AB COMP RENL FAIL ICD9 63632 CMPL ILEG INDUCD AB COMP RENAL FAIL ICD9 6364 ILEG INDUCD AB COMP METAB DISORDER ICD9 63640 UNS ILEG AB COMPL METABOLIC D/O ICD9 63641 INCPL ILEG INDUCD AB COMP METAB D/O ICD9 63642 CMPL ILEG INDUCD AB COMP METAB D/O ICD9 6365 ILLEGALLY INDUCED AB COMP SHOCK ICD9 63650 UNSPEC ILEG INDUCED AB COMP SHOCK ICD9 63651 INCPL ILEG INDUCED AB COMP SHOCK ICD9 63652 COMPLETE ILEG INDUCED AB COMP SHOCK ICD9 6366 ILLEGALLY INDUCED AB COMP EMBOLISM ICD9 63660 UNSPEC ILEG INDUCED AB COMP EMBO ICD9 63661 INCPL ILEG INDUCED AB COMP EMBO ICD9 63662 COMPLETE ILEG INDUCED AB COMP EMBO ICD9 6367 ILEG INDUCED AB W/OTH SPEC COMPS ICD9 63670 UNS ILEG INDUCD AB W/OTH SPEC COMPS

	ICD9 63671 INCPL ILEG INDUCD AB W/OTH COMPS ICD9 63672 CMPL ILEG INDUCD AB W/OTH COMPS ICD9 6368 ILLEGALLY INDUCED AB W/UNSPEC COMP ICD9 63680 UNSPEC ILEG INDUCD AB W/UNSPEC COMP ICD9 63681 INCPL ILEG INDUCED AB W/UNSPEC COMP ICD9 63682 CMPL ILEG INDUCD AB W/UNSPEC COMP ICD9 6369 ILEG INDUCD AB WITHOUT MENTION COMP ICD9 63690 UNS ILEG INDUCD AB W/O MENTION COMP ICD9 63691 INCPL ILEG INDUCD AB W/O COMP ICD9 63692 CMPL ILEG INDUCD AB W/O COMP ICD9 637 LEGALLY UNSPECIFIED ABORTION ICD9 6370 LEGL UNS AB COMP GNT TRACT&PELV INF ICD9 63700 AB UNS-CMPL/LEGL COMPL GEN&PELV INF ICD9 63701 LEGL UNS AB INCMPL COMPL PELV INF ICD9 63702 LEGL UNS AB CMPL COMPL GEN&PELV INF ICD9 6371 LEGL UNS AB COMP DELAY/XCESS HEMORR ICD9 63710 AB UNS CMPL/LEGL COMPL DELAY HEM ICD9 63711 LEGL UNS AB INCMPL COMPL DELAY HEM ICD9 63712 LEGL UNS AB CMPL COMPL DELAY HEM ICD9 6372 LEGL UNS AB COMPL DAMGE PELV ORGN ICD9 63720 AB UNS CMPL/LEGL COMPL DAMGE PELVIC ICD9 63721 LEGL UNS AB INCMPL COMPL DAMGE PELV ICD9 63722 LEGL UNS AB CMPL COMPL DAMGE PELV ICD9 6373 LEGALLY UNSPEC AB COMP RENAL FAIL ICD9 63730 AB UNS AS CMPL/LEGL COMP RENL FAIL ICD9 63731 LEGL UNSPEC AB INCPL COMP RENL FAIL ICD9 63732 LEGL UNSPEC AB CMPL COMP RENAL FAIL ICD9 6374 LEGL UNSPEC AB COMP METAB DISORDER ICD9 63740 AB UNS CMPLNESS/LEGL COMP METAB D/O ICD9 63741 LEGL UNSPEC AB INCPL COMP METAB D/O ICD9 63742 LEGL UNSPEC AB CMPL COMP METAB D/O ICD9 6375 LEGALLY UNSPEC AB COMPLICATED SHOCK ICD9 63750 AB UNSPEC AS CMPL/LEGL COMP SHOCK ICD9 63751 LEGALLY UNSPEC AB INCPL COMP SHOCK ICD9 63752 LEGL UNSPEC AB COMPLETE COMP SHOCK ICD9 6376 LEGALLY UNSPEC AB COMP EMBOLISM ICD9 63760 AB UNSPEC AS CMPL/LEGL COMP EMBO ICD9 63761 LEGALLY UNSPEC AB INCPL COMP EMBO ICD9 63762 LEGL UNSPEC AB COMPLETE COMP EMBO ICD9 6377 LEGALLY UNSPEC AB W/OTH SPEC COMPS ICD9 63770 AB UNS CMPL/LEGL W/OTH SPEC COMPS ICD9 63771 LEGL UNS AB INCPL W/OTH SPEC COMPS ICD9 63772 LEGL UNS AB CMPL W/OTH SPEC COMPS ICD9 6378 LEGALLY UNSPEC AB W/UNSPEC COMP ICD9 63780 AB UNS AS CMPL/LEGL W/UNS COMP ICD9 63781 LEGL UNSPEC AB INCPL W/UNSPEC COMP ICD9 63782 LEGL UNSPEC AB CMPL W/UNSPEC COMP ICD9 6379 LEGL UNSPEC AB WITHOUT MENTION COMP ICD9 63790 UNS TYPE AB UNS CMPL/LEGL W/O COMP ICD9 63791 LEGL UNS AB INCPL W/O MENTION COMP ICD9 63792 LEGL UNS AB CMPL W/O MENTION COMP ICD9 638 FAILED ATTEMPTED ABORTION ICD9 6380 FAILD ATTMP AB COMPL GEN&PELV INF ICD9 6381 FAILATMPT AB COMP DELAY/XCESS HEMOR ICD9 6382 FAILD ATTMP AB COMPL DMGE PELV ORGN ICD9 6383 FAILED ATTEMP AB COMPL RENAL FAILUR ICD9 6384 FAILD ATTEMP AB COMPL METAB D/O ICD9 6385 FAILED ATTEMP AB COMPLICATED SHOCK ICD9 6386 FAILED ATTEMP AB COMPL EMBOLISM ICD9 6387 FAILED ATTEMP AB W/OTH SPEC COMPL ICD9 6388 FAILED ATTEMP AB W/UNSPEC COMP ICD9 6389 FAILED ATTEMP AB W/O MENTION COMPL ICD9 639 COMPS FOLLOW AB/ECTOPIC&MOLAR PG ICD9 6390 GENIT&PELV INF FLW AB/ECTOP&MOLR PG ICD9 6391 DLAY/XCESS HEM FLW AB/ECTOP&MOLR PG ICD9 6392 DMGE PELV ORGN FLW AB/ECTOP&MOLR PG

ICD9	6393	RENL FAIL FOLLOW AB/ECTOP&MOLAR PG
ICD9	6394	METAB D/O FOLLOW AB/ECTOP&MOLAR PG
ICD9	6395	SHOCK FOLLOW AB/ECTOPIC&MOLAR PG
ICD9	6396	EMBO FOLLOW AB/ECTOPIC&MOLAR PG
ICD9	6398	OTH SPEC COMP FLW AB/ECTOP&MOLAR PG
ICD9	6399	UNS COMP FOLLOW AB/ECTOPIC&MOLAR PG
ICD9	64000	THREATENED AB UNSPEC AS EPIS CARE
ICD9	64001	THREATENED ABORTION, DELIVERED

Miscarriage or Abortion_P (Procedure)

Type	Code	Description
ICD9P	6662	SALPINGECTOMY W/REMOVAL TUBAL PG
ICD9P	6901	DILAT&CURET TERMINATION PREGNANCY
ICD9P	6902	DILATION&CURET FOLLOWING DELIV/AB
ICD9P	6951	ASPIRATION CURET UTERUS TERM PG
ICD9P	6952	ASPIRATION CURET FOLLOWING DELIV/AB
ICD9P	6993	INSERTION OF LAMINARIA
ICD9P	743	REMOVAL EXTRATUBAL ECTOPIC PG
ICD9P	7491	HYSTEROTOMY TO TERMINATE PREGNANCY
ICD9P	750	INTRA-AMNIOTIC INJECTION ABORTION
ICD9P	9649	OTHER GENITOURINARY INSTILLATION
CPT4	01964	ANESTHESIA FOR ABORTION PROCEDURES
CPT4	01965	ANESTH, INC/MISSED AB PROC
CPT4	01966	ANESTH, INDUCED AB PROCEDURE
CPT4	59120	SURG TX ECTOP PG;W/SALPINGECT&/OOPH
CPT4	59121	SURG TX ECTOP PG;NO SALPNGECT&/OOPH
CPT4	59130	SURGICAL TX ECTOPIC PG; ABD PG
CPT4	59135	SURG TX ECTOP PG; REQ TOT HYSTERECT
CPT4	59136	SURG TX ECTOP PG; W/PART RES UTERUS
CPT4	59140	SURGICAL TX ECTOPIC PG; CERV W/EVAC
CPT4	59150	LAP TX ECTOP PG; NO SALPNGECT&/OOPH
CPT4	59151	LAP TX ECTOP PG; W/SALPINGECT&/OOPH
CPT4	59812	TX INCMPL AB ANY TRIMESTR CMPL SURG
CPT4	59820	TX MISSED AB CMPL SURG; 1ST TRIMSTR
CPT4	59821	TX MISSED AB CMPL SURG; 2ND TRIMSTR
CPT4	59830	TX SEPTIC ABORTION CMPL SURGICALLY
CPT4	59840	INDUCED ABORTION DILATION&CURETTAGE
CPT4	59841	INDUCED ABORTION BY D&E
CPT4	59850	INDUCED AB-1/> INTRA-AMNIOTIC INJ
CPT4	59851	INDUCED AB-1/> INTRA-AMNIOT INJ; D&
CPT4	59852	INDUCED AB-1/> INJ; W/HYSTEROTOMY
CPT4	59855	INDUCED AB-1/> VAG SUPPOSITORIES;
CPT4	59856	INDUCED AB-VAG SUPPOS; W/D&C &/EVAC
CPT4	59857	INDUCED AB-VAG SUPPOS; W/HYSTEROT
CPT4	59870	UTERN EVAC&CURET HYDATIDIFORM MOLE
HCPCS	S0199	MED INDUCED AB ORAL INGEST MED
HCPCS	S2260	INDUCD AB 17-24 WEEKS ANY SURG METH
HCPCS	S2262	AB MATERNAL INDICATION 25 WEEKS/>
HCPCS	S2265	AB FETAL INDICATION 25-28 WEEKS
HCPCS	S2265	INDUCED ABORTION 25 TO 28 WEEKS
HCPCS	S2266	AB FETAL INDICATION 29-31 WEEKS
HCPCS	S2266	INDUCED ABORTION 29 TO 31 WEEKS
HCPCS	S2267	INDUCED ABORTION 32 WEEKS/GREATER
HCPCS	S2267	AB FETAL INDICATION 32 WEEKS/>

Polycystic Ovaries (Diagnosis)

Type	Code	Description
ICD9	2564	POLYCYSTIC OVARIES

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, 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". 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
336	410	81.95%
27	31	87.10%
16	18	88.89%
52	58	89.66%
199	217	91.71%
59	64	92.19%
883	938	94.14%
17	18	94.44%
70	74	94.59%
249	263	94.68%
25	26	96.15%
41	42	97.62%

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

	3	3	100.00%
	6	6	100.00%
	4	4	100.00%
	2	2	100.00%
	126	126	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)*:

Summary of Evidence (*provide guideline information below*): See Question #21.

Citations for Evidence:

21 **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*

[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.

(1c)	*summarize the rationale for using this guideline over others.* **Guideline Citation:** American Association of Clinical Endocrinologists medical guidelines for clinical practice for the management of diabetes mellitus. AACE Diabetes Mellitus Clinical Practice Guidelines Task Force. Endocr Pract. 2007 May-Jun;13 Suppl 1:1-68. **Specific guideline recommendation:** Diabetes and Pregnancy: Discontinue oral glucose-lowering drugs and start insulin if needed (grade A) **Guideline author's rating of strength of evidence** (*If different from USPSTF, also describe it and how it relates to USPSTF)***:** A **Rationale for using this guideline over others:** The American Association of Clinical Endocrinologists (AACE) is a 6000-member medical professional community of clinical endocrinologists committed to enhancing its members' ability to provide the highest quality of care.
22 (1c)	**Controversy/Contradictory Evidence** *Summarize any areas of controversy, contradictory evidence, or contradictory guidelines and provide citations.* **Summary:** The above AACE recommendation is supported by a similar (though slightly more flexible) recommendation from the American College of Obstetrics and Gyneocology (ACOG), which states, "The use of all oral agents for control of type 2 diabetes mellitus during pregnancy should be limited and individualized until data regarding the safety and efficacy of these drugs become available." **Citations:** ACOG Practice Bulletin. Clinical Management Guidelines for Obstetrician-Gynecologists. Number 60, March 2005. Pregestational diabetes mellitus. ACOG Committee on Practice Bulletins. Obstet Gynecol. 2005 Mar;105(3):675-85.
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):** This measure pertains to pregnant women with a pre-existing diagnosis of diabetes. Women who develop gestational diabetes are not the intended audience for this measure because of increasing evidence that certain oral hypoglycemic agents can be used to treat gestational diabetes. **Citations for Evidence:** Coustan DR. Pharmacological management of gestational diabetes: an overview. Diabetes Care. 2007 Jul;30 Suppl 2:S206-8. **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 --- 2,115 2,300 91.96%
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** Nationally ► If "other," please describe: ☒ Used in a public reporting initiative, name of initiative: Group Insurance Commission of Massachusetts Clinical Practice Improvement Initiative and Care Focused Purchasing 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: **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?** (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	**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: 2005 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-107-08 **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)***:** 10/22/08
2	**Title of Measure:** Pregnant women that had HIV testing.
3	**Brief description of measure [1]:** This measure identifies pregnant women who had an HIV test during their pregnancy.
4 (2a)	**Numerator Statement:** Did the patient have HIV testing (code set PR0142, LC0021) during the following time period: 280 days prior to delivery (PRE-EPIS)? **Time Window:** 280 days prior to a claim for a delivery procedure (code set PR0140, PR0141) AND the diagnosis is Full Term Delivery (code set DX0209) **Numerator Details** (Definitions, codes with description): see attached "Pregnancy Management ebm Alg" document
5 (2a)	**Denominator Statement:** See attached "Pregnancy Management ebm Alg" document for member demographics, build event, and member enrollment **Time Window:** 365 days prior to the common report period end date **Denominator Details** (Definitions, codes with description): see attached "Pregnancy Management ebm Alg" document
6 (2a, 2d)	**Denominator Exclusions:** Diagnosis of HIV infection **Denominator Exclusion Details** (Definitions, codes with description): see attached "Pregnancy Management ebm Alg" document
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*)

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

	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)**:** ICD-9 codes, CPT codes, Revenue codes, and LOINC 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:** not applicable **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 Not applicable
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:** Using a geographically diverse 12 million member benchmark database (this database represents predominately a commercial population less than 65 year of age) the compliance rate was 66 percent, indicating a clear gap in care and opportunity for care improvement. **Citations for Evidence:** Ingenix EBM Connect benchmark results, December 2007
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: not applicable **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)*: USPSTF grade A classification **Summary of Evidence** (*provide guideline information below*)**:** Numerous studies have demonstrated the efficacy of HIV antiretroviral medication in reducing the rate of transmission of HIV from an HIV-infected woman to her infant (1-3). HIV antiretroviral medications administered during pregnancy are considered the most effective means to prevent maternal-fetal HIV transmission. Since antiretroviral therapy can

[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 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.

	reduce maternal-fetal HIV transmission, it is critical that HIV-infected women be identified as soon as possible during their pregnancy. This is the basis for the recommendation that all pregnant women be tested for HIV-infection as part of routine prenatal care (1,4). **Citations for Evidence:** 1. Working Group on Antiretroviral Therapy and Medical Management of HIV-Infected Children. Guidelines for the Use of Antiretroviral Agents in Pediatric HIV Infection. October 26, 2006 1-126. Available at http://aidsinfo.nih.gov/ContentFiles/PediatricGuidelines.pdf. Accessed July 25, 2007 2. Panel on Antiretroviral Guidelines for Adult and Adolescents. Guidelines for the use of antiretroviral agents in HIV-infected adults and adolescents. Department of Health and Human Services. October 10, 2006; 1-113. Available at http://www.aidsinfo.nih.gov/ContentFiles/AdultandAdolescentsGL.pdf. Accessed July 25, 2007. 3. Conner EM, Sperling RS, Gelber R, et. al. Reduction of maternal-infant transmission of HIV-1 with zidovudine treatment. New Engl J Med 1994; 331(18):1173-80. 4. ACOG Committee on Obstetric Practice. ACOG committee opinion number 304, November 2004. Prenatal and perinatal human immunodeficiency virus testing: expanded recommendations. Obstet Gynecol. 2004 Nov;104(5 Pt 1):1119-24.
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:** 1. American Academy of Pediatrics and American College of Obstetricians and Gynecologists. Guidelines for Prenatal Care, 5th Edition. Elk Grove Village, IL, AAP/ACOG, 2002. 2. CDC. Revised recommendations for HIV screening of pregnant women. MMWR 2001; 50(No. RR-19). Available at: http://www.cdc.gov.mmwr/. Accessed November 2005. 3. U.S. Preventive Services Task Force. Screening for HIV: Recommendation Statement. Issued July 2005, amended April 2, 2007. AHRQ Publication No. 07-0597-EF-2. Agency for Healthcare Research and Quality, Rockville, MD. http://www.ahrq.gov/clinic/uspstf05/hiv/hivrs.htm **Specific guideline recommendation:** 1. Universal HIV testing with patient notification should be a routine component of prenatal care; however, this must be in accordance with current state laws. (AAP/ACOG) 2. PHS recommends that all pregnant women in the United States be tested for HIV infection. All health-care providers should recommend HIV testing to all of their pregnant patients, pointing out the substantial benefit of knowledge of HIV status for the health of women and their infants. HIV screening should be a routine part of prenatal care for all women. (CDC) 3. The USPSTF recommends that clinicians screen all pregnant women for HIV. The USPSTF found good evidence that both standard and FDA-approved rapid screening tests accurately detect HIV infection in pregnant women and fair evidence that introduction of universal prenatal counseling and voluntary testing increases the proportion of HIV-infected women who are diagnosed and are treated before delivery. There is good evidence that recommended regimens of HAART are acceptable to pregnant women and lead to significantly reduced rates of mother-to-child transmission. Early detection of maternal HIV infection also allows for discussion of elective cesarean section and avoidance of breastfeeding, both of which are associated with lower HIV transmission rates. There is no evidence of an increase in fetal anomalies or other fetal harm associated with currently recommended antiretroviral regimens (with the exception of efavirenz). Serious or fatal maternal events are rare using currently recommended combination therapies. The USPSTF concluded that the benefits of screening all pregnant women substantially outweigh potential harms. (USPSTF) (A Recommendation) . **Guideline author's rating of strength of evidence** (*If different from USPSTF, also describe it and how it relates to USPSTF)*: USPSTF grade A classification **Rationale for using this guideline over others:** Guidelines cited above represent a thorough and recent review of the literature regarding this topic. They are published by well recognized national organizations.
22	**Controversy/Contradictory Evidence** *Summarize any areas of controversy, contradictory evidence, or contradictory guidelines and provide citations.*

(1c)	**Summary:** Guideline recommendations are consistent. **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:** It will facilitate early diagnosis and management of HIV; a strategy that benefits the mother and, through specific interventions, offers an opportunity to reduce perinatal HIV transmission.
	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:** description attached, see "Testing" document **Analytic Method:** description attached, see "Testing" document **Testing Results:** see attached document, "Benchmark test results"
26 (2c)	**Validity Testing** **Data/sample:** description attached, see "Testing" document **Analytic Method:** description attached, see "Testing" document **Testing Results:** see attached document, "Benchmark test 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):** not applicable **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:** not applicable **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:** description attached, see "Testing" document **Analytic Method:**

	Results:
30 (2f)	**Provide Measure Results from Testing or Current Use** Results from testing **Data/sample:** see attached document, "Benchmark test results" **Methods to identify statistically significant and practically/meaningfully differences in performance:** **Results:**
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** Other ► If "other," please describe: Health plans, physicians (individuals and groups), care management, and other vendors/customers are using this on a national level. ☐ 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:** Results are summarized and reported by users/customers depending on their business need. Therefore, this is no single public reporting format. **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):** Prenatal Care: Screening for HIV (AMA PCPI) **Are the measure specifications harmonized with existing NQF-endorsed™ measures?** Partially harmonized ►If not fully harmonized, provide rationale: Differences between this EBM Connect measure and the AMA Physician Performance Measure "Screening for HIV" specification include the following: 1. Our measure uses episodic logic to identify a full term delivery and then identify any evidence of an HIV test during the time period 280 days prior to the delivery. This increases the chance of identifying the intervention (HIV test)without depending on chart review or submission of a CPT II code. 2. The AMA specification document does not include the most common procedure codes that represent diagnostic HIV antibody testing; these HIV antibody testing procedure codes are included in our measure; 3) Our measure uses LOINC codes, as well as CPT codes, to satisfy numerator compliance. **Describe the distinctive, improved, or additive value this measure provides to existing NQF-endorsed measures:** This measure provides a methodology, including enhanced and complete code sets, that improves claims-based data collection opportunities and accurate measurement of the desired

	intervention.
	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:** none are specific to nor dependent on EHR
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:** If a monitoring test is performed and the specific CPT code or LOINC code is not submitted, then a false negative result will be generated. This could occur, for example, if the patient had HIV testing performed at a confidential testing site. **Describe how could these potential problems be audited:** A chart review audit could define the frequency of this error type. **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: Testing of this measure did not identify any concerns that would cause us to modify code sets or overall logic. Also, cutomers have not notified us of any concerns about the performance of this measure.
	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:** To be defined
41	**Measure Intellectual Property Agreement Owner Point of Contact** **First Name:** Cheri **MI:** **Last Name:** DiGiovanni **Credentials (MD, MPH, etc.):** **Organization:** Ingenix **Street Address:** 1050 Carol Street **City:** Downers Grove **State:** IL **ZIP:** 60516 **Email:** cheri.digiovanni@ingenix.com **Telephone:** 602-276-8913 ext:
42	**Measure Submission Point of Contact** **If different than IP Owner Contact** **First Name:** Kay **MI:** E **Last Name:** Schwebke **Credentials (MD, MPH, etc.):** MD, MPH **Organization:** Ingenix **Street Address:** 12125 Technology Drive **City:** Eden Prairie **State:** MN **ZIP:** 55344 **Email:** kay.schwebke@ingenix.com **Telephone:** 952-833-7154 ext:
43	**Measure Developer Point of Contact** **If different than IP Owner Contact** **First Name:** Kay **MI:** E **Last Name:** Schwebke **Credentials (MD, MPH, etc.):** MD, MPH **Organization:** As above

	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:** Kay **MI:**E **Last Name:**Schwebke **Credentials (MD, MPH, etc.):** MD, MPH **Organization:** As above **Street Address:** **City:** **State:** **ZIP:** **Email:** **Telephone:** ext
	ADDITIONAL INFORMATION
45	**Workgroup/Expert Panel involved in measure development** Workgroup/panel used ►If workgroup used, describe the members' role in measure development: Reviewed relevant research/guideline, participated in the development of measure logic, reviewed code sets, reviewed benchmark results ►Provide a list of workgroup/panel members' names and organizations: see document, "Consultant panel members"
46	**Measure Developer/Steward Updates and Ongoing Maintenance** Year the measure was first released: Fall 2005 Month and Year of most recent revision: February 2007 What is the frequency for review/update of this measure? Consultant panel review due June 2009, and then every 3 years When is the next scheduled review/update for this measure? June 2009
47	**Copyright statement/disclaimers:** see attached "Pregnancy Management ebm Alg" document
48	**Additional Information:** In addition to the attachments referenced above, the following documents are attached. 1. EBM70Technical document 2. EBM70Concepts document Also, our next EBM Connect release, scheduled for November 2008, will include annual code set updates. Therefore, code sets submitted October 2008 might change slightly due to this routine maintenance process. The anticipated impact is minimal.
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*)**:** 10/30/08

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%

INGENIX

Algorithm

Pregnancy Management

Report Case ID: 201500

November 21, 2008

Table of Contents

Code Sets Utilized

Diagnosis Code Sets	DX0059 Hepatitis B DX0065 HIV/AIDS DX0209 Full Term Delivery DX0210 Group B Streptococcus Infection or Carrier State DX0211 Antenatal Screening for Streptococcus B
Procedure and Revenue Code Sets	PR0020 Chlaymdia Screening (HEDIS) PR0107 Professional Encounter Codes RV0107 Professional Encounter Codes PR0108 Professional Supervision PR0140 Delivery, Global Codes PR0141 Delivery, Non-Global Codes PR0142 HIV Test PR0145 ABO Blood TypeTesting PR0146 Rh Blood Type Testing PR0147 Syphilis PR0148 Urine Culture PR0149 Hepatitis B Surface Antigen PR0150 Group B Streptococcus
LOINC Code Sets	LC0005 Chlamydia Species LC0006 Chlamydia Trachomatis LC0014 Obstetric Panel LC0018 Syphilis LC0020 Chlamydia Trachomatis and Neisseria Gonorrhoeae LC0021 HIV Test LC0022 ABO Blood Type Testing LC0023 Rh Blood Type Testing LC0024 ABO/Rh Blood Type Testing LC0025 Hepatitis B Surface Antigen LC0026 Group B Streptococcus

Study Population

Time Frame Requirements

Period	Backward	Forward
Report Period	12m	
Minimum Medical Coverage	throughout event	
Minimum Pharmacy Coverage	throughout event	
Medical Claims Extraction	24m	
Pharmacy Claims Extraction	21m	
Determine Condition (Denom)	12m	
Determine Treatment (Num)	12m	
Physician Attribution	12m	

Rules

Report Rule ID	Rule Stmnt	Headings, Rules & Detail Description
Member Demographics		
1101001	A	All females that are 12 years of age or older at the end of the report period
Build Event		
6105001	A B	*Build Single Episode/Event which identifies deliveries and create a PRE WINDOW of 40 weeks (280 days) duration.* Begin a Single Episode with the earliest claim during the following window of time: 365 days prior to the common report period end date, where there is a claim for a delivery procedure (code set PR0140, PR0141) AND the diagnosis is Full Term Delivery (code set DX0209) **AND** Extend the episode back 280 days (PRE Period - Set Event Start Date to Episode Start Date minus 280)
Member Enrollment		
8102002	A	Patient must have been continuously enrolled in Medical benefits throughout the event *Note: The standard enrollment break logic allows unlimited breaks of no more than 45 days and no breaks greater than 45 days.* (*see Build Single Event.*)
Condition Exclusions		
		None

Intervention Rules

Report Rule ID	Rule Type & Task No.	Headings, Rules & Detail Description
Pregnant women should have HIV testing.		
9000001	**CP-N (139)**	**Pregnant women that had HIV testing.**
▪ **Result Flag (RF):** IF 1 = Y, set RF to NA4, else if 2=Y, set RF to Y, else set RF to N ▪ **EBM Flag (EF):** IF RF = N, set EF = 1, else set EF = 0		
7123001	A	During the 24 months prior to the end of the report period, did the patient have 2 or more that are at least 14 days apart of the following services, where the diagnosis is HIV/AIDS (code set DX0065): ▪ Professional Encounter (code set PR0107, RV0107) ▪ Professional Supervision Code Set (code set PR0108) ▪ Facility Event – Confinement/Admission ▪ Facility Event – Emergency Room ▪ Facility Event – Outpatient Surgery
7123002	A	Did the patient have HIV testing (code set PR0142, LC0021) during the following time period: 280 days prior to delivery (PRE-EPIS)?
Pregnant women should have chlamydia screening.		
9000003	**CP-I (139)**	**Pregnant women less than 25 years of age that had chlamydia screening.**
▪ **Result Flag (RF):** IF 4=N, set RF to NA1, else IF 5=Y, set RF to Y, else set RF to N ▪ **EBM Flag (EF):** IF RF = N, set EF = 1, else set EF = 0		
7123004	A	Was the patient's age < 25 years on the Episode End Date?
7123005	A	Did the patient have chlamydia testing (code set PR0020, LC0005, LC0006, LC0020) during the following time period: 280 days prior to delivery (PRE-EPIS)?
Pregnant women should have blood type testing (ABO and Rh).		
9000005	**CP-N (139)**	**Pregnant women that had ABO and Rh blood type testing.**
▪ **Result Flag (RF):** IF 7=Y AND 8=Y, set RF to Y, else set to N ▪ **EBM Flag (EF):** IF RF = N, set EF = 1, else set EF = 0		
7123007	A	Did the patient have ABO blood type testing (code set PR0145, LC0014, LC0022, LC0024) during the following time period: 280 days prior to delivery (PRE-EPIS)?
7123008	A	Did the patient have Rh blood type testing (code set PR0146, LC0014, LC0023, LC0024) during the following time period: 280 days prior to delivery (PRE-EPIS)?

Pregnancy Management Intervention Rules

Report Case ID: 201500

Report Rule ID	Rule Type & Task No.	Headings, Rules & Detail Description
Pregnant women should have syphilis screening.		
9000006	**CP-I (139)**	**Pregnant women that had syphilis screening.**
▪ **Result Flag (RF):** ▪ **EBM Flag (EF):**		IF 9=Y, set RF to Y, else set RF to N IF RF = N, set EF = 1, else set EF = 0
7123009	A	Did the patient have syphilis screening (code set PR0147, LC0014, LC0018) during the following time period: 280 days prior to delivery (PRE-EPIS)?
Pregnant women should have urine culture.		
9000007	**CP-I (139)**	**Pregnant women that had urine culture.**
▪ **Result Flag (RF):** ▪ **EBM Flag (EF)**:		IF 10=Y, set RF to Y, else set RF to N IF RF = N, set EF = 1, else set EF = 0
7123010	A	Did the patient have a urine culture (code set PR0148) during the following time period: 280 days prior to delivery (PRE-EPIS)?
Pregnant women should have Hepatitis B Surface antigen (HBsAg) testing.		
9000008	**CP-I (139)**	**Pregnant women that had HBsAg testing.**
▪ **Result Flag (RF):** ▪ **EBM Flag (EF):**		IF 11=Y, set RF to Y, else if 12=Y, set RF to NA7, else set RF to N IF RF = N, set EF = 1, else set EF = 0
7123011	A	Did the patient have HBsAg testing (code set PR0149, LC0014, LC0025) during the following time period: 280 days prior to delivery (PRE-EPIS)?
7123012	A	Did the patient have a claim with a diagnosis of Hepatitis B (code set DX0059) during the following time period: 365 days prior to the episode start date?
Pregnant women should have Group B Streptococcus (GBS) testing.		
9000009	**R-2 (136)**	**Pregnant women that received Group B Streptococcus testing.**
▪ **Result Flag (RF):** ▪ **EBM Flag (EF):**		IF 13=Y, set RF to Y, else if 14=Y, set RF to NA7, else set RF to N IF RF = N, set EF = 1, else set EF = 0
7123013	A	Did the patient have Group B Streptococcus testing (code set PR0150, LC0026) OR a diagnosis of Antenatal Screening for Streptococcus B (code set DX0211) during the following time period: 280 days prior to delivery (PRE-EPIS)?
7123014	A	Did the patient have a claim with a diagnosis of Group B Streptococcus (code set DX0210) during the following time period: 280 days prior to delivery (PRE-EPIS)?

Diagnosis Code Sets

The following tables represent the applicable diagnosis code sets for each condition referenced in the Pregnancy Management rules.

DX0059 HEPATITIS B

ICD-9 Code	Description
070.2	VIRAL HEPATITIS B WITH HEPATIC COMA
070.20	VIRL HEP B W/HEP COMA ACUT/UNS W/O HEP DELTA
070.21	VIRAL HEP B W/HEP COMA ACUTE/UNSPEC W/HEP DELTA
070.22	VIRL HEP B W/HEP COMA CHRN W/O MENTION HEP DELTA
070.23	VIRAL HEP B W/HEP COMA CHRONIC W/HEP DELTA
070.3	VIRAL HEPATITIS B WITHOUT MENTION HEPATIC COMA
070.30	VIRL HEP B W/O HEP COMA ACUT/UNS W/O HEP DELTA
070.31	VIRL HEP B W/O HEP COMA ACUT/UNS W/HEP DELTA
070.32	VIRL HEP B W/O HEP COMA CHRN W/O HEP DELTA
070.33	VIRL HEP B W/O MENTION HEP COMA CHRN W/HEP DELTA
V02.61	HEPATITIS B CARRIER

DX0065 HIV/AIDS

ICD-9 Code	Description
042	HUMAN IMMUNODEFICIENCY VIRUS [HIV]
079.53	HIV TYPE 2 IN CCE & UNS SITE
795.71	NONSPECIFIC SEROLOGIC EVIDENCE OF HIV
V08	ASYMPTOMATIC HIV INFECTION STATUS

DX0209 FULL TERM DELIVERY

ICD-9 Code	Description
642.01	BENIGN ESSENTIAL HYPERTENSION WITH DELIVERY
642.02	BEN ESSENTIAL HYPERTENSION W/DELIV W/CURRENT PPC
642.04	BENIGN ESSENTIAL HYPERTENSION PREVIOUS PPC
642.11	HYPERTENSION SEC TO RENAL DISEASE WITH DELIVERY
642.12	HTN SEC RENAL DISEASE W/DELIV W/CURRENT PP COMPL
642.14	HTN SEC RENAL DISEASE PREVIOUS POSTPARTUM COND
642.21	OTHER PRE-EXISTING HYPERTENSION WITH DELIVERY
642.22	OTH PRE-EXISTING HTN W/DELIV W/CURRENT PP COMPL
642.24	OTH PRE-EXISTING HTN PREVIOUS POSTPARTUM COND
642.31	TRANSIENT HYPERTENSION OF PREGNANCY W/DELIVERY
642.32	TRANSIENT HTN PG W/DELIV W/CURRENT PP COMPL
642.41	MILD OR UNSPECIFIED PRE-ECLAMPSIA WITH DELIVERY
642.42	MILD/UNSPEC PRE-ECLAMPSIA W/DELIV W/CURRENT PPC
642.44	MILD/UNSPEC PRE-ECLAMPSIA PREVIOUS PP COND
642.91	UNSPECIFIED HYPERTENSION WITH DELIVERY
643.01	MILD HYPEREMESIS GRAVIDARUM DELIVERED

DX0209 FULL TERM DELIVERY	
643.11	HYPEREMESIS GRAVIDA W/METAB DISTURBANCE DELIV
643.21	LATE VOMITING OF PREGNANCY DELIVERED
643.81	OTHER VOMITING COMPLICATING PREGNANCY DELIVERED
643.91	UNSPECIFIED VOMITING OF PREGNANCY DELIVERED
645.11	POST TERM PG DELIV W/WO MENTION ANTPRTM COND
645.21	PROLONGED PG DELIV W/WO MENTION ANTPRTM COND
646.01	PAPYRACEOUS FETUS DELIV W/WO ANTPRTM COND
646.41	PERIPHERAL NEURITIS IN PREGNANCY WITH DELIVERY
646.42	PERIPH NEURITIS PREGNANCY W/DELIV W/CURRENT PPC
646.51	ASYMPTOMATIC BACTERIURIA IN PREGNANCY W/DELIVERY
646.52	ASX BACTERIURIA PG W/DELIV W/CURRENT PPC
646.54	ASYMPTOMATIC BACTERIURIA PREVIOUS PP COND
646.71	LIVER DISORDERS IN PREGNANCY WITH DELIVERY
646.81	OTHER SPEC COMPLICATION PREGNANCY W/DELIVERY
646.82	OTH SPEC COMPS PREGNANCY W/DELIV W/CURRENT PPC
646.91	UNSPECIFIED COMPLICATION OF PREGNANCY W/DELIVERY
647.01	MATERNAL SYPHILIS COMP PREGNANCY W/DELIVERY
647.02	MTRN SYPHILIS COMP PG W/DELIV W/CURRENT PPC
647.11	MATERNAL GONORRHEA WITH DELIVERY
647.12	MATERNAL GONORRHEA W/DELIVERY W/CURRENT PPC
647.21	OTHER MATERNAL VENEREAL DISEASES WITH DELIVERY
647.22	OTH MATERNAL VENEREAL DZ W/DELIV W/CURRENT PPC
647.31	MATERNAL TUBERCULOSIS WITH DELIVERY
647.32	MATERNAL TUBERCULOSIS W/DELIVERY W/CURRENT PPC
647.41	MATERNAL MALARIA WITH DELIVERY
647.42	MATERNAL MALARIA W/DELIVERY W/CURRENT PPC
647.51	MATERNAL RUBELLA WITH DELIVERY
647.52	MATERNAL RUBELLA W/DELIVERY W/CURRENT PPC
647.61	OTHER MATERNAL VIRAL DISEASE WITH DELIVERY
647.62	OTH MATERNAL VIRAL DISEASE W/DELIV W/CURRENT PPC
647.81	OTH SPEC MATERNAL INF&PARASITIC DISEASE W/DELIV
647.82	OTH SPEC MTRN INF&PARASITIC DZ DELIV W/CURR PPC
647.91	UNSPEC MATERNAL INFECTION/INFESTATION W/DELIVERY
647.92	UNSPEC MATERNAL INF/INFEST W/DELIV W/CURRENT PPC
648.11	MTRN THYROID DYSF DELIV W/WO ANTPRTM COND
648.14	MTRN THYROID DYSF PREVIOUS POSTPARTUM COND/COMP
648.21	MATERNAL ANEMIA, WITH DELIVERY
648.22	MATERNAL ANEMIA W/DELIVERY W/CURRENT PPC
648.41	MATERNAL MENTAL DISORDERS WITH DELIVERY
648.42	MATERNAL MENTAL DISORDERS W/DELIV W/CURRENT PPC
648.51	MATERNAL CONGENITAL CV DISORDERS W/DELIVERY
648.52	MATERNAL CONGEN CV D/O W/DELIV W/CURRENT PPC
648.61	OTH MATERNAL CARDIOVASCULAR DISEASES W/DELIVERY
648.62	OTH MATERNAL CV DISEASES W/DELIV W/CURRENT PPC
648.71	BN&JNT D/O MAT BACK PELVIS&LW LMB W/DEL

DX0209 FULL TERM DELIVERY	
648.72	BN&JNT D/O MAT BACK PELV&LW LMB W/DEL W/PP COMPL
648.81	ABNORMAL MATERNAL GLUCOSE TOLERANCE W/DELIVERY
648.82	ABNORMAL MTRN GLU TOLERNC W/DELIV W/CURRENT PPC
648.84	ABNORMAL MTRN GLU TOLERANCE PREVIOUS PP COND
648.91	OTH CURRENT MATERNAL CCE W/DELIVERY
648.92	OTH CURRENT MATERNAL CCE W/DEL W/CURRNT PP COMPL
650	NORMAL DELIVERY
651.01	TWIN PREGNANCY, DELIVERED
651.11	TRIPLET PREGNANCY, DELIVERED
651.21	QUADRUPLET PREGNANCY, DELIVERED
651.31	TWIN PG W/FETAL LOSS&RETENTION 1 FETUS DELIV
651.41	TRIPLET PG W/FETAL LOSS&RETENTION 1/MORE DELIV
651.51	QUADRUPLET PG W/FETAL LOSS&RETN 1/MORE DELIV
651.61	OTH MX PG W/FETAL LOSS&RETN 1/MORE FETUS DELIV
651.81	OTHER SPECIFIED MULTIPLE GESTATION DELIVERED
651.91	UNSPECIFIED MULTIPLE GESTATION DELIVERED
652.01	UNSTABLE LIE OF FETUS, DELIVERED
652.21	BREECH PRESENTATION W/O MENTION VERSION DELIV
652.31	TRANSVERSE/OBLIQUE FETAL PRESENTATION DELIVERED
652.41	FETAL FACE OR BROW PRESENTATION DELIVERED
652.51	HIGH FETAL HEAD AT TERM, DELIVERED
652.61	MX GEST W/MALPRESENTATION 1 FETUS/MORE DELIV
652.81	OTH SPEC MALPOSITION/MALPRESENTATION FETUS DELIV
653.01	MAJOR ABNORM BONY PELVIS NOT FURTHER SPEC DELIV
653.11	GENERALLY CONTRACTED PELVIS PREGNANCY DELIVERED
653.21	INLET CONTRACTION OF PELVIS PREGNANCY DELIVERED
653.31	OUTLET CONTRACTION OF PELVIS PREGNANCY DELIVERED
653.41	FETOPELVIC DISPROPORTION, DELIVERED
653.51	UNUSUALLY LARGE FETUS CAUS DISPROPRTN DELIVERED
653.61	HYDROCEPHALIC FETUS CAUSING DISPROPRTN DELIVERED
653.71	OTH FETAL ABNORM CAUSING DISPROPRTN DELIVERED
653.81	FETAL DISPROPORTION OF OTHER ORIGIN DELIVERED
653.91	UNSPECIFIED FETAL DISPROPORTION DELIVERED
654.01	CONGENITAL ABNORM PREGNANT UTERUS DELIVERED
654.02	CONGEN ABNORM PG UTERUS DELIV W/MENTION PPC
654.11	TUMORS OF BODY OF UTERUS, DELIVERED
654.12	TUMORS BODY UTERUS DELIVERED W/MENTION PPC
654.14	TUMORS BODY UTERUS POSTPARTUM COND/COMPLICATION
654.21	PREV C/S DELIV DELIV W/WO MENTION ANTPRTM COND
654.31	RETROVERTED&INCARCERATED GRAVID UTERUS DELIVERED
654.32	RETROVRT&INCARCERAT GRAVD UTRUS DELIV W/ PPC
654.41	OTH ABN SHAPE/PSTN GRAVD UTRUS&NGHBR STRCT DELIV
654.42	OTH ABN SHAPE/POS GRAVID UTERUS DEL W/PP COMPL
654.71	CONGENITAL/ACQUIRED ABNORM VAGINA W/DELIVERY
654.72	CONGEN/ACQ ABNORM VAGINA DELIVERED W/MENTION PPC

DX0209 FULL TERM DELIVERY	
654.81	CONGENITAL/ACQUIRED ABNORMALITY VULVA W/DELIVERY
654.82	CONGEN/ACQ ABNORM VULVA DELIVERED W/MENTION PPC
654.91	OTH&UNSPEC ABNORM ORGN&SOFT TISSUES PELV W/DELIV
654.92	OTH&UNS ABN ORGN&SOFT TISS PELVIS DEL W/PP COMPL
659.41	GRAND MULTIPARITY DELIV W/WO ANTPRTM COND
659.51	ELDERLY PRIMIGRAVIDA, DELIVERED
659.61	ELDER MULTIGRAVIDA DELIV W/MENTION ANTPRTM COND
660.01	OBST CAUS MALPOSITION FETUS@ONSET LABR DELIV
660.11	OBSTRUCTION BY BONY PELVIS DURING L&D DELIVERED
660.21	OBST ABN PELV SFT TISS DUR LABRAND DELIV DELIV
660.31	DEEP TRNSVRSE ARREST-OCCIPITOPOSTER-DEL-UNS APC
660.41	SHOULDER DYSTOCIA DURING LABOR&DELIVER DELIVERED
660.51	LOCKED TWINS, DELIVERED
660.91	UNSPECIFIED OBSTRUCTED LABOR WITH DELIVERY
661.01	PRIMARY UTERINE INERTIA WITH DELIVERY
661.11	SECONDARY UTERINE INERTIA WITH DELIVERY
661.21	OTHER AND UNSPECIFIED UTERINE INERTIA W/DELIVERY
661.31	PRECIPITATE LABOR, WITH DELIVERY
661.41	HYPERTON INCOORD/PROLONG UTERINE CONTRACS DELIV
661.91	UNSPECIFIED ABNORMALITY OF LABOR WITH DELIVERY
662.01	PROLONGED FIRST STAGE OF LABOR DELIVERED
662.11	UNSPECIFIED PROLONGED LABOR DELIVERED
662.21	PROLONGED SECOND STAGE OF LABOR DELIVERED
662.31	DELAYED DELIVERY 2 TWIN TRIPLET ETC DELIVERED
664	TRAUMA TO PERINEUM AND VULVA DURING DELIVERY
664.0	FIRST-DEGREE PERINEAL LACERATION DURING DELIVERY
664.01	FIRST-DEGREE PERINEAL LACERATION WITH DELIVERY
664.1	2-DEGREE PERINEAL LACERATION DURING DELIVERY
664.11	SECOND-DEGREE PERINEAL LACERATION WITH DELIVERY
664.2	THIRD-DEGREE PERINEAL LACERATION DURING DELIVERY
664.21	THIRD-DEGREE PERINEAL LACERATION WITH DELIVERY
664.3	FOURTH-DEG PERINEAL LACERATION DURING DELIVERY
664.31	FOURTH-DEGREE PERINEAL LACERATION WITH DELIVERY
664.4	UNSPECIFIED PERINEAL LACERATION DURING DELIVERY
664.41	UNSPECIFIED PERINEAL LACERATION WITH DELIVERY
664.5	VULVAR AND PERINEAL HEMATOMA DURING DELIVERY
664.51	VULVAR AND PERINEAL HEMATOMA WITH DELIVERY
664.8	OTHER SPEC TRAUMA PERINEUM&VULVA DURING DELIVERY
664.81	OTHER SPECIFIED TRAUMA PERINEUM&VULVA W/DELIVERY
664.9	UNSPEC TRAUMA PERINEUM&VULVA DURING DELIVERY
664.91	UNSPECIFIED TRAUMA TO PERINEUM&VULVA W/DELIVERY
665.22	INVERSION UTERUS DELIVERED W/PPC
665.24	INVERSION OF UTERUS, POSTPARTUM
665.31	LACERATION OF CERVIX, WITH DELIVERY
665.41	HIGH VAGINAL LACERATION WITH DELIVERY

DX0209 FULL TERM DELIVERY	
665.51	OTHER INJURY TO PELVIC ORGANS WITH DELIVERY
665.61	DAMAGE TO PELVIC JOINTS AND LIGAMENTS W/DELIVERY
665.71	PELVIC HEMATOMA, WITH DELIVERY
665.81	OTHER SPECIFIED OBSTETRICAL TRAUMA WITH DELIVERY
665.91	UNSPECIFIED OBSTETRICAL TRAUMA WITH DELIVERY
666.02	THIRD-STAGE POSTPARTUM HEMORRHAGE WITH DELIVERY
666.12	OTHER IMMEDIATE POSTPARTUM HEMORRHAGE W/DELIVERY
666.32	POSTPARTUM COAGULATION DEFECTS WITH DELIVERY
667	RETAINED PLACENTA/MEMBRANES WITHOUT HEMORRHAGE
667.0	RETAINED PLACENTA WITHOUT HEMORRHAGE
667.00	RETAIN PLACENTA W/O HEMORR UNSPEC AS EPIS CARE
667.02	RETN PLACNTA W/O HEMORR DEL W/MENTION PP COMPL
667.04	RETAINED PLACENTA WITHOUT HEMORR PP COND/COMP
667.1	RETAINED PRTNS PLACENTA/MEMBRANES WITHOUT HEMORR
667.10	RETN PORTIONS PLACNTA/MEMB W/O HEMORR UNS EOC
667.12	RETN PORTIONS PLCNTA/MEMB W/O HEMORR DEL W/COMPL
667.14	RETN PORTIONS PLACNTA/MEMB W/O HEMOR PP COMPL
669.5	FORCEPS/VAC EXT DELIV WITHOUT MENTION INDICATION
669.50	FORCEPS/VAC EXT DELIV W/O INDICAT UNS EPIS CARE
669.51	FORCEPS/EXTRACTOR DEL W/O INDICATION-DELIVERED
669.6	BREECH EXTRACTION WITHOUT MENTION OF INDICATION
669.60	BREECH XTRAC W/O MENTION INDICAT UNS EPIS CARE
669.61	BREECH XTRAC W/O INDICAT DELIV W/WO ANTPRTM COND
669.7	CESAREAN DELIVERY WITHOUT MENTION OF INDICATION
669.70	C/S DELIV W/O MENTION INDICAT UNS AS EPIS CARE
669.71	C/S DELIV W/O INDICAT DELIV W/WO ANTPRTM COND
669.81	OTH COMP L&D DELIVERED W/WO MENTION ANTPRTM COND
669.91	UNSPEC COMP L&D DELIV W/WO MENTION ANTPRTM COND
671.01	VARICOSE VNS LEGS DELIV W/WO ANTPRTM COND
671.02	VARICOSE VEINS LEGS W/DELIVERY W/MENTION PPC
671.11	VARICOSE VNS VULVA&PERIN DELIV W/WO ANTPRTM COND
671.12	VARICOSE VEINS VULVA&PERIN W/DELIV W/MENTION PPC
671.21	SUP THROMBOPHLEB DELIV W/WO MENTION ANTPRTM COND
671.22	SUP THROMBOPHLEBITIS W/DELIV W/MENTION PPC
V27.0	OUTCOME OF DELIVERY SINGLE LIVEBORN
V27.2	OUTCOME OF DELIVERY TWINS BOTH LIVEBORN
V27.3	OUTCOME DELIVERY TWINS 1 LIVEBORN& 1 STILLBORN
V27.5	OUTCOME DELIVERY OTH MULTIPLE BIRTH ALL LIVEBORN
V27.6	OUTCOME DELIV OTH MULTIPLE BIRTH SOME LIVEBORN
V27.9	OUTCOME OF DELIVERY, UNSPECIFIED

DX0210 GROUP B STREP INFECTION OR CARRIER STATE	
ICD-9 Code	**Description**
041.02	STREPTOCOCCUS INFECTION CCE & UNS SITE GROUP B
V02.51	CARRIER/SUSPECTED CARRIER GROUP B STREPTOCOCCUS

DX0211 ANTENATAL SCREENING FOR STRETOCOCCUS B	
ICD-9 Code	**Description**
V28.6	ANTENATAL SCREENING FOR STREPTOCOCCUS B

Procedure and Revenue Code Sets

The following tables represent the applicable code sets for each procedure that is referenced by the Pregnancy Management rules.

PR0020 CHLAMYDIA SCREENING (HEDIS®)	
CPT® Code	**Description**
87110	Culture, chlamydia, any source
87270	Infectious agent antigen detection by immunofluorescent technique; Chlamydia trachomatis
87320	Infectious agent antigen detection by enzyme immunoassay technique, qualitative or semiquantitative, multiple step method; Chlamydia trachomatis
87490	Infectious agent detection by nucleic acid (DNA or RNA); Chlamydia trachomatis, direct probe technique
87491	Infectious agent detection by nucleic acid (DNA or RNA); Chlamydia trachomatis, amplified probe technique
87492	Infectious agent detection by nucleic acid (DNA or RNA); Chlamydia trachomatis, quantification
87810	Infectious agent detection by immunoassay with direct optical observation; Chlamydia trachomatis

PR0107 PROFESSIONAL ENCOUNTER		
CPT Code	**Specific Encounter Type**	**General Encounter Category**
99201-99215	Office Visit	Outpatient Professional
99217-99220	Observation Care	Observation Care
99221-99239	Inpatient Visit	Inpatient Visit
99241-99245	Office Consult	Outpatient Professional
99251-99263	Inpatient Consult	Inpatient Consult
99271-99275	Confirmatory Consultation	Confirmatory Consultation
99281-99285	ER Physician Visit	ER Professional Visit
99301-99318	Nursing Facility Services	Nursing Facility Services
99341-99350	Home Visit	Outpatient Professional
99381-99397	Preventive Medicine Visit	Outpatient Professional
99401-99429	Counseling/Risk Factor Visit	Counseling/Risk Factor Visit
RV0107 PROFESSIONAL ENCOUNTER		
Rev Code	**Specific Encounter Type**	**General Encounter Category**
0510-0526, 0528-0529	Clinic Visit (Facility Component)	Clinic Visit (Facility Component)
0981	ER Visit (Professional Component)	ER Professional Visit
0983	Clinic Visit (Professional Component)	Outpatient Professional

PR0108 PROFESSIONAL SUPERVISION		
CPT Code	**Specific Encounter Type**	**General Encounter Category**
99321 - 99337	Domiciliary or Rest Home Visit	Rest Home Visit
99339 - 99340	Physician Supervision of Rest Home Patient	Rest Home Supervision
99371 - 99373	Telephone call for consultation or medical management or coordination	Telephonic service
99374 - 99375	Supervision of Home Health Care	Home Care Supervision
99377 - 99378	Physician Supervision of Hospice Care	Hospice Care Supervision
99379 - 99380	Physician Supervision of Nursing Facility Patient	Nursing Facility Supervision
HCPCS Code	**Specific Encounter Type**	**General Encounter Category**
G0182	Physician Supervision of Hospice Care	Hospice Care Supervision

PR0140 DELIVERY, GLOBAL CODES	
CPT Code	**Description**
59400	Routine obstetric care including antepartum care, vaginal delivery (with or w/o episiotomy, and/or forceps) and postpartum care
59510	Routine obstetric care including antepartum care, cesarean delivery (with or w/o episiotomy, and/or forceps) and postpartum care
59610	Routine obstetric care including antepartum care, vaginal delivery (with or w/o episiotomy, and/or forceps) and postpartum care, after previous cesarean delivery
59618	Routine obstetric care including antepartum care, cesarean delivery, and postpartum care, following attempted vaginal delivery after previous cesarean delivery

PR0141 DELIVERY, NON-GLOBAL CODES	
CPT Code	**Description**
59409	Vaginal delivery only (with or w/o episiotomy, and/or forceps)
59410	Vaginal delivery only (with or w/o episiotomy, and/or forceps), including postpartum care
59514	Cesarean delivery only
59515	Cesarean delivery only, including postpartum care
59612	Vaginal delivery only, after previous cesarean delivery (with or w/o episiotomy, and/or forceps)
59614	Vaginal delivery only, after previous cesarean delivery (with or w/o episiotomy, and/or forceps),
59620	Cesarean delivery only, following attempted vaginal delivery after previous cesarean delivery
59622	Cesarean delivery only, following attempted vaginal delivery after previous cesarean delivery,
ICD-9 Code	**Description**
72.0	Low forceps operation
72.1	Low forceps operation with episiotomy
72.2	Mid forceps operation
72.21	Mid forceps operation with episiotomy
72.29	Other mid forceps operation
72.3	High forceps operation
72.31	High forceps operation with episiotomy
72.39	Other high forceps operation
72.4	Forceps rotation of fetal head
72.5	Breech extraction
72.51	Partial breech extraction with forceps to aftercoming head
72.52	Other partial breech extraction
72.53	Total breech extraction with forceps to aftercoming head
72.54	Other total breech extraction
72.6	Forceps application to aftercoming head
72.7	Vacuum extraction
72.71	Vacuum extraction with episiotomy
72.79	Other vacuum extraction
72.8	Other specified instrumental delivery
72.9	Unspecified instrumental delivery
73.0	Artificial rupture of membranes
73.01	Induction of labor by artificial rupture of membranes
73.09	Other artificial rupture of membranes
73.1	Other surgical induction of labor

73.2	Internal and combined version and extraction
73.21	Internal and combined version without extraction
73.22	Internal and combined version with extraction
73.3	Failed forceps
73.4	Medical induction of labor
73.5	Manually assisted delivery
73.51	Manual rotation of fetal head
73.59	Other manually assisted delivery
73.6	Episiotomy
73.8	Operations on fetus to facilitate delivery
73.9	Other operations assisting delivery
73.91	External version to assist delivery
73.92	Replacement of prolapsed umbilical cord
73.93	Incision of cervix to assist delivery
73.94	Pubiotomy to assist delivery
73.99	Other operations to assist delivery
74.0	Classical cesarean section
74.1	Low cervical cesarean section
74.2	Extraperitoneal cesarean section
74.3	Removal of extratubal ectopic pregnancy
74.4	Cesarean section of other specified type
74.9	Cesarean section of unspecified type
74.91	Hysterotomy to terminate pregnancy
74.99	Other cesarean section of unspecified type

PR0142 HIV TEST	
CPT Code	**Description**
86689	Antibody; HTLV or HIV antibody, confirmatory test (eg, Western Blot)
86701	Antibody; HIV-1
86702	Antibody; HIV-2
86703	Antibody; HIV-1 and HIV-2, single assay
87390	Infectious agent antigen detection by enzyme immunoassay technique, qualitative or semiquantitative, multiple step method; HIV-1
87391	Infectious agent antigen detection by enzyme immunoassay technique, qualitative or semiquantitative, multiple step method; HIV-2
87534	Infectious agent detection by nucleic acid (DNA or RNA); HIV-1, direct probe technique
87535	Infectious agent detection by nucleic acid (DNA or RNA); HIV-1, amplified probe technique
87536	Infectious agent detection by nucleic acid (DNA or RNA); HIV-1, quantification
87537	Infectious agent detection by nucleic acid (DNA or RNA); HIV-2, direct probe technique
87538	Infectious agent detection by nucleic acid (DNA or RNA); HIV-2, amplified probe technique
87539	Infectious agent detection by nucleic acid (DNA or RNA); HIV-2, quantification

PR0145 ABO BLOOD TYPE TESTING	
CPT Code	**Description**
80055	**Obstetric panel** This panel must include the following: Blood count, complete (CBC), automated

	and automated differential WBC count (85025 or 85027 and 85004) OR Blood count, complete (CBC), automated (85027) and appropriate manual differential WBC count (85007 or 85009) Hepatitis B surface antigen (HBsAg) (87340) Antibody, rubella (86762) Syphilis test, qualitative (eg, VDRL, RPR, ART) (86592) Antibody screen, RBC, each serum technique (86850) Blood typing, ABO (86900) AND Blood typing, Rh (D) (86901)
86900	Blood typing; ABO

PR0146 RH BLOOD TYPE TESTING	
CPT Code	**Description**
80055	**Obstetric panel** This panel must include the following: Blood count, complete (CBC), automated and automated differential WBC count (85025 or 85027 and 85004) OR Blood count, complete (CBC), automated (85027) and appropriate manual differential WBC count (85007 or 85009) Hepatitis B surface antigen (HBsAg) (87340) Antibody, rubella (86762) Syphilis test, qualitative (eg, VDRL, RPR, ART) (86592) Antibody screen, RBC, each serum technique (86850) Blood typing, ABO (86900) AND Blood typing, Rh (D) (86901)
86901	Blood typing; Rh (D)

PR0147 SYPHILIS	
CPT Code	**Description**
80055	**Obstetric panel** This panel must include the following: Blood count, complete (CBC), automated and automated differential WBC count (85025 or 85027 and 85004) OR Blood count, complete (CBC), automated (85027) and appropriate manual differential WBC count (85007 or 85009) Hepatitis B surface antigen (HBsAg) (87340) Antibody, rubella (86762) Syphilis test, qualitative (eg, VDRL, RPR, ART) (86592) Antibody screen, RBC, each serum technique (86850) Blood typing, ABO (86900) AND Blood typing, Rh (D) (86901)
86592	Syphilis test; qualitative (eg, VDRL, RPR, ART)
86593	Syphilis test; quantitative
86781	Antibody; Treponema pallidum, confirmatory test (eg, FTA-abs)
87285	Infectious agent antigen detection by immunofluorescent technique; Treponema pallidum

PR0148 URINE CULTURE	
CPT Code	**Description**
87086	Urine culture, bacterial, quantitative colony count
87088	Urine culture, bacterial, quantitative colony count, with isolation and presumptive identification of isolates

PR0149 HEPATITIS B SURFACE ANTIGEN	
CPT Code	**Description**
80055	**Obstetric panel** - This panel must include the following: Hemogram, automated, and manual differential WBC count (CBC) (85022) OR Hemogram and platelet count, automated, and automated complete differential WBC count (CBC) (85025) Hepatitis B surface antigen (HBsAg) (87340) Antibody, rubella (86762) Syphilis test, qualitative (e.g., VDRL, RPR, ART) (86592) Antibody screen, RBC, each serum technique (86850) Blood typing, ABO (86900) AND Blood typing, Rh (D) (86901)
87340	Hepatitis B surface antigen (HBsAg)

PR0150 GROUP B STREPTOCOCCUS	
CPT Code	**Description**
87081	Culture, presumptive, pathogenic organisms, screening only;
87149	Culture, typing; identification by nucleic acid probe
87653	Infectious agent detection by nucleic acid (DNA or RNA); Streptococcus, group B, amplified probe technique
87802	Infectious agent detection by immunoassay with direct optical observation, Streptococcus, group B

Laboratory Result Values – LOINC® Code Sets

The following codes represent the lab result values that are referenced in the Pregnancy Management rules.

LC0005 CHLAMYDIA SPECIES

Note	LOINC Code	Component	Property	Time	System	Scale	Method Type	Units
	557-9	CHLAMYDIA SP IDENTIFIED	PRID	PT	GEN	NOM	ORGANISM SPECIFIC CULTURE	
	560-3	CHLAMYDIA SP IDENTIFIED	PRID	PT	XXX	NOM	ORGANISM SPECIFIC CULTURE	

LC0006 CHLAMYDIA TRACHOMATIS

Note	LOINC Code	Component	Property	Time	System	Scale	Method Type	Units
	14463-4	CHLAMYDIA TRACHOMATIS	ACNC	PT	CVX	ORD	ORGANISM SPECIFIC CULTURE	
	14464-2	CHLAMYDIA TRACHOMATIS	ACNC	PT	GENV	ORD	ORGANISM SPECIFIC CULTURE	
	14467-5	CHLAMYDIA TRACHOMATIS	ACNC	PT	URNS	ORD	ORGANISM SPECIFIC CULTURE	
	14470-9	CHLAMYDIA TRACHOMATIS AG	ACNC	PT	CVX	ORD	EIA	
	14471-7	CHLAMYDIA TRACHOMATIS AG	ACNC	PT	GENV	ORD	EIA	
	14474-1	CHLAMYDIA TRACHOMATIS AG	ACNC	PT	URNS	ORD	EIA	
	14509-4	CHLAMYDIA TRACHOMATIS AG	ACNC	PT	CVX	ORD	IF	
	14510-2	CHLAMYDIA TRACHOMATIS AG	ACNC	PT	GENV	ORD	IF	
	14513-6	CHLAMYDIA TRACHOMATIS AG	ACNC	PT	URNS	ORD	IF	
	16600-9	CHLAMYDIA TRACHOMATIS DNA	ACNC	PT	GEN	ORD	PROBE	
	16601-7	CHLAMYDIA TRACHOMATIS DNA	ACNC	PT	UR	ORD	PROBE	
	16602-5	CHLAMYDIA TRACHOMATIS RRNA	ACNC	PT	UR	ORD	PROBE	
2	20993-2	CHLAMYDIA TRACHOMATIS DNA	ACNC	PT	XXX	ORD	PROBE	
	21189-6	CHLAMYDIA TRACHOMATIS DNA	ACNC	PT	CVM	ORD	PROBE.AMP. TAR	
	21190-4	CHLAMYDIA TRACHOMATIS DNA	ACNC	PT	CVX	ORD	PROBE.AMP. TAR	
	21191-2	CHLAMYDIA TRACHOMATIS DNA	ACNC	PT	URTH	ORD	PROBE.AMP. TAR	
	21192-0	CHLAMYDIA TRACHOMATIS DNA	ACNC	PT	URTH	ORD	PROBE	
1	21613-5	CHLAMYDIA TRACHOMATIS DNA	ACNC	PT	XXX	ORD	PROBE.AMP. TAR	
	23838-6	CHLAMYDIA TRACHOMATIS DNA	ACNC	PT	GENF	ORD	PROBE	
	31771-9	CHLAMYDIA TRACHOMATIS AG	ACNC	PT	CVX	ORD		
	31772-7	CHLAMYDIA TRACHOMATIS AG	ACNC	PT	GENV	ORD		

	31775-0	CHLAMYDIA TRACHOMATIS AG	ACNC	PT	URNS	ORD		
	31777-6	CHLAMYDIA TRACHOMATIS AG	ACNC	PT	XXX	ORD		
	42931-6	CHLAMYDIA TRACHOMATIS RRNA	ACNC	PT	UR	ORD	PROBE.AMP. TAR DETECTION LIMIT = 50 IU/ML	
	4993-2	CHLAMYDIA TRACHOMATIS RRNA	ACNC	PT	XXX	ORD	PROBE	
	6349-5	CHLAMYDIA TRACHOMATIS	ACNC	PT	XXX	ORD	ORGANISM SPECIFIC CULTURE	
	6354-5	CHLAMYDIA TRACHOMATIS AG	ACNC	PT	XXX	ORD	EIA	
	6355-2	CHLAMYDIA TRACHOMATIS AG	ACNC	PT	XXX	ORD	IF	
	6356-0	CHLAMYDIA TRACHOMATIS DNA	ACNC	PT	GEN	ORD	PROBE.AMP. TAR	
	6357-8	CHLAMYDIA TRACHOMATIS DNA	ACNC	PT	UR	ORD	PROBE.AMP. TAR	

LC0014 OBSTETRIC PANEL

Note	LOINC Code	Component	Property	Time	System	Scale	Method Type	Units
1	24364-2	OBSTETRIC HCFA 96 PANEL		PT	SER+BLD			

LC0018 SYPHILIS

Note	LOINC Code	Component	Property	Time	System	Scale	Method Type	Units
	11084-1	REAGIN AB	TITR	PT	SER	QN		TITER
	11597-2	TREPONEMA PALLIDUM AB	ACNC	PT	SER	QN		
	17723-8	TREPONEMA PALLIDUM AB	ACNC	PT	SER	ORD	IMMOBILIZATION	
	17724-6	TREPONEMA PALLIDUM AB	ACNC	PT	SER	QN	IF	
	17725-3	TREPONEMA PALLIDUM AB	ACNC	PT	SER	QN	LA	
	17726-1	TREPONEMA PALLIDUM AB.IGG	ACNC	PT	SER	ORD	IF	
	17727-9	TREPONEMA PALLIDUM AB.IGG	ACNC	PT	SER	QN	IF	
	17728-7	TREPONEMA PALLIDUM AB.IGM	ACNC	PT	SER	QN	IF	
	17729-5	TREPONEMA PALLIDUM AB.IGM	ACNC	PT	SER	ORD	IF	
	20507-0	REAGIN AB	ACNC	PT	SER	ORD	RAPID TEST	
	20508-8	REAGIN AB	ACNC	PT	SER	QN	RAPID TEST	
	22461-8	REAGIN AB	ACNC	PT	SER	ORD		
	22462-6	REAGIN AB	ACNC	PT	SER	QN		
	22587-0	TREPONEMA PALLIDUM AB	ACNC	PT	SER	ORD		
	22590-4	TREPONEMA PALLIDUM AB	TITR	PT	SER	QN		TITER
	22592-0	TREPONEMA PALLIDUM AB.IGG	ACNC	PT	SER	QN		
	22594-6	TREPONEMA PALLIDUM AB.IGM	ACNC	PT	SER	QN		
	24110-9	TREPONEMA PALLIDUM AB	ACNC	PT	SER	ORD	EIA	
	24312-1	TREPONEMA PALLIDUM AB	ACNC	PT	SER	ORD	AGGL	

	26009-1	TREPONEMA PALLIDUM AB	TITR	PT	SER	QN	HA	TITER
	31147-2	REAGIN AB	TITR	PT	SER	QN	RAPID TEST	
	34382-2	TREPONEMA PALLIDUM AB	TITR	PT	SER	QN	IF	
	5291-0	REAGIN AB	ACNC	PT	SER	QN	FLOC	
1	5292-8	REAGIN AB	ACNC	PT	SER	ORD	FLOC	
	5392-6	TREPONEMA PALLIDUM AB	ACNC	PT	SER	QN	IMMOBILIZATION	
	5393-4	TREPONEMA PALLIDUM AB	ACNC	PT	SER	ORD	IF	
	5394-2	TREPONEMA PALLIDUM AB	TITR	PT	SER	QN	LA	TITER
	6561-5	TREPONEMA PALLIDUM AB.IGG	ACNC	PT	SER	ORD		
	6562-3	TREPONEMA PALLIDUM AB.IGM	ACNC	PT	SER	ORD		
	660-1	MICROSCOPIC OBSERVATION	PRID	PT	XXX	NOM	DARK FIELD EXAMINATION	
	8041-6	TREPONEMA PALLIDUM AB	ACNC	PT	SER	ORD	HA	

LC0020 CHLAMYDIA TRACHOMATIS AND NEISSERIA GONORRHOEAE

Note	LOINC Code	Component	Property	Time	System	Scale	Method Type	Units
	36902-5	CHLAMYDIA TRACHOMATIS+NEISSERIA GONORRHOEAE DNA	ACNC	PT	XXX	ORD	PROBE.AMP. TAR	
	36903-3	CHLAMYDIA TRACHOMATIS+NEISSERIA GONORRHOEAE DNA	PRID	PT	XXX	NOM	PROBE.AMP. TAR	
	43406-8	CHLAMYDIA TRACHOMATIS+NEISSERIA GONORRHOEAE DNA	ACNC	PT	XXX	ORD	PROBE.AMP. SIG	

LC0021 HIV TEST

Note	LOINC Code	Component	Property	Time	System	Scale	Method Type	Units
	14092-1	HIV 1 AB	ACNC	PT	SER	ORD	IF	
	24012-7	HIV 1 AG	ACNC	PT	SER	ORD		
	29893-5	HIV 1 AB	ACNC	PT	SER	ORD	EIA	
	31201-7	HIV 1+2 AB	ACNC	PT	SER	ORD	EIA	
	5221-7	HIV 1 AB	ACNC	PT	SER	ORD	IB	
	5222-5	HIV 1 AG	ACNC	PT	SER	ORD	EIA	
	7917-8	HIV 1 AB	ACNC	PT	SER	ORD		
	7918-6	HIV 1+2 AB	ACNC	PT	SER	ORD		

LC0022 ABO BLOOD TYPE TESTING

Note	LOINC Code	Component	Property	Time	System	Scale	Method Type	Units
	883-9	ABO GROUP	TYPE	PT	BLD	NOM		

LC0023 RH BLOOD TYPE TESTING

Note	LOINC Code	Component	Property	Time	System	Scale	Method Type	Units

	10331-7	RH	TYPE	PT	BLD	NOM		
	34961-3	RH	TYPE	PT	BLD	NOM	CONFIRM	

LC0024 ABO/RH BLOOD TYPE TESTING

Note	LOINC Code	Component	Property	Time	System	Scale	Method Type	Units
	34530-6	ABO & RH GROUP PANEL	TYPE	PT	BLD	NOM		
	882-1	ABO+RH GROUP	TYPE	PT	BLD	NOM		
	884-7	ABO+RH GROUP	TYPE	PT	BLDC	NOM		

LC0025 HEPATITIS B SURFACE ANTIGEN

Note	LOINC Code	Component	Property	Time	System	Scale	Method Type	Units
	10674-0	HEPATITIS B VIRUS SURFACE AG	ACNC	PT	TISS	ORD	IMMUNE STAIN	
	10675-7	HEPATITIS B VIRUS SURFACE AG	PRID	PT	TISS	NOM	ORCEIN STAIN	
	7905-3	HEPATITIS B VIRUS SURFACE AG	ACNC	PT	SER	ORD	NEUT	

LC0026 GROUP B STREPTOCOCCUS

Note	LOINC Code	Component	Property	Time	System	Scale	Method Type	Units
	11266-4	STREPTOCOCCUS AGALACTIAE AG	ACNC	PT	XXX	ORD		
	20488-3	STREPTOCOCCUS AGALACTIAE AG	ACNC	PT	CSF	ORD		
	5034-4	STREPTOCOCCUS AGALACTIAE RRNA	ACNC	PT	XXX	ORD	PROBE	
	584-3	STREPTOCOCCUS AGALACTIAE IDENTIFIED	PRID	PT	GENV	NOM	ORGANISM SPECIFIC CULTURE	
	6551-6	STREPTOCOCCUS AGALACTIAE AG	ACNC	PT	THRT	ORD	IF	

Notes:

(1) When using lab results data that has not been mapped to a LOINC code, customers should map the comparable vendor specific test number provided by their laboratory vendor(s) to one of these “default” codes.

(2) This is a deprecated code which may be present on historical data, or which some laboratories may be continuing to use. Result records with these codes are included on the definition of this test.

Pregnancy Management Glossary

<table>
<tr><th>Term</th><th>Definition</th></tr>
<tr><td>℞</td><td>The presence of ℞ in the Report Rule ID column indicates that the rule candidate is exclusively or primarily dependent on pharmacy claims information. Members who do not have a managed pharmacy benefit, as determined from the Member Term input data file, will be assigned a default value of ‘N’ for these rule candidates, thus eliminating unnecessary processing time.</td></tr>
<tr><td>Result Flag ‘Y’</td><td>A Result Flag of ‘Y’ is assigned to indicate that the result of the rule is affirmative; the treatment was provided, the diagnostic test was performed, the lab value was normal, etc. If a rule has an affirmative result, the result flag of Y will be assigned regardless of the patient’s length of eligibility.</td></tr>
<tr><td>Result Flag ‘N’</td><td>A Result Flag of ‘N’ is assigned to indicate that the result of the rule is negative AND the patient met the minimum eligibility requirements for that particular rule. For example, if the rule is looking for a drug within the last 120 days, the patient must be enrolled in a drug benefit for at least the last 120 days.</td></tr>
<tr><td>Result Flag ‘Q’</td><td>A Result Flag of ‘Q’ is assigned to indicate that there was no claim record indicating that the patient received a particular test or treatment, but there may be data incompleteness due to lack of continuous enrollment. If a patient is not continuously enrolled in medical or pharmacy benefits throughout the window of time during which the service was being evaluated, there is no way to know whether the test was performed or not. The absence of a claim record for the test might be due to data incompleteness prior to the onset of medical benefits, or it might reflect the fact that the patient did not actually receive the test.</td></tr>
<tr><td>Result Flag ‘NA’</td><td>A Result Flag of ‘NA’ is assigned to indicate that the member has clinical characteristics or contraindications that render a particular rule “not applicable” to that particular member. There are seven (7) breakdowns of the NA result flag, which provide a method for further identification and clarification of this flag:
<table>
<tr><th>FLAG</th><th>DESCRIPTION</th></tr>
<tr><td>NA1</td><td>Patient did not meet the age or gender criteria.</td></tr>
<tr><td>NA2</td><td>Patient was not currently taking the medication in question or had not taken it for the required duration.</td></tr>
<tr><td>NA3</td><td>Patient was taking the medication, but a possession ratio could not be computed [less than two prescriptions during the rule time window].</td></tr>
<tr><td>NA4</td><td>Patient did not meet the rule specific criteria [e.g., co-morbidity, complexity (diagnosis and medication), intervention not warranted].</td></tr>
<tr><td>NA5</td><td>No lab result record or insufficient information.</td></tr>
<tr><td>NA6</td><td>Patient admitted to long term care facility or hospital which might cause data incompleteness.</td></tr>
<tr><td>NA7</td><td>Patient who did not receive treatment or medication had a contraindication or other justification.</td></tr>
</table></td></tr>
<tr><td>Result Flag ‘NRX’</td><td>A Result Flag of ‘NRX’ is assigned under the following circumstances to the rule types noted below: 1) the member did not have a pharmacy benefit at the end of the report period (applies to chronic and some preventive cases (case ID = 1xxxxx or 3xxxxx)) or 2) the member did not have a pharmacy benefit throughout the duration of episodic condition (case ID = 2xxxxx).

Research Based rules (R-1, R-2)
Medication Adherence rules (A)
Patient Safety rules (S-M, S-DI)

These rule types are exclusively or primarily dependent on pharmacy claims. For Care Pattern rules (CP-I, CP-R, CP-E), a Q flag will be assigned if the patient does not meet the minimum pharmacy eligibility requirements for the particular rule. In addition to the above, some national standard rules may also have NRX flags assigned if the member did not have pharmacy benefit at the end of the report period.</td></tr>
<tr><td>MCE</td><td>In order to assign a Result Flag of 'Q', each rule has a specific Minimum Continuous Enrollment (MCE) period for medical and pharmacy benefits which reflects the time frame of the recommended services (e.g., if the rule is looking for a test within 12 months the medical MCE is 12 months). When a test or treatment is absent, the MCE is used to determine whether to assign a result flag of ‘N’ or ‘Q’. A Result Flag of ‘N’ is assigned when the patient meets the MCE requirements. A Result Flag of ‘Q’ is assigned when the patient does not meet the MCE requirements.</td></tr>
</table>

INGENIX®

Quality Processes

10/27/08

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Table of Contents

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Section 1 - Overview

1.1 Purpose of Document

This document describes the quality processes from clinical measure creation to final product delivery. These processes ensure that the information provided to our clients has maximum quality and integrity.

1.2 Overview

Evidence-based treatment guidelines have been developed with the belief that adherence to them lowers costs, increases quality of care, or both. Health service organizations, payers, and employers want to provide the best care at the best cost. By integrating clinically relevant research evidence with actual care patterns, as evidenced through claims and other administrative data, gaps in care can be identified and interventions can be targeted to improve outcomes (cost and quality).

Measures are created through a well-defined process involving careful review at every step. Quality checks are performed in five different phases of development:

1. Clinical Measure Creation
2. Conversion of Clinical Measures to Machine Code
3. Clinical Measures Processing Engine (i.e., component-ware)
4. End to End Testing (Customer Acceptance Testing)
5. Validation of Results

1.3 Testing Through Multiple Methods

Quality assurance of each measure is accomplished through the testing using multiple methods. Types of testing, data samples and volume vary to ensure the integrity of the measure. Rigorous development, analysis and testing processes are deployed for creating of the measure specifications. Software testing ensures the software is working as designed. Reliability and validity testing of measures is based on differing data samples and volume of members. National benchmarks are created on a large volume set of data representing members throughout the United States. All quality checks for all measure results must have consistent results and meet expected outcomes based on industry knowledge and experience.

Section 2 - Quality Processes

2.1 Creation of Clinical Measures

2.1.1 Literature Review

The process of measure creation begins with the clinician, who reviews published literature on evidence-based medicine. Various resources are examined, including but not limited to:

- MEDLINE
- Professional and specialty organization (e.g. ADA, ACC/AHA) guidelines
- Agency for Healthcare Research and Quality (AHRQ) including national clearinghouse guidelines
- National standards (e.g. HEDIS, AMA PCPI, AQA, NQF)
- Institute for Clinical Systems Improvement (ICSI)
- Food and Drug Administration (FDA) Advisories
- Published clinical trials and other relevant articles

- Pharmaceutical manufacturer's recommendations

Based upon the supporting literature and the ability to adequately define and measure care using electronic claims data, proposed new measures are developed. Note: this same process is employed when deciding whether to update or retire an existing measure.

2.1.2 Expert Panel Review

The proposed measures and current treatment guidelines are then reviewed by the Clinical Consultant Panel. This expert panel plays a critical role in the creation and maintenance of measures. The panel is currently comprised of 21 clinicians, including 18 physicians and 3 Pharmacologists. Each physician is board certified in their area of specialty and has more than 15 years of clinical practice.

The specialties / sub-specialties represented on the panel are:

Specialty	
Cardiology (2)	Oncology
Endocrinology	Ophthalmology
Family Practice	Orthopedics
Gastrointestinal	Otolaryngology
Geriatrics	Pediatrics
Hematology	Psychiatry (2)
Infectious Disease	Pulmonary
Internal Medicine	Rad Oncology
Nephrology	Rheumatology
Neurology (4)	Surgery
OB/GYN	

The physicians on the panel are practicing physicians in settings such as a university hospital, VA hospital, medical center, clinic, independent or group practice. The Pharmacologists have more than 10 years of clinical practice. All clinicians, with the exception of the Medical Director, have no affiliation with UnitedHealth Group outside of their responsibilities on the Clinical Consultant Panel. An annual training session is held for all panel members to provide updates on future product enhancements.

2.1.3 Summary of Evidence Basis

When the expert panel has reached consensus on the proposed measures, a synopsis of the evidence basis for each measure is developed. This synopsis includes citations for published research and guidelines that support the measure, as well as strength of evidence ratings when these rankings are available.

2.1.4 Clinical Algorithms

In conjunction with the synopsis a clinical algorithm is developed which indicates how to define and evaluate the clinical measures. This document includes condition confirmation criteria, exclusion rules, intervention rules, and compliance criteria, as well as high-level details of diagnostic, procedural, revenue, pharmaceutical, and laboratory code sets. These code sets are defined and maintained in a secure product database.

2.1.5 Maintenance Review Cycle

Existing measures are reviewed every 12-24 months as part of an ongoing product maintenance cycle. Any member of the expert panel may suggest changes to a measure at any point, even outside of the regular review cycle, if new evidence is published which relates to the measure.

2.2 Conversion of Clinical Measures into Software Code

The clinical algorithms are converted into software code. A team of business analysts, nurses, and health services researchers translates the words from the clinical algorithm into machine readable language. The team members independently peer review and sign off on each measure to ensure that the software code accurately reflects the original measure specifications.

2.3 Testing of Engine Software Code

The software code from is processed to produce compliance results. Per the product development life cycle there are multiple types of testing activities associated with this component-ware engine. Security requirements, performance requirements, legal requirements (e.g. HIPAA), content requirements, and usability are all tested and verified.

2.3.1 Unit and Integration Testing

During unit and integration testing each engine component is tested discretely by the developer or software engineer who programmed it. In unit testing the developer tests functional features, environmental requirements, system behavior and performance aspects. When the software moves into integration testing, the developer performs positive and negative testing of system interfaces to verify that the functions which were tested at the unit level perform correctly in a full system build and deployment.

2.3.2 Functional Testing

Functional testing is conducted at the end of each software iteration to test the alignment of the product to the functional requirements. The QA team performs positive and negative testing of product requirements and architecture. At the end of functional testing, the decision is made either to move on to the next iteration or to move the software into system testing.

2.3.3 System Testing

There are three types of system testing initiatives which are conducted using sample data to simulate business processes. The table below describes the purpose of each type of system test.

Test Type	Description
Volume testing	Determine whether the engine can handle the required volume of data
Performance testing	Determine whether the engine meets its performance requirements
Platform testing	Ensure that the component-ware works appropriately for all supported operating systems

2.4 Reliability Testing

Customer Acceptance Testing (CAT) is another important quality process. CAT ensures that the clinical measures are functioning as intended and that they generate accurate results for typical billing patterns. Using actual claims data a team of business analysts, nurses, and health services researchers conducts a detailed analysis of the output. For each clinical condition in the product (e.g., Diabetes Mellitus, Coronary Artery Disease, etc.) there is a set of CAT data with at least 4000 members who satisfy the condition confirmation criteria. This data is extracted from a large (50+ million member) multi-payer benchmark database and contains inpatient, outpatient, pharmacy, and laboratory data. The testing team rigorously checks the creation of denominators (target population), numerators, and exclusions from both.

Regression testing is the part of CAT that verifies the reliability of the product across software releases. For a new release the testing team confirms that every unchanged measure produces the same results as in previous releases, accounting for systematic changes to the software (e.g., code updates, logic changes, etc). Regression testing is conducted at multiple points throughout the software development cycle.

2.5 Validity Testing

Face Validity Testing (FVT) is the final testing step in the software release cycle. One million members are randomly selected from the large multi-payer benchmark database and their claims data is processed through the software. The Medical Director reviews the results to verify that:

- Prevalence rates for a condition are comparable to nationally published rates
- Compliance rates for a measure are comparable to the rates reported in the published literature or by other national sources (e.g. HEDIS). If no comparable sources are available, the rates are judged to be clinically reasonable by practicing physicians and health services researchers
- There are no significant, unexplained variations when looking at results from different health plans and different geographic areas

2.6 Creation of National Benchmarks

National benchmarks are on a population no less than 12 million members. Prevalence is calculated doe each condition. Compliance rates are calculated for each measure.
The Medical Director reviews the results to verify that:

- Prevalence rates for a condition are comparable to nationally published rates
- Compliance rates for a measure are comparable to the rates reported in the published literature or by other national sources (e.g. HEDIS). If no comparable sources are available, the rates are judged to be clinically reasonable by practicing physicians and health services researchers
- There are no significant, unexplained variations when looking at results from different health plans and different geographic areas

Section 3 - Summary

Ensuring quality in the product requires expertise from a variety of disciplines across each step in the development process. These efforts, which are designed to minimize the risk of producing inaccurate results, are particularly important for an application which assesses clinical care and identifies gaps in care. Errors cannot be completely eliminated due to the inherent limitations of administrative and claims data (e.g., incomplete data due to coverage and benefit limitations, coordination across multiple insurers, or complimentary care). None-the-less, administrative and claims data offer a cost effective means of identifying gaps in care, so that limited resources can be directed to the areas most likely to generate a return on investment, either through improved outcomes, reduced costs, or both.

INGENIX®

Input Guide

Release 7.0, Technical Guide for Windows, February 2008

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What Input Files to Prepare

The following list specifies what input files you prepare for processing:

- The claims data file (required)
- The member data file (required)
- The member term data file (required)

Field Type Definitions and Input File Requirements

This chapter lists the field requirements for your input files. One of the attributes listed among the requirements is defined as "Type". There are four field types used to describe a field's value, and they are defined below.

Field Type	Definition
AlphaNum	A value made of letters and/or numbers. If a value of this type is made of numbers only, it will not be a value that can be operated on mathematically. For example, it would be inappropriate to subtract one procedure code from another procedure code even though both values may contain only numbers.
Num	A value made of numbers only, and which can logically be operated on mathematically. Age is an example of this type. One particular field, while not used in mathematical calculations, is defined in the EBM Connect software as such that it accepts only numeric values. (To enter a non-numeric value would cause EBM Connect processing to stop.) Therefore, this field is defined as Num. It is the Case ID field in the optional disease registry input file.
Date	A value which can be interpreted as a date value. Values should always use four-digit years but the format may vary otherwise.
DecNum	A value made of numbers and a decimal point. These values can also logically be operated on mathematically.

Claims Input File

The claims file contains detailed information on services that were billed or performed or otherwise rendered. The claims file includes:

- Medical claims, including medical services, facility services and clinic services
- Pharmacy claims, including billed prescriptions and drugs
- Lab claims, including lab test and results information

Field Name	Type	Length	Required or Optional
Family ID	AlphaNum	1-30	Always required for all claims
Patient ID	AlphaNum	0-2	Optional
Amount Paid	DecNum	1-11	Required for all claims
Amount Allowed	DecNum	0-11	Required for all claims
Procedure Code	AlphaNum	5	Required if there is no revenue code, NDC, or LOINC® code
Procedure Code Modifier	AlphaNum	2	Required for medical claims
Revenue Code	AlphaNum	0 or 4	Optional (applies to medical claims when used)
First Diagnosis Code	AlphaNum	5 or 6	Required for medical claims
Second Diagnosis Code	AlphaNum	0, 5 or 6	Optional (applies to medical claims when used)
Third Diagnosis Code	AlphaNum	0, 5 or 6	Optional (applies to medical claims when used)
Fourth Diagnosis Code	AlphaNum	0, 5 or 6	Optional (applies to medical claims when used)
First Date of Service	Date	8 or 10	Always required for all claims
Last Date of Service	Date	8 or 10	Required for all claims

Paid Date	Date	0, 8 or 10	Optional
Type of Service	AlphaNum	0-10	Optional
Provider ID	AlphaNum	1-20	Required for medical claims
Ordering Provider ID	AlphaNum	0-20	Optional
Provider Type	AlphaNum	1-10	Required for medical claims
Provider Specialty Type	AlphaNum	1-10	Required for medical claims
Provider Key	AlphaNum	1-20	Required for medical claims
NDC	AlphaNum	0 or 11	Required for Rx claims
Day Supply	Num	0-4	Required for Rx claims
Quantity Count	DecNum	0-10	Required for Rx claims
LOINC®	AlphaNum	0 or 7	Required for lab claims
Lab Test Result	AlphaNum	0-18	Required for lab claims
Place of Service	AlphaNum	1-10	Required for medical claims
Unique Record ID	AlphaNum	1-28	Required for all claims
Claim Number	AlphaNum	1-28	Required for all claims
Bill Type Frequency Indicator	Num	0 or 1	Optional
Patient Status	AlphaNum	1-2	Required for facility claims (involving admission or confinement).
Facility Type	AlphaNum	0-2	Optional
Bed Type	AlphaNum	0-1	Optional
First ICD-9 Procedure Code	AlphaNum	0, 4 or 5	Optional, but will impact results (applies to medical claims when used)
Second ICD-9 Procedure Code	AlphaNum	0, 4 or 5	Optional (see above)
Third ICD-9 Procedure Code	AlphaNum	0, 4 or 5	Optional (see above)
Fourth ICD-9 Procedure Code	AlphaNum	0, 4 or 5	Optional (see above)

Field Descriptions

Instructions for each input field are as follows:

Family ID

This field identifies all members of a family and can be any alphanumeric string.

Note: Remember that each Family ID (and Patient ID) listed in your claims input file must have a corresponding record in your member input data file and your member term data file.

Patient ID

This field identifies individual members within a family. If present, this field must be sorted within Family ID, so that all records for an individual are contiguous. If the Family ID uniquely identifies an individual, this field need not be specified (that is, its length in the dictionary will be zero).

Amount Paid

The amount paid for this claim line.

Amount Allowed

The allowed amount for this claim line. This amount typically represents the total amount reimbursed including deductibles, copays, coinsurance, insurer paid, etc.

Procedure Code

The procedure code must be one of:

- A procedure code specified in the Physician's Current Procedure Terminology, 4th Edition (CPT®-4 codes) defined by the American Medical Association, for the years 1997 and later.
- A procedure code specified by the HCFA Common Procedure Coding System, Level II code (HCPCS) defined by the Centers for Medicare and Medicaid Services (CMS) for the years 1999 and later.
- A National Uniform Billing Committee (NUBC) revenue code.

Note: When the NUBC code is entered in the Procedure Code field, it should be padded to the right with blanks because the Procedure Code field always occupies five characters.

- If your organization defines its own procedure codes and/or revenue codes, they must be mapped to standard procedure and revenue codes.

Procedure Code Modifier

Use this field to specify any procedure code modifier that accompanies the procedure code.

Revenue Code

The revenue code, if one was entered for the claim. Supported values in this field are NUBC revenue codes. If your organization defines its own revenue codes, they must be mapped to standard revenue codes.

The revenue code is an optional field, allowing you to define your input records so that you can place an NUBC revenue code and a CPT/HCPCS procedure code on a single record line.

For claim records that do not have a revenue code, leave the revenue code field blank.

First Diagnosis Code Through Fourth Diagnosis Code

Up to four diagnoses may be entered for each claim, but only the first is required.

If your organization defines its own diagnosis codes, they must be mapped to standard ICD-9 diagnosis codes.

First Date of Service and Last Date of Service

The first date and last date represented by the claim line. If you choose to use a date format with separators (such as YYYY/MM/DD or YYYY-MM-DD), the separators are ignored on input, so you can use any character as a separator. Valid formats include: YYYYMMDD, MMDDYYYY, DDMMYYYY, YYYY/MM/DD, MM/DD/ YYYY, and DD/MM/YYYY, where the separator can be any character.

Paid Date

This field is optional. This is the date the claim was paid. The format of the paid date must be the same as that used in the First and Last Date of Service.

Type of Service

This is an optional code which represents the type of service (TOS) performed for this claim. If no specific value is available for this field, it should be filled with blanks. If this field is not used (i.e., its length is set to zero in the configuration), non-pharmaceutical claims with no procedure code will be treated as ancillary records.

Provider ID

Provider identification number from the claim. Used to identify who performed the service.

Ordering Provider ID

This is an optional field. This is the identification number of the provider who ordered the service.

Provider Type

This code represents the type of provider who performed the service. Examples of provider types would be chiropractor, nurse practitioner, medical doctor, counselor, pharmacy, hospital or treatment facility.

Provider Specialty Type

This code represents the specialty of the provider who performed the service.

Provider Key

Unique number or code for a physician who has multiple provider IDs or specialties. A single health care provider may have multiple provider IDs in your input claims data, but this person or entity should have only one provider key.

NDC

If this is a pharmaceutical claim, this field should contain the drug's NDC code. For non-pharmaceutical claim records, the NDC field should be filled with blanks.

Day Supply

For pharmacy records, the number of days a filled prescription is expected to last. If you have no pharmacy records, the Days Supply is an optional field.

Quantity Count

Quantity of drug dispensed in metric units:

Each - solid oral dosage forms (tablet, capsule), powder filled (dry) vials, packets, patches, units of use packages, suppositories, bars.

Milliliter - (cc) liquid oral dosage forms, liquid filled vials, ampules, reconstituted oral products.

Grams - ointments, bulk powders (not IV).
If you have no pharmacy records, the Quantity Count is an optional field.

LOINC®

Logical Observation Identifiers Names and Codes (LOINC®). The LOINC Code is a universal identifier for a lab test for a particular analyte. The LOINC User's Guide and database can be found at www.regenstrief.org.

Enter a LOINC code if the record is a lab record. For non-lab records, leave the LOINC field blank.

If you have no lab records in your claims input, the LOINC code is optional.

Notes:

(1) When using lab results data that has not been mapped to a LOINC code, map the comparable vendor-specific test number provided by the laboratory vendor(s) to one of these default codes.

(2) This is a retired code which may be present on historical data, or which some laboratories may be continuing to use. Input record data with this code is included in the definition of this test.

Lab Test Result

If the record is a lab record, use this field to enter the result value of lab test. For non-lab records, this field should be blank.

If you have no lab records in your claims input, the Lab Test Result is optional.

Place of Service

Place of service (POS). You must map your internal POS codes to Centers for Medicare and Medicaid Services (CMS) standard POS codes.

Unique Record ID

This required field contains a unique identifier representing the service line from the claim. For medical services, this ID typically represents the service row from the CMS 1500 or CMS 1450/UB92 claim form.

Claim Number

A unique identifier used to link service lines for a specific claim submitted for a member. If a claim has multiple service lines, each service will have a unique record ID and the same claim number to represent the claim.

Bill Type Frequency Indicator

This optional field is used to indicate the disposition of confinements.

Patient Status

This field is required for facility claims. The contents will be the patient status indicator field from the NUBC UB-92 form. This field can denote whether the member died during a confinement.

Facility Type

This field is optional. Space for it is provided to allow for additional post grouping analysis. The contents will typically be the UB-92 facility type data value. This would allow records to be easily selected for diagnosis related grouping (DRG) based on the facility type.

Bed Type

If a value is present, this field acts as an additional discriminator in determining whether a Facility record extends an existing confinement or starts a new confinement.

First ICD-9 Procedure Code Through Fourth ICD-9 Procedure Code

If your claims have ICD-9 procedure codes, include them in your claims input file.

If a decimal point will appear in this field in your claim records, the length should be given as 5. If the decimal separator is not used, the length is 4. If these fields are unused, the length is zero.

Member Input File

The member data file contains the most current information about the member.

Field Descriptions

Field	Type	Length	Required or Optional
Family ID	AlphaNum	1-30	Required
Patient ID	AlphaNum	0-2	Optional
Patient Gender	AlphaNum	1	Required
Date of Birth	Date	8 or 10	Required
Member Beginning Eligibility Date	Date	0, 8 or 10	Optional
Member Ending Eligibility Date	Date	0, 8 or 10	Optional

Instructions for each input field are as follows:

Family ID

This field identifies all members of a family and can be any alphanumeric string. The records in the member file must be sorted first on the Family ID (together with Patient ID, if available) so that all records for an individual are contiguous.

Patient ID

This field identifies individual members within a family. If present, this field must be sorted within Family ID, so that all records for an individual are contiguous. If the Family ID uniquely identifies an individual, this field need not be specified (that is, its length in the dictionary will be zero).

Patient Gender and Date of Birth

The member's gender (F or M) and date of birth. If you choose to use a date format with separators (such as YYYY/MM/DD or YYYY-MM-DD), the separators are ignored on input, so you can use any character as a separator. Valid date formats include: YYYYMMDD, MMDDYYYY, DDMMYYYY, YYYY/MM/DD, MM/DD/YYYY, and DD/MM/YYYY, where the separator can be any character.

Member Beginning Eligibility Date and Ending Eligibility Date

The first date on which the member became covered under the plan and the last date of the member's coverage. If you choose to use a date format with separators (such as YYYY/MM/DD or YYYY-MM-DD), the separators are ignored on input, so you can use any character as a separator. Valid formats include: YYYYMMDD, MMDDYYYY, DDMMYYYY, YYYY/MM/DD, MM/DD/YYYY, and DD/MM/YYYY, where the separator can be any character.

Member Term Input File

The member term data file contains member coverage and term activity information. Plan coverage begin and end dates are required in order to correctly calculate the other fields in the member term file. There may be more than one record per individual member.

Field Descriptions

Field	Type	Length	Required or Optional
Family ID	AlphaNum	1-30	Required
Patient ID	AlphaNum	0-2	Optional
Member Beginning Eligibility Date	Date	8 or 10	Required
Member Ending Eligibility Date	Date	8 or 10	Required
Primary Care Provider	AlphaNum	20	Required
Provider Specialty Type	AlphaNum	1-10	Required
Medical Flag	AlphaNum	1	Required
Pharmacy Flag	AlphaNum	1	Required

Instructions for each input field are as follows:

Family ID

This field identifies all members of a family and can be any alphanumeric string. The records in the member term file must be sorted first on the Family ID (together with Patient ID, if available) so that all records for an individual are contiguous.

Patient ID

This field identifies individual members within a family.

Member Beginning Eligibility Date and Member Ending Eligibility Date

The first date on which the member became covered under the plan and the last date of the member's coverage. If you choose to use a date format with separators (such as YYYY/MM/DD or YYYY-MM-DD), the separators are ignored on input, so you can use any character as a separator. Valid formats include: YYYYMMDD, MMDDYYYY, DDMMYYYY, YYYY/MM/DD, MM/DD/YYYY, and DD/MM/YYYY, where the separator can be any character.

Primary Care Provider

The provider key for the member's primary care physician. A single health care physician may have multiple provider IDs in your input claims data, but this person should have only one provider key.

Provider Specialty Type

This code represents the specialty of the primary care physician.

Medical Flag

Identifies whether the member has medical coverage (Y or N).

Pharmacy Flag

Identifies whether the member has pharmacy coverage (Y or N).

INGENIX

2007 Benchmarks

									Result Flag Distribution				
Report Case ID	Case Description	Summary Rule ID	Rule Cat. Desc.	Rule Type	Rule Description	Compliance Rate	Non-Compliance Rate	Yes Rate	Y	N	Q	NRX	NA (total)
0	Global Rules	9179002	Global Encounter	CP-C	Patient(s) currently taking a COX-2 inhibitor without a documented indication.	46	54	54	54	46	0	0	0
0	Global Rules	9180015	Global Drug Monitoring	S-M	Adult patient(s) taking warfarin that had three or more prothrombin time tests in last 6 reported months.	69	31	69	69	31	0	0	0
0	Global Rules	9180016	Global Drug Monitoring	S-M	Adult patient(s) taking a statin-containing medication nicotinic acid or fibric acid derivative that had an annual serum ALT	81	19	81	81	19	0	0	0
100311	Diabetes	9000023	Patient Safety	S-M	Patient(s) taking a biguanide (e.g. metformin) ACE-inhibitor or angiotensin II receptor antagonist that had a serum	80	20	80	50	12	0	0	38
100311	Diabetes	9000027	Care Pattern	CP-I	Patient(s) that had an office visit for diabetes care in last 6 reported months.	78	22	78	78	22	0	0	0
100311	Diabetes	9000043	Disease Management	R-2	Adult(s) that had a serum creatinine in last 12 reported months.	76	24	76	75	24	0	0	2
100404	Asthma	9000007	Care Pattern	CP-I	Patient(s) that had an office visit for asthma care in last 6 reported months.	58	42	58	58	42	0	0	0
102500	HTN	9000011	Care Pattern	CP-I	Patient(s) that had an annual physician	82	18	82	82	18	0	0	0
102500	HTN	9000012	Care Pattern	CP-I	Patient(s) that had a serum creatinine in last 12 reported months.	68	32	68	68	32	0	0	0
103300	COPD	9000003	Care Pattern	CP-I	Patient(s) that had an annual physician	81	19	81	81	19	0	0	0
103300	COPD	9000006	Disease Management	R-1	Patient(s) with frequent short-acting inhaled bronchodilator use who are also using a long-acting inhaled bronchodilator.	64	36	64	2	1	0	0	97
103500	Hyperlipidemia	9000006	Care Pattern	CP-I	Patient(s) with a LDL cholesterol test in last 12 reported months.	80	20	80	80	20	0	0	0
103500	Hyperlipidemia	9000012	Care Pattern	CP-I	Patient(s) with a HDL cholesterol test in last 12 reported months.	80	20	80	80	20	0	0	0
103500	Hyperlipidemia	9000014	Care Pattern	CP-I	Patient(s) with a triglyceride test in last 12 reported months.	80	20	80	80	20	0	0	0
104000	Migraine	9000006	Care Pattern	CP-I	Adult patient(s) with frequent use of acute medications that also received prophylactic medications.	62	38	62	2	1	0	0	96
104200	CKD	9000027	Disease Management	R-1	Patient(s) with proteinuria currently taking an ACE-inhibitor or angiotensin II receptor	69	31	69	19	9	0	0	72
104700	Prostate CA - I	9000006	Care Pattern	CP-I	Patient(s) that had a prostate specific antigen test in last 12 reported months.	80	20	80	80	20	0	0	0

INGENIX

2007 Benchmarks

									Result Flag Distribution				
Report Case ID	Case Description	Summary Rule ID	Rule Cat. Desc.	Rule Type	Rule Description	Compliance Rate	Non-Compliance Rate	Yes Rate	Y	N	Q	NRX	NA (total)
104700	Prostate CA -	9000007	Care Pattern	CP-I	Patient(s) that had an annual physician	87	13	87	87	13	0	0	0
201200	Sinusitis Acute	9000002	Care Pattern	CP-I	Patient(s) treated with an antibiotic for acute sinusitis that received a first line	62	38	62	31	19	0	0	50
201500	Pregnancy Management	9000001	Care Pattern	CP-N	Pregnant women that had HIV testing.	66	34	66	66	34	0	0	0
201500	Pregnancy Management	9000003	Care Pattern	CP-I	Pregnant women less than 25 years of age that had chlamydia screening.	67	33	67	8	4	0	0	88
201500	Pregnancy Management	9000005	Care Pattern	CP-N	Pregnant women that had ABO and Rh blood type testing.	82	18	82	82	18	0	0	0
201500	Pregnancy Management	9000006	Care Pattern	CP-I	Pregnant women that had syphilis screening.	84	16	84	84	16	0	0	0
201500	Pregnancy Management	9000007	Care Pattern	CP-I	Pregnant women that had urine culture.	59	41	59	59	41	0	0	0
201500	Pregnancy Management	9000008	Care Pattern	CP-I	Pregnant women that had HBsAg testing.	83	17	83	83	17	0	0	0
201500	Pregnancy Management	9000009	Disease Management	R-2	Pregnant women that received Group B Streptococcus testing.	71	29	71	69	28	0	0	4

INGENIX

Overview of Facility Event Methodology

A Facility Event is a unique collection of services performed for a particular member by one to many providers, representing an admission, emergency department visit, or outpatient surgery. There are four types of Facility Events:

1. Confinement/Admission (FIP)
2. Outpatient Surgery (FOS)
3. Emergency Room (FER)
4. Other (OTH)

Each Facility Event Type has a unique set of rules to identify claim detail records as trigger records. A trigger record is a record that meets the criteria for the basis of an event. A trigger record, in turn, serves as a sort of "magnet" for associating additional related claim detail records.

Claim data elements required to trigger specific event types and service date time period:

1. Confinement/Admission (FIP)
   - A confinement record (created by the Confinement/Admission methodology described below) with a revenue code representing inpatient accommodation room and board (revenue code of 0100-0219) triggers a Confinement/Admission (FIP) Event Type.
     - Confinement/Admission Methodology:
       - Confinement/Admission definition: Confinement/Admission represents a member's uninterrupted stay for a defined period of time in a hospital, skilled nursing facility, or other approved health care facility or program, followed by discharge from that same facility or program.
       - A confinement is assigned to a set of one or more medical claim records on which there is:
         1. The same unique patient ID
         2. The same unique provider ID
         3. An inpatient accommodation room and board revenue code of 0100-0219
         4. No gap in dates of service
       - The beginning and the ending dates of the confinement period are identified using the **From** and **Through** dates from the facility claim.
       - In order for multiple inpatient accommodation room and board records to be regarded as one confinement, the following condition must be met:
         - The difference between the **Through date** of the first accommodation room and board revenue code record and the **From date** of the next accommodation room and board revenue code record must be less than or equal to 1 day. The beginning of the confinement represents the earliest **From date** and the ending of the confinement represents the latest **Through date**. If a record has overlapping dates, the record will be included in the confinement for which the record's **From date** and **Through date** are between the dates of the confinement inclusive. If the difference between the **Through date** and the **From date** is > 1, then the next record represents a new confinement.

   - The timeframe for claims included in a Confinement/Admission Facility Event is one day prior to the Confinement admission date through the discharge date of the confinement.

2. Outpatient Surgery (FOS)
   - A claim record based on a CMS Place of Service code representing an outpatient acute care facility or office/clinic, and a Procedure Code Service Type of Surgical Procedures or a Revenue Code representing operating room or ambulatory surgery services triggers an Outpatient Surgery Event.
     - A POS code of 05, 06, 07, 08, 22, or 24 AND a procedure code (CPT or HCPCS) with a Service_Type_High_Code='SURG' (there are 5808 CPT codes and 341 HCPCS codes that fall into this category—see attached list of codes)

FOS_procedure codes.xls

     - **OR** a POS code of 05, 06, 07, 08, 11, 22, 24, 25, 26, 49, 50 or 72 AND a Revenue Code of 0360, 0361, 0369, 0490, 0499.

   - The service date timeframe for claims included in an OP Surgery event is up to +/- 2 days of the service date on the trigger record.
   - To create an Outpatient Surgery event, the claim detail must *not* meet the coding conditions listed for an Admission/Confinement (FIP) event.

3. Emergency Room (FER)
   - An Emergency Room Event is identified on a claim record in which the CPT code or revenue code stands for emergency room or emergency evaluation and management, and the provider specialty represents General Hospital, Psychiatric Hospital or Emergency Care Center.
     - A revenue code of 0450-0452 or 0459
     - **OR** CPT procedure code 99281-99285, 99288 or HCPCS procedure code G0380-G0384 AND a Detail Level Provider Category of General Hospital, Psychiatric Hospital or Emergency Care Center.
     - **OR** CPT procedure code 99281-99285, or 99288 or HCPCS procedure code G0380-G0384 AND [there is at least one other claim detail record which will be associated with the trigger record with a revenue code that is *not* 0456 (Urgent Care) AND a Detail Level Provider Category of General Hospital, Psychiatric Hospital or Emergency Care Center].
   - The service date timeframe for claims included in an Emergency Room (FER) event are up to +/- 2 days of the service date on the trigger record.
   - To create an Emergency Room event, the claim detail must *not* meet any of the coding conditions for an Admission/Confinement (FIP) or Outpatient Surgery (FOS) event.

4. Other (OTH)
   - All service records that are not assigned FIP, FOS, or FER are assigned OTH

Result/EBM/Compliance Flags

Result Flags and Values

The Result flag provides a status for each clinical rule in any condition for which the member has qualified. The five possible Result flag values are described below.

- Yes means the answer to the clinical question is yes.
- No means the answer to the clinical question is no.
- NA (not applicable) means the rule is not applicable to the member. A rule may not be applicable for a number of reasons. The third character of the NA flag contains a number which further defines the reason (see below).
- NRX (no RX benefit) indicates that the member did not have any pharmacy benefit during the reporting period. The NRX value is only applicable to certain rules that are pharmacy dependent.
- Q (questionable) indicates that the member has no claim record for the particular test or treatment during the time window of the rule, but the member did not have coverage throughout the time window or there was insufficient time range of input claims data, and hence, there may be data incompleteness. The Q value is applied only for certain rules and certain setup configurations.

Result Flag Value	Description
NA1	Member did not meet the age or gender criteria.
NA2	Member was not currently taking the medication in question or had not taken it for the required duration.
NA3	Member was taking the medication, but a possession ratio could not be computed [less than two prescriptions during the rule time window].
NA4	Member did not meet the rule specific criteria [e.g., co-morbidity, complexity (diagnosis and medication), intervention not warranted].
NA5	No lab result record or insufficient information.
NA6	Member admitted to a hospital or long term care facility which might cause data incompleteness.
NA7	Member who did not receive treatment or medication had a contraindication or other justification.

EBM Flag

The EBM flag provides a counter for rules in which the result is NOT consistent with evidence based guidelines. There are two possible results for the EBM flag counter:

- 1 when a result is ***not*** consistent with the EBM Connect software's evidence based guidelines, and
- 0 when any of the following are true:
  - the member's care is consistent with the software's evidence based guidelines
  - the rule is not relevant to the member
  - there is insufficient information in the database to analyze the rule
  - the rule is informational only, and does not reflect appropriateness of care

Compliance Flag

The Compliance flag provides a counter for cases in which the result ***is*** consistent with evidence based guidelines. There are two possible results for the Compliance flag counter:

- 1 when a result ***is*** consistent with the EBM Connect software's evidence based guidelines, and
- 0 when any of the following are true:
  - the member's care is not consistent with the software's evidence based guidelines
  - the rule is not relevant to the member
  - there is insufficient information in the database to analyze the rule
  - the rule is informational only, and does not reflect appropriateness of care

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-110-08 **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)***:** 10/22/08
2	**Title of Measure:** Pregnant women that had syphilis screening.
3	**Brief description of measure [1]:** This measure identifies pregnant women who had a syphilis test during their pregnancy.
4 (2a)	**Numerator Statement:** Did the patient have syphilis screening (code set PR0147, LC0014, LC0018) during the following time period: 280 days prior to delivery (PRE-EPIS)? **Time Window:** 280 days prior to a claim for a delivery procedure (code set PR0140, PR0141) AND the diagnosis is Full Term Delivery (code set DX0209) **Numerator Details** (Definitions, codes with description): see attached "Pregnancy Management ebm Alg" document
5 (2a)	**Denominator Statement:** See attached "Pregnancy Management ebm Alg" document for member demographics, build event, and member enrollment **Time Window:** 365 days prior to the common report period end date **Denominator Details** (Definitions, codes with description): see attached "Pregnancy Management ebm Alg" document
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*)

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

	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)**:** ICD-9 codes, CPT codes, Revenue codes, and LOINC 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:** not applicable **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 Not applicable
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:** Using a geographically diverse 12 million member benchmark database (this database represents predominately a commercial population less than 65 year of age) the compliance rate was 84 percent, indicating a clear gap in care and opportunity for care improvement. **Citations for Evidence:** Ingenix EBM Connect benchmark results, December 2007
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: not applicable **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)*: USPSTF grade A classification **Summary of Evidence** (*provide guideline information below*)**:** The USPSTF strongly recommends that clinicians screen all pregnant women for syphilis infection. The USPSTF found observational evidence that the universal screening of pregnant women decreases the proportion of infants with clinical manifestations of syphilis infection and those with positive serologies. The USPSTF concludes that the benefits of

[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 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.

	screening all pregnant women for syphilis infection substantially outweigh potential harms. **Citations for Evidence:** Screening for Syphilis Infection, Topic Page. July 2004. U.S. Preventive Services Task Force. Agency for Healthcare Research and Quality, Rockville, MD. http://www.ahrq.gov/clinic/uspstf/uspssyph.htm
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:** Screening for Syphilis Infection, Topic Page. July 2004. U.S. Preventive Services Task Force. Agency for Healthcare Research and Quality, Rockville, MD. http://www.ahrq.gov/clinic/uspstf/uspssyph.htm **Specific guideline recommendation:** The USPSTF strongly recommends that clinicians screen all pregnant women for syphilis infection. The USPSTF found observational evidence that the universal screening of pregnant women decreases the proportion of infants with clinical manifestations of syphilis infection and those with positive serologies. The USPSTF concludes that the benefits of screening all pregnant women for syphilis infection substantially outweigh potential harms. **Guideline author's rating of strength of evidence** (*If different from USPSTF, also describe it and how it relates to USPSTF)***:** USPSTF grade A classification **Rationale for using this guideline over others:** This guideline represents a thorough and recent review of the literature regarding this topic. The U.S. Preventive Services Task Force is a well recognized and respected guideline source.
22 (1c)	**Controversy/Contradictory Evidence** *Summarize any areas of controversy, contradictory evidence, or contradictory guidelines and provide citations.* **Summary:** None **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:** It will facilitate maternal care and reduce adverse pregnancy outcomes.
	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:** description attached, see "Testing" document **Analytic Method:** description attached, see "Testing" document **Testing Results:** see attached document, "Benchmark test results"
26 (2c)	**Validity Testing** **Data/sample:** description attached, see "Testing" document **Analytic Method:** description attached, see "Testing" document **Testing Results:** see attached document, "Benchmark test results"
27	**Measure Exclusions** *Provide evidence to justify exclusion(s) and analysis of impact on measure results*

(2d)	*during testing.* **Summary of Evidence supporting exclusion(s):** not applicable **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:** not applicable **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:** description attached, see "Testing" document **Analytic Method:** **Results:**
30 (2f)	**Provide Measure Results from Testing or Current Use** Results from testing **Data/sample:** see attached document, "Benchmark test results" **Methods to identify statistically significant and practically/meaningfully differences in performance:** **Results:**
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** Other ► If "other," please describe: Health plans, physicians (individuals and groups), care management, and other vendors/customers are using this on a national level. ☐ 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:** Results are summarized and reported by users/customers depending on their business need. Therefore, this is no single public reporting format.

	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):** Prenatal Care (AMA PCPI) **Are the measure specifications harmonized with existing NQF-endorsed™ measures?** Partially harmonized ►If not fully harmonized, provide rationale: Our methodology differs from the AMA PCPI methodology as follows: 1) We use episodic logic to identify a full term delivery and then identify any evidence of the desired intervention during the time period 280 days prior to the delivery. Given this methodology, a greater number of patients can be evaluated assuming that more than 12 months of claims-based data is available. Also, this provides a methodology where numerator compliance can be satisfied using enriched claims-based data that is not solely dependent on the submission of CPT II codes (that methodology used in AMA PCPI specifications). 2) Code sets that we use to identify pregnant women overlap but are not identical to AMA PCPI code sets. Our logic more specifically identifies pregnanct women with a full term delivery. Also, we have enriched our code set with ICD-9 procedure codes that identify pregnancy women. Overall, our methodology improves claims-based data collection opportunities and enhances the measurement of the desired prenatal intervention. **Describe the distinctive, improved, or additive value this measure provides to existing NQF-endorsed measures:** This measure adds value to the existing prenatal care NQF endorsed measures by addressing a recommended aspect of prenatal care that is not represented by current 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:** none are specific to nor dependent on EHR
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:** If a monitoring test is performed and the specific CPT code or LOINC code is not submitted (e.g., syphilis testing at a confidential testing site), then a false negative result will be generated. **Describe how could these potential problems be audited:** A chart review audit could define the frequency of this error type.

	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: Testing of this measure did not identify any concerns that would cause us to modify code sets or overall logic. Also, cutomers have not notified us of any concerns about the performance of this measure.
	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:** To be defined
41	**Measure Intellectual Property Agreement Owner Point of Contact** **First Name:** Cheri **MI:** **Last Name:** DiGiovanni **Credentials (MD, MPH, etc.):** **Organization:** Ingenix **Street Address:** 1050 Carol Street **City:** Downers Grove **State:** IL **ZIP:** 60516 **Email:** cheri.digiovanni@ingenix.com **Telephone:** 602-276-8913 ext:
42	**Measure Submission Point of Contact** **If different than IP Owner Contact** **First Name:** Kay **MI:** E **Last Name:** Schwebke **Credentials (MD, MPH, etc.):** MD, MPH **Organization:** Ingenix **Street Address:** 12125 Technology Drive **City:** Eden Prairie **State:** MN **ZIP:** 55344 **Email:** kay.schwebke@ingenix.com **Telephone:** 952-833-7154 ext:
43	**Measure Developer Point of Contact** **If different than IP Owner Contact** **First Name:** Kay **MI:** E **Last Name:** Schwebke **Credentials (MD, MPH, etc.):** MD, MPH **Organization:** As above **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:** Kay **MI:**E **Last Name:**Schwebke **Credentials (MD, MPH, etc.):** MD, MPH **Organization:** As above **Street Address:** **City:** **State:** **ZIP:** **Email:** **Telephone:** ext
	ADDITIONAL INFORMATION
45	**Workgroup/Expert Panel involved in measure development** Workgroup/panel used ►If workgroup used, describe the members' role in measure development: Reviewed relevant research/guideline, participated in the development of measure logic, reviewed code sets, reviewed benchmark results ►Provide a list of workgroup/panel members' names and organizations: see document, "Consultant panel members"
46	**Measure Developer/Steward Updates and Ongoing Maintenance** Year the measure was first released: Fall 2005 Month and Year of most recent revision: February 2007 What is the frequency for review/update of this measure? Consultant panel review due June 2009, and then every 3 years When is the next scheduled review/update for this measure? June 2009
47	**Copyright statement/disclaimers:** see attached "Pregnancy Management ebm Alg" document
48	**Additional Information:** In addition to the attachments referenced above, the following documents are attached. 1. EBM70Technical document

	2. EBM70Concepts document Also, our next EBM Connect release, scheduled for November 2008, will include annual code set updates. Therefore, code sets submitted October 2008 might change slightly due to this routine maintenance process. The anticipated impact is minimal.
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*)**:** 10/30/08

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%

INGENIX

Algorithm

Pregnancy Management

Report Case ID: 201500

November 21, 2008

Table of Contents

Code Sets Utilized

Diagnosis Code Sets	DX0059 Hepatitis B DX0065 HIV/AIDS DX0209 Full Term Delivery DX0210 Group B Streptococcus Infection or Carrier State DX0211 Antenatal Screening for Streptococcus B
Procedure and Revenue Code Sets	PR0020 Chlaymdia Screening (HEDIS) PR0107 Professional Encounter Codes RV0107 Professional Encounter Codes PR0108 Professional Supervision PR0140 Delivery, Global Codes PR0141 Delivery, Non-Global Codes PR0142 HIV Test PR0145 ABO Blood TypeTesting PR0146 Rh Blood Type Testing PR0147 Syphilis PR0148 Urine Culture PR0149 Hepatitis B Surface Antigen PR0150 Group B Streptococcus
LOINC Code Sets	LC0005 Chlamydia Species LC0006 Chlamydia Trachomatis LC0014 Obstetric Panel LC0018 Syphilis LC0020 Chlamydia Trachomatis and Neisseria Gonorrhoeae LC0021 HIV Test LC0022 ABO Blood Type Testing LC0023 Rh Blood Type Testing LC0024 ABO/Rh Blood Type Testing LC0025 Hepatitis B Surface Antigen LC0026 Group B Streptococcus

Study Population

Time Frame Requirements

Period	Backward	Forward
Report Period	12m	
Minimum Medical Coverage	throughout event	
Minimum Pharmacy Coverage	throughout event	
Medical Claims Extraction	24m	
Pharmacy Claims Extraction	21m	
Determine Condition (Denom)	12m	
Determine Treatment (Num)	12m	
Physician Attribution	12m	

Rules

Report Rule ID	Rule Stmnt	Headings, Rules & Detail Description
Member Demographics		
1101001	A	All females that are 12 years of age or older at the end of the report period
Build Event		
6105001	A B	*Build Single Episode/Event which identifies deliveries and create a PRE WINDOW of 40 weeks (280 days) duration.* Begin a Single Episode with the earliest claim during the following window of time: 365 days prior to the common report period end date, where there is a claim for a delivery procedure (code set PR0140, PR0141) AND the diagnosis is Full Term Delivery (code set DX0209) **AND** Extend the episode back 280 days (PRE Period - Set Event Start Date to Episode Start Date minus 280)
Member Enrollment		
8102002	A	Patient must have been continuously enrolled in Medical benefits throughout the event *Note: The standard enrollment break logic allows unlimited breaks of no more than 45 days and no breaks greater than 45 days.* (*see Build Single Event.*)
Condition Exclusions		
		None

Intervention Rules

Report Rule ID	Rule Type & Task No.	Headings, Rules & Detail Description
Pregnant women should have HIV testing.		
9000001	**CP-N (139)**	**Pregnant women that had HIV testing.**
▪ **Result Flag (RF):** IF 1 = Y, set RF to NA4, else if 2=Y, set RF to Y, else set RF to N ▪ **EBM Flag (EF):** IF RF = N, set EF = 1, else set EF = 0		
7123001	A	During the 24 months prior to the end of the report period, did the patient have 2 or more that are at least 14 days apart of the following services, where the diagnosis is HIV/AIDS (code set DX0065): ▪ Professional Encounter (code set PR0107, RV0107) ▪ Professional Supervision Code Set (code set PR0108) ▪ Facility Event – Confinement/Admission ▪ Facility Event – Emergency Room ▪ Facility Event – Outpatient Surgery
7123002	A	Did the patient have HIV testing (code set PR0142, LC0021) during the following time period: 280 days prior to delivery (PRE-EPIS)?
Pregnant women should have chlamydia screening.		
9000003	**CP-I (139)**	**Pregnant women less than 25 years of age that had chlamydia screening.**
▪ **Result Flag (RF):** IF 4=N, set RF to NA1, else IF 5=Y, set RF to Y, else set RF to N ▪ **EBM Flag (EF):** IF RF = N, set EF = 1, else set EF = 0		
7123004	A	Was the patient's age < 25 years on the Episode End Date?
7123005	A	Did the patient have chlamydia testing (code set PR0020, LC0005, LC0006, LC0020) during the following time period: 280 days prior to delivery (PRE-EPIS)?
Pregnant women should have blood type testing (ABO and Rh).		
9000005	**CP-N (139)**	**Pregnant women that had ABO and Rh blood type testing.**
▪ **Result Flag (RF):** IF 7=Y AND 8=Y, set RF to Y, else set to N ▪ **EBM Flag (EF):** IF RF = N, set EF = 1, else set EF = 0		
7123007	A	Did the patient have ABO blood type testing (code set PR0145, LC0014, LC0022, LC0024) during the following time period: 280 days prior to delivery (PRE-EPIS)?
7123008	A	Did the patient have Rh blood type testing (code set PR0146, LC0014, LC0023, LC0024) during the following time period: 280 days prior to delivery (PRE-EPIS)?

Pregnancy Management Intervention Rules

Report Case ID: 201500

Report Rule ID	Rule Type & Task No.	Headings, Rules & Detail Description
Pregnant women should have syphilis screening.		
9000006	**CP-I (139)**	**Pregnant women that had syphilis screening.**
▪ **Result Flag (RF):** ▪ **EBM Flag (EF):**		IF 9=Y, set RF to Y, else set RF to N IF RF = N, set EF = 1, else set EF = 0
7123009	A	Did the patient have syphilis screening (code set PR0147, LC0014, LC0018) during the following time period: 280 days prior to delivery (PRE-EPIS)?
Pregnant women should have urine culture.		
9000007	**CP-I (139)**	**Pregnant women that had urine culture.**
▪ **Result Flag (RF):** ▪ **EBM Flag (EF)**:		IF 10=Y, set RF to Y, else set RF to N IF RF = N, set EF = 1, else set EF = 0
7123010	A	Did the patient have a urine culture (code set PR0148) during the following time period: 280 days prior to delivery (PRE-EPIS)?
Pregnant women should have Hepatitis B Surface antigen (HBsAg) testing.		
9000008	**CP-I (139)**	**Pregnant women that had HBsAg testing.**
▪ **Result Flag (RF):** ▪ **EBM Flag (EF):**		IF 11=Y, set RF to Y, else if 12=Y, set RF to NA7, else set RF to N IF RF = N, set EF = 1, else set EF = 0
7123011	A	Did the patient have HBsAg testing (code set PR0149, LC0014, LC0025) during the following time period: 280 days prior to delivery (PRE-EPIS)?
7123012	A	Did the patient have a claim with a diagnosis of Hepatitis B (code set DX0059) during the following time period: 365 days prior to the episode start date?
Pregnant women should have Group B Streptococcus (GBS) testing.		
9000009	**R-2 (136)**	**Pregnant women that received Group B Streptococcus testing.**
▪ **Result Flag (RF):** ▪ **EBM Flag (EF):**		IF 13=Y, set RF to Y, else if 14=Y, set RF to NA7, else set RF to N IF RF = N, set EF = 1, else set EF = 0
7123013	A	Did the patient have Group B Streptococcus testing (code set PR0150, LC0026) OR a diagnosis of Antenatal Screening for Streptococcus B (code set DX0211) during the following time period: 280 days prior to delivery (PRE-EPIS)?
7123014	A	Did the patient have a claim with a diagnosis of Group B Streptococcus (code set DX0210) during the following time period: 280 days prior to delivery (PRE-EPIS)?

Diagnosis Code Sets

The following tables represent the applicable diagnosis code sets for each condition referenced in the Pregnancy Management rules.

DX0059 HEPATITIS B

ICD-9 Code	Description
070.2	VIRAL HEPATITIS B WITH HEPATIC COMA
070.20	VIRL HEP B W/HEP COMA ACUT/UNS W/O HEP DELTA
070.21	VIRAL HEP B W/HEP COMA ACUTE/UNSPEC W/HEP DELTA
070.22	VIRL HEP B W/HEP COMA CHRN W/O MENTION HEP DELTA
070.23	VIRAL HEP B W/HEP COMA CHRONIC W/HEP DELTA
070.3	VIRAL HEPATITIS B WITHOUT MENTION HEPATIC COMA
070.30	VIRL HEP B W/O HEP COMA ACUT/UNS W/O HEP DELTA
070.31	VIRL HEP B W/O HEP COMA ACUT/UNS W/HEP DELTA
070.32	VIRL HEP B W/O HEP COMA CHRN W/O HEP DELTA
070.33	VIRL HEP B W/O MENTION HEP COMA CHRN W/HEP DELTA
V02.61	HEPATITIS B CARRIER

DX0065 HIV/AIDS

ICD-9 Code	Description
042	HUMAN IMMUNODEFICIENCY VIRUS [HIV]
079.53	HIV TYPE 2 IN CCE & UNS SITE
795.71	NONSPECIFIC SEROLOGIC EVIDENCE OF HIV
V08	ASYMPTOMATIC HIV INFECTION STATUS

DX0209 FULL TERM DELIVERY

ICD-9 Code	Description
642.01	BENIGN ESSENTIAL HYPERTENSION WITH DELIVERY
642.02	BEN ESSENTIAL HYPERTENSION W/DELIV W/CURRENT PPC
642.04	BENIGN ESSENTIAL HYPERTENSION PREVIOUS PPC
642.11	HYPERTENSION SEC TO RENAL DISEASE WITH DELIVERY
642.12	HTN SEC RENAL DISEASE W/DELIV W/CURRENT PP COMPL
642.14	HTN SEC RENAL DISEASE PREVIOUS POSTPARTUM COND
642.21	OTHER PRE-EXISTING HYPERTENSION WITH DELIVERY
642.22	OTH PRE-EXISTING HTN W/DELIV W/CURRENT PP COMPL
642.24	OTH PRE-EXISTING HTN PREVIOUS POSTPARTUM COND
642.31	TRANSIENT HYPERTENSION OF PREGNANCY W/DELIVERY
642.32	TRANSIENT HTN PG W/DELIV W/CURRENT PP COMPL
642.41	MILD OR UNSPECIFIED PRE-ECLAMPSIA WITH DELIVERY
642.42	MILD/UNSPEC PRE-ECLAMPSIA W/DELIV W/CURRENT PPC
642.44	MILD/UNSPEC PRE-ECLAMPSIA PREVIOUS PP COND
642.91	UNSPECIFIED HYPERTENSION WITH DELIVERY
643.01	MILD HYPEREMESIS GRAVIDARUM DELIVERED

DX0209 FULL TERM DELIVERY	
643.11	HYPEREMESIS GRAVIDA W/METAB DISTURBANCE DELIV
643.21	LATE VOMITING OF PREGNANCY DELIVERED
643.81	OTHER VOMITING COMPLICATING PREGNANCY DELIVERED
643.91	UNSPECIFIED VOMITING OF PREGNANCY DELIVERED
645.11	POST TERM PG DELIV W/WO MENTION ANTPRTM COND
645.21	PROLONGED PG DELIV W/WO MENTION ANTPRTM COND
646.01	PAPYRACEOUS FETUS DELIV W/WO ANTPRTM COND
646.41	PERIPHERAL NEURITIS IN PREGNANCY WITH DELIVERY
646.42	PERIPH NEURITIS PREGNANCY W/DELIV W/CURRENT PPC
646.51	ASYMPTOMATIC BACTERIURIA IN PREGNANCY W/DELIVERY
646.52	ASX BACTERIURIA PG W/DELIV W/CURRENT PPC
646.54	ASYMPTOMATIC BACTERIURIA PREVIOUS PP COND
646.71	LIVER DISORDERS IN PREGNANCY WITH DELIVERY
646.81	OTHER SPEC COMPLICATION PREGNANCY W/DELIVERY
646.82	OTH SPEC COMPS PREGNANCY W/DELIV W/CURRENT PPC
646.91	UNSPECIFIED COMPLICATION OF PREGNANCY W/DELIVERY
647.01	MATERNAL SYPHILIS COMP PREGNANCY W/DELIVERY
647.02	MTRN SYPHILIS COMP PG W/DELIV W/CURRENT PPC
647.11	MATERNAL GONORRHEA WITH DELIVERY
647.12	MATERNAL GONORRHEA W/DELIVERY W/CURRENT PPC
647.21	OTHER MATERNAL VENEREAL DISEASES WITH DELIVERY
647.22	OTH MATERNAL VENEREAL DZ W/DELIV W/CURRENT PPC
647.31	MATERNAL TUBERCULOSIS WITH DELIVERY
647.32	MATERNAL TUBERCULOSIS W/DELIVERY W/CURRENT PPC
647.41	MATERNAL MALARIA WITH DELIVERY
647.42	MATERNAL MALARIA W/DELIVERY W/CURRENT PPC
647.51	MATERNAL RUBELLA WITH DELIVERY
647.52	MATERNAL RUBELLA W/DELIVERY W/CURRENT PPC
647.61	OTHER MATERNAL VIRAL DISEASE WITH DELIVERY
647.62	OTH MATERNAL VIRAL DISEASE W/DELIV W/CURRENT PPC
647.81	OTH SPEC MATERNAL INF&PARASITIC DISEASE W/DELIV
647.82	OTH SPEC MTRN INF&PARASITIC DZ DELIV W/CURR PPC
647.91	UNSPEC MATERNAL INFECTION/INFESTATION W/DELIVERY
647.92	UNSPEC MATERNAL INF/INFEST W/DELIV W/CURRENT PPC
648.11	MTRN THYROID DYSF DELIV W/WO ANTPRTM COND
648.14	MTRN THYROID DYSF PREVIOUS POSTPARTUM COND/COMP
648.21	MATERNAL ANEMIA, WITH DELIVERY
648.22	MATERNAL ANEMIA W/DELIVERY W/CURRENT PPC
648.41	MATERNAL MENTAL DISORDERS WITH DELIVERY
648.42	MATERNAL MENTAL DISORDERS W/DELIV W/CURRENT PPC
648.51	MATERNAL CONGENITAL CV DISORDERS W/DELIVERY
648.52	MATERNAL CONGEN CV D/O W/DELIV W/CURRENT PPC
648.61	OTH MATERNAL CARDIOVASCULAR DISEASES W/DELIVERY
648.62	OTH MATERNAL CV DISEASES W/DELIV W/CURRENT PPC
648.71	BN&JNT D/O MAT BACK PELVIS&LW LMB W/DEL

DX0209 FULL TERM DELIVERY	
648.72	BN&JNT D/O MAT BACK PELV&LW LMB W/DEL W/PP COMPL
648.81	ABNORMAL MATERNAL GLUCOSE TOLERANCE W/DELIVERY
648.82	ABNORMAL MTRN GLU TOLERNC W/DELIV W/CURRENT PPC
648.84	ABNORMAL MTRN GLU TOLERANCE PREVIOUS PP COND
648.91	OTH CURRENT MATERNAL CCE W/DELIVERY
648.92	OTH CURRENT MATERNAL CCE W/DEL W/CURRNT PP COMPL
650	NORMAL DELIVERY
651.01	TWIN PREGNANCY, DELIVERED
651.11	TRIPLET PREGNANCY, DELIVERED
651.21	QUADRUPLET PREGNANCY, DELIVERED
651.31	TWIN PG W/FETAL LOSS&RETENTION 1 FETUS DELIV
651.41	TRIPLET PG W/FETAL LOSS&RETENTION 1/MORE DELIV
651.51	QUADRUPLET PG W/FETAL LOSS&RETN 1/MORE DELIV
651.61	OTH MX PG W/FETAL LOSS&RETN 1/MORE FETUS DELIV
651.81	OTHER SPECIFIED MULTIPLE GESTATION DELIVERED
651.91	UNSPECIFIED MULTIPLE GESTATION DELIVERED
652.01	UNSTABLE LIE OF FETUS, DELIVERED
652.21	BREECH PRESENTATION W/O MENTION VERSION DELIV
652.31	TRANSVERSE/OBLIQUE FETAL PRESENTATION DELIVERED
652.41	FETAL FACE OR BROW PRESENTATION DELIVERED
652.51	HIGH FETAL HEAD AT TERM, DELIVERED
652.61	MX GEST W/MALPRESENTATION 1 FETUS/MORE DELIV
652.81	OTH SPEC MALPOSITION/MALPRESENTATION FETUS DELIV
653.01	MAJOR ABNORM BONY PELVIS NOT FURTHER SPEC DELIV
653.11	GENERALLY CONTRACTED PELVIS PREGNANCY DELIVERED
653.21	INLET CONTRACTION OF PELVIS PREGNANCY DELIVERED
653.31	OUTLET CONTRACTION OF PELVIS PREGNANCY DELIVERED
653.41	FETOPELVIC DISPROPORTION, DELIVERED
653.51	UNUSUALLY LARGE FETUS CAUS DISPROPRTN DELIVERED
653.61	HYDROCEPHALIC FETUS CAUSING DISPROPRTN DELIVERED
653.71	OTH FETAL ABNORM CAUSING DISPROPRTN DELIVERED
653.81	FETAL DISPROPORTION OF OTHER ORIGIN DELIVERED
653.91	UNSPECIFIED FETAL DISPROPORTION DELIVERED
654.01	CONGENITAL ABNORM PREGNANT UTERUS DELIVERED
654.02	CONGEN ABNORM PG UTERUS DELIV W/MENTION PPC
654.11	TUMORS OF BODY OF UTERUS, DELIVERED
654.12	TUMORS BODY UTERUS DELIVERED W/MENTION PPC
654.14	TUMORS BODY UTERUS POSTPARTUM COND/COMPLICATION
654.21	PREV C/S DELIV DELIV W/WO MENTION ANTPRTM COND
654.31	RETROVERTED&INCARCERATED GRAVID UTERUS DELIVERED
654.32	RETROVRT&INCARCERAT GRAVD UTRUS DELIV W/ PPC
654.41	OTH ABN SHAPE/PSTN GRAVD UTRUS&NGHBR STRCT DELIV
654.42	OTH ABN SHAPE/POS GRAVID UTERUS DEL W/PP COMPL
654.71	CONGENITAL/ACQUIRED ABNORM VAGINA W/DELIVERY
654.72	CONGEN/ACQ ABNORM VAGINA DELIVERED W/MENTION PPC

DX0209 FULL TERM DELIVERY	
654.81	CONGENITAL/ACQUIRED ABNORMALITY VULVA W/DELIVERY
654.82	CONGEN/ACQ ABNORM VULVA DELIVERED W/MENTION PPC
654.91	OTH&UNSPEC ABNORM ORGN&SOFT TISSUES PELV W/DELIV
654.92	OTH&UNS ABN ORGN&SOFT TISS PELVIS DEL W/PP COMPL
659.41	GRAND MULTIPARITY DELIV W/WO ANTPRTM COND
659.51	ELDERLY PRIMIGRAVIDA, DELIVERED
659.61	ELDER MULTIGRAVIDA DELIV W/MENTION ANTPRTM COND
660.01	OBST CAUS MALPOSITION FETUS@ONSET LABR DELIV
660.11	OBSTRUCTION BY BONY PELVIS DURING L&D DELIVERED
660.21	OBST ABN PELV SFT TISS DUR LABRAND DELIV DELIV
660.31	DEEP TRNSVRSE ARREST-OCCIPITOPOSTER-DEL-UNS APC
660.41	SHOULDER DYSTOCIA DURING LABOR&DELIVER DELIVERED
660.51	LOCKED TWINS, DELIVERED
660.91	UNSPECIFIED OBSTRUCTED LABOR WITH DELIVERY
661.01	PRIMARY UTERINE INERTIA WITH DELIVERY
661.11	SECONDARY UTERINE INERTIA WITH DELIVERY
661.21	OTHER AND UNSPECIFIED UTERINE INERTIA W/DELIVERY
661.31	PRECIPITATE LABOR, WITH DELIVERY
661.41	HYPERTON INCOORD/PROLONG UTERINE CONTRACS DELIV
661.91	UNSPECIFIED ABNORMALITY OF LABOR WITH DELIVERY
662.01	PROLONGED FIRST STAGE OF LABOR DELIVERED
662.11	UNSPECIFIED PROLONGED LABOR DELIVERED
662.21	PROLONGED SECOND STAGE OF LABOR DELIVERED
662.31	DELAYED DELIVERY 2 TWIN TRIPLET ETC DELIVERED
664	TRAUMA TO PERINEUM AND VULVA DURING DELIVERY
664.0	FIRST-DEGREE PERINEAL LACERATION DURING DELIVERY
664.01	FIRST-DEGREE PERINEAL LACERATION WITH DELIVERY
664.1	2-DEGREE PERINEAL LACERATION DURING DELIVERY
664.11	SECOND-DEGREE PERINEAL LACERATION WITH DELIVERY
664.2	THIRD-DEGREE PERINEAL LACERATION DURING DELIVERY
664.21	THIRD-DEGREE PERINEAL LACERATION WITH DELIVERY
664.3	FOURTH-DEG PERINEAL LACERATION DURING DELIVERY
664.31	FOURTH-DEGREE PERINEAL LACERATION WITH DELIVERY
664.4	UNSPECIFIED PERINEAL LACERATION DURING DELIVERY
664.41	UNSPECIFIED PERINEAL LACERATION WITH DELIVERY
664.5	VULVAR AND PERINEAL HEMATOMA DURING DELIVERY
664.51	VULVAR AND PERINEAL HEMATOMA WITH DELIVERY
664.8	OTHER SPEC TRAUMA PERINEUM&VULVA DURING DELIVERY
664.81	OTHER SPECIFIED TRAUMA PERINEUM&VULVA W/DELIVERY
664.9	UNSPEC TRAUMA PERINEUM&VULVA DURING DELIVERY
664.91	UNSPECIFIED TRAUMA TO PERINEUM&VULVA W/DELIVERY
665.22	INVERSION UTERUS DELIVERED W/PPC
665.24	INVERSION OF UTERUS, POSTPARTUM
665.31	LACERATION OF CERVIX, WITH DELIVERY
665.41	HIGH VAGINAL LACERATION WITH DELIVERY

DX0209 FULL TERM DELIVERY	
665.51	OTHER INJURY TO PELVIC ORGANS WITH DELIVERY
665.61	DAMAGE TO PELVIC JOINTS AND LIGAMENTS W/DELIVERY
665.71	PELVIC HEMATOMA, WITH DELIVERY
665.81	OTHER SPECIFIED OBSTETRICAL TRAUMA WITH DELIVERY
665.91	UNSPECIFIED OBSTETRICAL TRAUMA WITH DELIVERY
666.02	THIRD-STAGE POSTPARTUM HEMORRHAGE WITH DELIVERY
666.12	OTHER IMMEDIATE POSTPARTUM HEMORRHAGE W/DELIVERY
666.32	POSTPARTUM COAGULATION DEFECTS WITH DELIVERY
667	RETAINED PLACENTA/MEMBRANES WITHOUT HEMORRHAGE
667.0	RETAINED PLACENTA WITHOUT HEMORRHAGE
667.00	RETAIN PLACENTA W/O HEMORR UNSPEC AS EPIS CARE
667.02	RETN PLACNTA W/O HEMORR DEL W/MENTION PP COMPL
667.04	RETAINED PLACENTA WITHOUT HEMORR PP COND/COMP
667.1	RETAINED PRTNS PLACENTA/MEMBRANES WITHOUT HEMORR
667.10	RETN PORTIONS PLACNTA/MEMB W/O HEMORR UNS EOC
667.12	RETN PORTIONS PLCNTA/MEMB W/O HEMORR DEL W/COMPL
667.14	RETN PORTIONS PLACNTA/MEMB W/O HEMOR PP COMPL
669.5	FORCEPS/VAC EXT DELIV WITHOUT MENTION INDICATION
669.50	FORCEPS/VAC EXT DELIV W/O INDICAT UNS EPIS CARE
669.51	FORCEPS/EXTRACTOR DEL W/O INDICATION-DELIVERED
669.6	BREECH EXTRACTION WITHOUT MENTION OF INDICATION
669.60	BREECH XTRAC W/O MENTION INDICAT UNS EPIS CARE
669.61	BREECH XTRAC W/O INDICAT DELIV W/WO ANTPRTM COND
669.7	CESAREAN DELIVERY WITHOUT MENTION OF INDICATION
669.70	C/S DELIV W/O MENTION INDICAT UNS AS EPIS CARE
669.71	C/S DELIV W/O INDICAT DELIV W/WO ANTPRTM COND
669.81	OTH COMP L&D DELIVERED W/WO MENTION ANTPRTM COND
669.91	UNSPEC COMP L&D DELIV W/WO MENTION ANTPRTM COND
671.01	VARICOSE VNS LEGS DELIV W/WO ANTPRTM COND
671.02	VARICOSE VEINS LEGS W/DELIVERY W/MENTION PPC
671.11	VARICOSE VNS VULVA&PERIN DELIV W/WO ANTPRTM COND
671.12	VARICOSE VEINS VULVA&PERIN W/DELIV W/MENTION PPC
671.21	SUP THROMBOPHLEB DELIV W/WO MENTION ANTPRTM COND
671.22	SUP THROMBOPHLEBITIS W/DELIV W/MENTION PPC
V27.0	OUTCOME OF DELIVERY SINGLE LIVEBORN
V27.2	OUTCOME OF DELIVERY TWINS BOTH LIVEBORN
V27.3	OUTCOME DELIVERY TWINS 1 LIVEBORN& 1 STILLBORN
V27.5	OUTCOME DELIVERY OTH MULTIPLE BIRTH ALL LIVEBORN
V27.6	OUTCOME DELIV OTH MULTIPLE BIRTH SOME LIVEBORN
V27.9	OUTCOME OF DELIVERY, UNSPECIFIED

DX0210 GROUP B STREP INFECTION OR CARRIER STATE	
ICD-9 Code	**Description**
041.02	STREPTOCOCCUS INFECTION CCE & UNS SITE GROUP B
V02.51	CARRIER/SUSPECTED CARRIER GROUP B STREPTOCOCCUS

DX0211 ANTENATAL SCREENING FOR STRETOCOCCUS B	
ICD-9 Code	**Description**
V28.6	ANTENATAL SCREENING FOR STREPTOCOCCUS B

Procedure and Revenue Code Sets

The following tables represent the applicable code sets for each procedure that is referenced by the Pregnancy Management rules.

PR0020 CHLAMYDIA SCREENING (HEDIS®)	
CPT® Code	**Description**
87110	Culture, chlamydia, any source
87270	Infectious agent antigen detection by immunofluorescent technique; Chlamydia trachomatis
87320	Infectious agent antigen detection by enzyme immunoassay technique, qualitative or semiquantitative, multiple step method; Chlamydia trachomatis
87490	Infectious agent detection by nucleic acid (DNA or RNA); Chlamydia trachomatis, direct probe technique
87491	Infectious agent detection by nucleic acid (DNA or RNA); Chlamydia trachomatis, amplified probe technique
87492	Infectious agent detection by nucleic acid (DNA or RNA); Chlamydia trachomatis, quantification
87810	Infectious agent detection by immunoassay with direct optical observation; Chlamydia trachomatis

PR0107 PROFESSIONAL ENCOUNTER		
CPT Code	**Specific Encounter Type**	**General Encounter Category**
99201-99215	Office Visit	Outpatient Professional
99217-99220	Observation Care	Observation Care
99221-99239	Inpatient Visit	Inpatient Visit
99241-99245	Office Consult	Outpatient Professional
99251-99263	Inpatient Consult	Inpatient Consult
99271-99275	Confirmatory Consultation	Confirmatory Consultation
99281-99285	ER Physician Visit	ER Professional Visit
99301-99318	Nursing Facility Services	Nursing Facility Services
99341-99350	Home Visit	Outpatient Professional
99381-99397	Preventive Medicine Visit	Outpatient Professional
99401-99429	Counseling/Risk Factor Visit	Counseling/Risk Factor Visit
RV0107 PROFESSIONAL ENCOUNTER		
Rev Code	**Specific Encounter Type**	**General Encounter Category**
0510-0526, 0528-0529	Clinic Visit (Facility Component)	Clinic Visit (Facility Component)
0981	ER Visit (Professional Component)	ER Professional Visit
0983	Clinic Visit (Professional Component)	Outpatient Professional

PR0108 PROFESSIONAL SUPERVISION		
CPT Code	**Specific Encounter Type**	**General Encounter Category**
99321 - 99337	Domiciliary or Rest Home Visit	Rest Home Visit
99339 - 99340	Physician Supervision of Rest Home Patient	Rest Home Supervision
99371 - 99373	Telephone call for consultation or medical management or coordination	Telephonic service
99374 - 99375	Supervision of Home Health Care	Home Care Supervision
99377 - 99378	Physician Supervision of Hospice Care	Hospice Care Supervision
99379 - 99380	Physician Supervision of Nursing Facility Patient	Nursing Facility Supervision
HCPCS Code	**Specific Encounter Type**	**General Encounter Category**
G0182	Physician Supervision of Hospice Care	Hospice Care Supervision

PR0140 DELIVERY, GLOBAL CODES	
CPT Code	**Description**
59400	Routine obstetric care including antepartum care, vaginal delivery (with or w/o episiotomy, and/or forceps) and postpartum care
59510	Routine obstetric care including antepartum care, cesarean delivery (with or w/o episiotomy, and/or forceps) and postpartum care
59610	Routine obstetric care including antepartum care, vaginal delivery (with or w/o episiotomy, and/or forceps) and postpartum care, after previous cesarean delivery
59618	Routine obstetric care including antepartum care, cesarean delivery, and postpartum care, following attempted vaginal delivery after previous cesarean delivery

PR0141 DELIVERY, NON-GLOBAL CODES	
CPT Code	**Description**
59409	Vaginal delivery only (with or w/o episiotomy, and/or forceps)
59410	Vaginal delivery only (with or w/o episiotomy, and/or forceps), including postpartum care
59514	Cesarean delivery only
59515	Cesarean delivery only, including postpartum care
59612	Vaginal delivery only, after previous cesarean delivery (with or w/o episiotomy, and/or forceps)
59614	Vaginal delivery only, after previous cesarean delivery (with or w/o episiotomy, and/or forceps),
59620	Cesarean delivery only, following attempted vaginal delivery after previous cesarean delivery
59622	Cesarean delivery only, following attempted vaginal delivery after previous cesarean delivery,
ICD-9 Code	**Description**
72.0	Low forceps operation
72.1	Low forceps operation with episiotomy
72.2	Mid forceps operation
72.21	Mid forceps operation with episiotomy
72.29	Other mid forceps operation
72.3	High forceps operation
72.31	High forceps operation with episiotomy
72.39	Other high forceps operation
72.4	Forceps rotation of fetal head
72.5	Breech extraction
72.51	Partial breech extraction with forceps to aftercoming head
72.52	Other partial breech extraction
72.53	Total breech extraction with forceps to aftercoming head
72.54	Other total breech extraction
72.6	Forceps application to aftercoming head
72.7	Vacuum extraction
72.71	Vacuum extraction with episiotomy
72.79	Other vacuum extraction
72.8	Other specified instrumental delivery
72.9	Unspecified instrumental delivery
73.0	Artificial rupture of membranes
73.01	Induction of labor by artificial rupture of membranes
73.09	Other artificial rupture of membranes
73.1	Other surgical induction of labor

73.2	Internal and combined version and extraction
73.21	Internal and combined version without extraction
73.22	Internal and combined version with extraction
73.3	Failed forceps
73.4	Medical induction of labor
73.5	Manually assisted delivery
73.51	Manual rotation of fetal head
73.59	Other manually assisted delivery
73.6	Episiotomy
73.8	Operations on fetus to facilitate delivery
73.9	Other operations assisting delivery
73.91	External version to assist delivery
73.92	Replacement of prolapsed umbilical cord
73.93	Incision of cervix to assist delivery
73.94	Pubiotomy to assist delivery
73.99	Other operations to assist delivery
74.0	Classical cesarean section
74.1	Low cervical cesarean section
74.2	Extraperitoneal cesarean section
74.3	Removal of extratubal ectopic pregnancy
74.4	Cesarean section of other specified type
74.9	Cesarean section of unspecified type
74.91	Hysterotomy to terminate pregnancy
74.99	Other cesarean section of unspecified type

PR0142 HIV TEST	
CPT Code	**Description**
86689	Antibody; HTLV or HIV antibody, confirmatory test (eg, Western Blot)
86701	Antibody; HIV-1
86702	Antibody; HIV-2
86703	Antibody; HIV-1 and HIV-2, single assay
87390	Infectious agent antigen detection by enzyme immunoassay technique, qualitative or semiquantitative, multiple step method; HIV-1
87391	Infectious agent antigen detection by enzyme immunoassay technique, qualitative or semiquantitative, multiple step method; HIV-2
87534	Infectious agent detection by nucleic acid (DNA or RNA); HIV-1, direct probe technique
87535	Infectious agent detection by nucleic acid (DNA or RNA); HIV-1, amplified probe technique
87536	Infectious agent detection by nucleic acid (DNA or RNA); HIV-1, quantification
87537	Infectious agent detection by nucleic acid (DNA or RNA); HIV-2, direct probe technique
87538	Infectious agent detection by nucleic acid (DNA or RNA); HIV-2, amplified probe technique
87539	Infectious agent detection by nucleic acid (DNA or RNA); HIV-2, quantification

PR0145 ABO BLOOD TYPE TESTING	
CPT Code	**Description**
80055	**Obstetric panel** This panel must include the following: Blood count, complete (CBC), automated

	and automated differential WBC count (85025 or 85027 and 85004) OR Blood count, complete (CBC), automated (85027) and appropriate manual differential WBC count (85007 or 85009) Hepatitis B surface antigen (HBsAg) (87340) Antibody, rubella (86762) Syphilis test, qualitative (eg, VDRL, RPR, ART) (86592) Antibody screen, RBC, each serum technique (86850) Blood typing, ABO (86900) AND Blood typing, Rh (D) (86901)
86900	Blood typing; ABO

PR0146 RH BLOOD TYPE TESTING	
CPT Code	**Description**
80055	**Obstetric panel** This panel must include the following: Blood count, complete (CBC), automated and automated differential WBC count (85025 or 85027 and 85004) OR Blood count, complete (CBC), automated (85027) and appropriate manual differential WBC count (85007 or 85009) Hepatitis B surface antigen (HBsAg) (87340) Antibody, rubella (86762) Syphilis test, qualitative (eg, VDRL, RPR, ART) (86592) Antibody screen, RBC, each serum technique (86850) Blood typing, ABO (86900) AND Blood typing, Rh (D) (86901)
86901	Blood typing; Rh (D)

PR0147 SYPHILIS	
CPT Code	**Description**
80055	**Obstetric panel** This panel must include the following: Blood count, complete (CBC), automated and automated differential WBC count (85025 or 85027 and 85004) OR Blood count, complete (CBC), automated (85027) and appropriate manual differential WBC count (85007 or 85009) Hepatitis B surface antigen (HBsAg) (87340) Antibody, rubella (86762) Syphilis test, qualitative (eg, VDRL, RPR, ART) (86592) Antibody screen, RBC, each serum technique (86850) Blood typing, ABO (86900) AND Blood typing, Rh (D) (86901)
86592	Syphilis test; qualitative (eg, VDRL, RPR, ART)
86593	Syphilis test; quantitative
86781	Antibody; Treponema pallidum, confirmatory test (eg, FTA-abs)
87285	Infectious agent antigen detection by immunofluorescent technique; Treponema pallidum

PR0148 URINE CULTURE	
CPT Code	**Description**
87086	Urine culture, bacterial, quantitative colony count
87088	Urine culture, bacterial, quantitative colony count, with isolation and presumptive identification of isolates

PR0149 HEPATITIS B SURFACE ANTIGEN	
CPT Code	**Description**
80055	**Obstetric panel** - This panel must include the following: Hemogram, automated, and manual differential WBC count (CBC) (85022) OR Hemogram and platelet count, automated, and automated complete differential WBC count (CBC) (85025) Hepatitis B surface antigen (HBsAg) (87340) Antibody, rubella (86762) Syphilis test, qualitative (e.g., VDRL, RPR, ART) (86592) Antibody screen, RBC, each serum technique (86850) Blood typing, ABO (86900) AND Blood typing, Rh (D) (86901)
87340	Hepatitis B surface antigen (HBsAg)

PR0150 GROUP B STREPTOCOCCUS	
CPT Code	**Description**
87081	Culture, presumptive, pathogenic organisms, screening only;
87149	Culture, typing; identification by nucleic acid probe
87653	Infectious agent detection by nucleic acid (DNA or RNA); Streptococcus, group B, amplified probe technique
87802	Infectious agent detection by immunoassay with direct optical observation, Streptococcus, group B

Laboratory Result Values – LOINC® Code Sets

The following codes represent the lab result values that are referenced in the Pregnancy Management rules.

LC0005 CHLAMYDIA SPECIES

Note	LOINC Code	Component	Property	Time	System	Scale	Method Type	Units
	557-9	CHLAMYDIA SP IDENTIFIED	PRID	PT	GEN	NOM	ORGANISM SPECIFIC CULTURE	
	560-3	CHLAMYDIA SP IDENTIFIED	PRID	PT	XXX	NOM	ORGANISM SPECIFIC CULTURE	

LC0006 CHLAMYDIA TRACHOMATIS

Note	LOINC Code	Component	Property	Time	System	Scale	Method Type	Units
	14463-4	CHLAMYDIA TRACHOMATIS	ACNC	PT	CVX	ORD	ORGANISM SPECIFIC CULTURE	
	14464-2	CHLAMYDIA TRACHOMATIS	ACNC	PT	GENV	ORD	ORGANISM SPECIFIC CULTURE	
	14467-5	CHLAMYDIA TRACHOMATIS	ACNC	PT	URNS	ORD	ORGANISM SPECIFIC CULTURE	
	14470-9	CHLAMYDIA TRACHOMATIS AG	ACNC	PT	CVX	ORD	EIA	
	14471-7	CHLAMYDIA TRACHOMATIS AG	ACNC	PT	GENV	ORD	EIA	
	14474-1	CHLAMYDIA TRACHOMATIS AG	ACNC	PT	URNS	ORD	EIA	
	14509-4	CHLAMYDIA TRACHOMATIS AG	ACNC	PT	CVX	ORD	IF	
	14510-2	CHLAMYDIA TRACHOMATIS AG	ACNC	PT	GENV	ORD	IF	
	14513-6	CHLAMYDIA TRACHOMATIS AG	ACNC	PT	URNS	ORD	IF	
	16600-9	CHLAMYDIA TRACHOMATIS DNA	ACNC	PT	GEN	ORD	PROBE	
	16601-7	CHLAMYDIA TRACHOMATIS DNA	ACNC	PT	UR	ORD	PROBE	
	16602-5	CHLAMYDIA TRACHOMATIS RRNA	ACNC	PT	UR	ORD	PROBE	
2	20993-2	CHLAMYDIA TRACHOMATIS DNA	ACNC	PT	XXX	ORD	PROBE	
	21189-6	CHLAMYDIA TRACHOMATIS DNA	ACNC	PT	CVM	ORD	PROBE.AMP. TAR	
	21190-4	CHLAMYDIA TRACHOMATIS DNA	ACNC	PT	CVX	ORD	PROBE.AMP. TAR	
	21191-2	CHLAMYDIA TRACHOMATIS DNA	ACNC	PT	URTH	ORD	PROBE.AMP. TAR	
	21192-0	CHLAMYDIA TRACHOMATIS DNA	ACNC	PT	URTH	ORD	PROBE	
1	21613-5	CHLAMYDIA TRACHOMATIS DNA	ACNC	PT	XXX	ORD	PROBE.AMP. TAR	
	23838-6	CHLAMYDIA TRACHOMATIS DNA	ACNC	PT	GENF	ORD	PROBE	
	31771-9	CHLAMYDIA TRACHOMATIS AG	ACNC	PT	CVX	ORD		
	31772-7	CHLAMYDIA TRACHOMATIS AG	ACNC	PT	GENV	ORD		

	31775-0	CHLAMYDIA TRACHOMATIS AG	ACNC	PT	URNS	ORD		
	31777-6	CHLAMYDIA TRACHOMATIS AG	ACNC	PT	XXX	ORD		
	42931-6	CHLAMYDIA TRACHOMATIS RRNA	ACNC	PT	UR	ORD	PROBE.AMP. TAR DETECTION LIMIT = 50 IU/ML	
	4993-2	CHLAMYDIA TRACHOMATIS RRNA	ACNC	PT	XXX	ORD	PROBE	
	6349-5	CHLAMYDIA TRACHOMATIS	ACNC	PT	XXX	ORD	ORGANISM SPECIFIC CULTURE	
	6354-5	CHLAMYDIA TRACHOMATIS AG	ACNC	PT	XXX	ORD	EIA	
	6355-2	CHLAMYDIA TRACHOMATIS AG	ACNC	PT	XXX	ORD	IF	
	6356-0	CHLAMYDIA TRACHOMATIS DNA	ACNC	PT	GEN	ORD	PROBE.AMP. TAR	
	6357-8	CHLAMYDIA TRACHOMATIS DNA	ACNC	PT	UR	ORD	PROBE.AMP. TAR	

LC0014 OBSTETRIC PANEL

Note	LOINC Code	Component	Property	Time	System	Scale	Method Type	Units
1	24364-2	OBSTETRIC HCFA 96 PANEL		PT	SER+BLD			

LC0018 SYPHILIS

Note	LOINC Code	Component	Property	Time	System	Scale	Method Type	Units
	11084-1	REAGIN AB	TITR	PT	SER	QN		TITER
	11597-2	TREPONEMA PALLIDUM AB	ACNC	PT	SER	QN		
	17723-8	TREPONEMA PALLIDUM AB	ACNC	PT	SER	ORD	IMMOBILIZATION	
	17724-6	TREPONEMA PALLIDUM AB	ACNC	PT	SER	QN	IF	
	17725-3	TREPONEMA PALLIDUM AB	ACNC	PT	SER	QN	LA	
	17726-1	TREPONEMA PALLIDUM AB.IGG	ACNC	PT	SER	ORD	IF	
	17727-9	TREPONEMA PALLIDUM AB.IGG	ACNC	PT	SER	QN	IF	
	17728-7	TREPONEMA PALLIDUM AB.IGM	ACNC	PT	SER	QN	IF	
	17729-5	TREPONEMA PALLIDUM AB.IGM	ACNC	PT	SER	ORD	IF	
	20507-0	REAGIN AB	ACNC	PT	SER	ORD	RAPID TEST	
	20508-8	REAGIN AB	ACNC	PT	SER	QN	RAPID TEST	
	22461-8	REAGIN AB	ACNC	PT	SER	ORD		
	22462-6	REAGIN AB	ACNC	PT	SER	QN		
	22587-0	TREPONEMA PALLIDUM AB	ACNC	PT	SER	ORD		
	22590-4	TREPONEMA PALLIDUM AB	TITR	PT	SER	QN		TITER
	22592-0	TREPONEMA PALLIDUM AB.IGG	ACNC	PT	SER	QN		
	22594-6	TREPONEMA PALLIDUM AB.IGM	ACNC	PT	SER	QN		
	24110-9	TREPONEMA PALLIDUM AB	ACNC	PT	SER	ORD	EIA	
	24312-1	TREPONEMA PALLIDUM AB	ACNC	PT	SER	ORD	AGGL	

	26009-1	TREPONEMA PALLIDUM AB	TITR	PT	SER	QN	HA	TITER
	31147-2	REAGIN AB	TITR	PT	SER	QN	RAPID TEST	
	34382-2	TREPONEMA PALLIDUM AB	TITR	PT	SER	QN	IF	
	5291-0	REAGIN AB	ACNC	PT	SER	QN	FLOC	
1	5292-8	REAGIN AB	ACNC	PT	SER	ORD	FLOC	
	5392-6	TREPONEMA PALLIDUM AB	ACNC	PT	SER	QN	IMMOBILIZATION	
	5393-4	TREPONEMA PALLIDUM AB	ACNC	PT	SER	ORD	IF	
	5394-2	TREPONEMA PALLIDUM AB	TITR	PT	SER	QN	LA	TITER
	6561-5	TREPONEMA PALLIDUM AB.IGG	ACNC	PT	SER	ORD		
	6562-3	TREPONEMA PALLIDUM AB.IGM	ACNC	PT	SER	ORD		
	660-1	MICROSCOPIC OBSERVATION	PRID	PT	XXX	NOM	DARK FIELD EXAMINATION	
	8041-6	TREPONEMA PALLIDUM AB	ACNC	PT	SER	ORD	HA	

LC0020 CHLAMYDIA TRACHOMATIS AND NEISSERIA GONORRHOEAE

Note	LOINC Code	Component	Property	Time	System	Scale	Method Type	Units
	36902-5	CHLAMYDIA TRACHOMATIS+NEISSERIA GONORRHOEAE DNA	ACNC	PT	XXX	ORD	PROBE.AMP. TAR	
	36903-3	CHLAMYDIA TRACHOMATIS+NEISSERIA GONORRHOEAE DNA	PRID	PT	XXX	NOM	PROBE.AMP. TAR	
	43406-8	CHLAMYDIA TRACHOMATIS+NEISSERIA GONORRHOEAE DNA	ACNC	PT	XXX	ORD	PROBE.AMP. SIG	

LC0021 HIV TEST

Note	LOINC Code	Component	Property	Time	System	Scale	Method Type	Units
	14092-1	HIV 1 AB	ACNC	PT	SER	ORD	IF	
	24012-7	HIV 1 AG	ACNC	PT	SER	ORD		
	29893-5	HIV 1 AB	ACNC	PT	SER	ORD	EIA	
	31201-7	HIV 1+2 AB	ACNC	PT	SER	ORD	EIA	
	5221-7	HIV 1 AB	ACNC	PT	SER	ORD	IB	
	5222-5	HIV 1 AG	ACNC	PT	SER	ORD	EIA	
	7917-8	HIV 1 AB	ACNC	PT	SER	ORD		
	7918-6	HIV 1+2 AB	ACNC	PT	SER	ORD		

LC0022 ABO BLOOD TYPE TESTING

Note	LOINC Code	Component	Property	Time	System	Scale	Method Type	Units
	883-9	ABO GROUP	TYPE	PT	BLD	NOM		

LC0023 RH BLOOD TYPE TESTING

Note	LOINC Code	Component	Property	Time	System	Scale	Method Type	Units

	10331-7	RH	TYPE	PT	BLD	NOM		
	34961-3	RH	TYPE	PT	BLD	NOM	CONFIRM	

LC0024 ABO/RH BLOOD TYPE TESTING

Note	LOINC Code	Component	Property	Time	System	Scale	Method Type	Units
	34530-6	ABO & RH GROUP PANEL	TYPE	PT	BLD	NOM		
	882-1	ABO+RH GROUP	TYPE	PT	BLD	NOM		
	884-7	ABO+RH GROUP	TYPE	PT	BLDC	NOM		

LC0025 HEPATITIS B SURFACE ANTIGEN

Note	LOINC Code	Component	Property	Time	System	Scale	Method Type	Units
	10674-0	HEPATITIS B VIRUS SURFACE AG	ACNC	PT	TISS	ORD	IMMUNE STAIN	
	10675-7	HEPATITIS B VIRUS SURFACE AG	PRID	PT	TISS	NOM	ORCEIN STAIN	
	7905-3	HEPATITIS B VIRUS SURFACE AG	ACNC	PT	SER	ORD	NEUT	

LC0026 GROUP B STREPTOCOCCUS

Note	LOINC Code	Component	Property	Time	System	Scale	Method Type	Units
	11266-4	STREPTOCOCCUS AGALACTIAE AG	ACNC	PT	XXX	ORD		
	20488-3	STREPTOCOCCUS AGALACTIAE AG	ACNC	PT	CSF	ORD		
	5034-4	STREPTOCOCCUS AGALACTIAE RRNA	ACNC	PT	XXX	ORD	PROBE	
	584-3	STREPTOCOCCUS AGALACTIAE IDENTIFIED	PRID	PT	GENV	NOM	ORGANISM SPECIFIC CULTURE	
	6551-6	STREPTOCOCCUS AGALACTIAE AG	ACNC	PT	THRT	ORD	IF	

Notes:

(1) When using lab results data that has not been mapped to a LOINC code, customers should map the comparable vendor specific test number provided by their laboratory vendor(s) to one of these “default” codes.

(2) This is a deprecated code which may be present on historical data, or which some laboratories may be continuing to use. Result records with these codes are included on the definition of this test.

Pregnancy Management Glossary

<table>
<tr><th>Term</th><th>Definition</th></tr>
<tr><td>℞</td><td>The presence of ℞ in the Report Rule ID column indicates that the rule candidate is exclusively or primarily dependent on pharmacy claims information. Members who do not have a managed pharmacy benefit, as determined from the Member Term input data file, will be assigned a default value of ‘N’ for these rule candidates, thus eliminating unnecessary processing time.</td></tr>
<tr><td>Result Flag ‘Y’</td><td>A Result Flag of ‘Y’ is assigned to indicate that the result of the rule is affirmative; the treatment was provided, the diagnostic test was performed, the lab value was normal, etc. If a rule has an affirmative result, the result flag of Y will be assigned regardless of the patient’s length of eligibility.</td></tr>
<tr><td>Result Flag ‘N’</td><td>A Result Flag of ‘N’ is assigned to indicate that the result of the rule is negative AND the patient met the minimum eligibility requirements for that particular rule. For example, if the rule is looking for a drug within the last 120 days, the patient must be enrolled in a drug benefit for at least the last 120 days.</td></tr>
<tr><td>Result Flag ‘Q’</td><td>A Result Flag of ‘Q’ is assigned to indicate that there was no claim record indicating that the patient received a particular test or treatment, but there may be data incompleteness due to lack of continuous enrollment. If a patient is not continuously enrolled in medical or pharmacy benefits throughout the window of time during which the service was being evaluated, there is no way to know whether the test was performed or not. The absence of a claim record for the test might be due to data incompleteness prior to the onset of medical benefits, or it might reflect the fact that the patient did not actually receive the test.</td></tr>
<tr><td>Result Flag ‘NA’</td><td>A Result Flag of ‘NA’ is assigned to indicate that the member has clinical characteristics or contraindications that render a particular rule “not applicable” to that particular member. There are seven (7) breakdowns of the NA result flag, which provide a method for further identification and clarification of this flag:
<table>
<tr><th>FLAG</th><th>DESCRIPTION</th></tr>
<tr><td>NA1</td><td>Patient did not meet the age or gender criteria.</td></tr>
<tr><td>NA2</td><td>Patient was not currently taking the medication in question or had not taken it for the required duration.</td></tr>
<tr><td>NA3</td><td>Patient was taking the medication, but a possession ratio could not be computed [less than two prescriptions during the rule time window].</td></tr>
<tr><td>NA4</td><td>Patient did not meet the rule specific criteria [e.g., co-morbidity, complexity (diagnosis and medication), intervention not warranted].</td></tr>
<tr><td>NA5</td><td>No lab result record or insufficient information.</td></tr>
<tr><td>NA6</td><td>Patient admitted to long term care facility or hospital which might cause data incompleteness.</td></tr>
<tr><td>NA7</td><td>Patient who did not receive treatment or medication had a contraindication or other justification.</td></tr>
</table></td></tr>
<tr><td>Result Flag ‘NRX’</td><td>A Result Flag of ‘NRX’ is assigned under the following circumstances to the rule types noted below: 1) the member did not have a pharmacy benefit at the end of the report period (applies to chronic and some preventive cases (case ID = 1xxxxx or 3xxxxx)) or 2) the member did not have a pharmacy benefit throughout the duration of episodic condition (case ID = 2xxxxx).

Research Based rules (R-1, R-2)
Medication Adherence rules (A)
Patient Safety rules (S-M, S-DI)

These rule types are exclusively or primarily dependent on pharmacy claims. For Care Pattern rules (CP-I, CP-R, CP-E), a Q flag will be assigned if the patient does not meet the minimum pharmacy eligibility requirements for the particular rule. In addition to the above, some national standard rules may also have NRX flags assigned if the member did not have pharmacy benefit at the end of the report period.</td></tr>
<tr><td>MCE</td><td>In order to assign a Result Flag of 'Q', each rule has a specific Minimum Continuous Enrollment (MCE) period for medical and pharmacy benefits which reflects the time frame of the recommended services (e.g., if the rule is looking for a test within 12 months the medical MCE is 12 months). When a test or treatment is absent, the MCE is used to determine whether to assign a result flag of ‘N’ or ‘Q’. A Result Flag of ‘N’ is assigned when the patient meets the MCE requirements. A Result Flag of ‘Q’ is assigned when the patient does not meet the MCE requirements.</td></tr>
</table>

INGENIX®

Quality Processes

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Section 1 - Overview

1.1 Purpose of Document

This document describes the quality processes from clinical measure creation to final product delivery. These processes ensure that the information provided to our clients has maximum quality and integrity.

1.2 Overview

Evidence-based treatment guidelines have been developed with the belief that adherence to them lowers costs, increases quality of care, or both. Health service organizations, payers, and employers want to provide the best care at the best cost. By integrating clinically relevant research evidence with actual care patterns, as evidenced through claims and other administrative data, gaps in care can be identified and interventions can be targeted to improve outcomes (cost and quality).

Measures are created through a well-defined process involving careful review at every step. Quality checks are performed in five different phases of development:

1. Clinical Measure Creation
2. Conversion of Clinical Measures to Machine Code
3. Clinical Measures Processing Engine (i.e., component-ware)
4. End to End Testing (Customer Acceptance Testing)
5. Validation of Results

1.3 Testing Through Multiple Methods

Quality assurance of each measure is accomplished through the testing using multiple methods. Types of testing, data samples and volume vary to ensure the integrity of the measure. Rigorous development, analysis and testing processes are deployed for creating of the measure specifications. Software testing ensures the software is working as designed. Reliability and validity testing of measures is based on differing data samples and volume of members. National benchmarks are created on a large volume set of data representing members throughout the United States. All quality checks for all measure results must have consistent results and meet expected outcomes based on industry knowledge and experience.

Section 2 - Quality Processes

2.1 Creation of Clinical Measures

2.1.1 Literature Review

The process of measure creation begins with the clinician, who reviews published literature on evidence-based medicine. Various resources are examined, including but not limited to:

- MEDLINE
- Professional and specialty organization (e.g. ADA, ACC/AHA) guidelines
- Agency for Healthcare Research and Quality (AHRQ) including national clearinghouse guidelines
- National standards (e.g. HEDIS, AMA PCPI, AQA, NQF)
- Institute for Clinical Systems Improvement (ICSI)
- Food and Drug Administration (FDA) Advisories
- Published clinical trials and other relevant articles

- Pharmaceutical manufacturer's recommendations

Based upon the supporting literature and the ability to adequately define and measure care using electronic claims data, proposed new measures are developed. Note: this same process is employed when deciding whether to update or retire an existing measure.

2.1.2 Expert Panel Review

The proposed measures and current treatment guidelines are then reviewed by the Clinical Consultant Panel. This expert panel plays a critical role in the creation and maintenance of measures. The panel is currently comprised of 21 clinicians, including 18 physicians and 3 Pharmacologists. Each physician is board certified in their area of specialty and has more than 15 years of clinical practice.

The specialties / sub-specialties represented on the panel are:

Specialty	
Cardiology (2)	Oncology
Endocrinology	Ophthalmology
Family Practice	Orthopedics
Gastrointestinal	Otolaryngology
Geriatrics	Pediatrics
Hematology	Psychiatry (2)
Infectious Disease	Pulmonary
Internal Medicine	Rad Oncology
Nephrology	Rheumatology
Neurology (4)	Surgery
OB/GYN	

The physicians on the panel are practicing physicians in settings such as a university hospital, VA hospital, medical center, clinic, independent or group practice. The Pharmacologists have more than 10 years of clinical practice. All clinicians, with the exception of the Medical Director, have no affiliation with UnitedHealth Group outside of their responsibilities on the Clinical Consultant Panel. An annual training session is held for all panel members to provide updates on future product enhancements.

2.1.3 Summary of Evidence Basis

When the expert panel has reached consensus on the proposed measures, a synopsis of the evidence basis for each measure is developed. This synopsis includes citations for published research and guidelines that support the measure, as well as strength of evidence ratings when these rankings are available.

2.1.4 Clinical Algorithms

In conjunction with the synopsis a clinical algorithm is developed which indicates how to define and evaluate the clinical measures. This document includes condition confirmation criteria, exclusion rules, intervention rules, and compliance criteria, as well as high-level details of diagnostic, procedural, revenue, pharmaceutical, and laboratory code sets. These code sets are defined and maintained in a secure product database.

2.1.5 Maintenance Review Cycle

Existing measures are reviewed every 12-24 months as part of an ongoing product maintenance cycle. Any member of the expert panel may suggest changes to a measure at any point, even outside of the regular review cycle, if new evidence is published which relates to the measure.

2.2 Conversion of Clinical Measures into Software Code

The clinical algorithms are converted into software code. A team of business analysts, nurses, and health services researchers translates the words from the clinical algorithm into machine readable language. The team members independently peer review and sign off on each measure to ensure that the software code accurately reflects the original measure specifications.

2.3 Testing of Engine Software Code

The software code from is processed to produce compliance results. Per the product development life cycle there are multiple types of testing activities associated with this component-ware engine. Security requirements, performance requirements, legal requirements (e.g. HIPAA), content requirements, and usability are all tested and verified.

2.3.1 Unit and Integration Testing

During unit and integration testing each engine component is tested discretely by the developer or software engineer who programmed it. In unit testing the developer tests functional features, environmental requirements, system behavior and performance aspects. When the software moves into integration testing, the developer performs positive and negative testing of system interfaces to verify that the functions which were tested at the unit level perform correctly in a full system build and deployment.

2.3.2 Functional Testing

Functional testing is conducted at the end of each software iteration to test the alignment of the product to the functional requirements. The QA team performs positive and negative testing of product requirements and architecture. At the end of functional testing, the decision is made either to move on to the next iteration or to move the software into system testing.

2.3.3 System Testing

There are three types of system testing initiatives which are conducted using sample data to simulate business processes. The table below describes the purpose of each type of system test.

Test Type	Description
Volume testing	Determine whether the engine can handle the required volume of data
Performance testing	Determine whether the engine meets its performance requirements
Platform testing	Ensure that the component-ware works appropriately for all supported operating systems

2.4 Reliability Testing

Customer Acceptance Testing (CAT) is another important quality process. CAT ensures that the clinical measures are functioning as intended and that they generate accurate results for typical billing patterns. Using actual claims data a team of business analysts, nurses, and health services researchers conducts a detailed analysis of the output. For each clinical condition in the product (e.g., Diabetes Mellitus, Coronary Artery Disease, etc.) there is a set of CAT data with at least 4000 members who satisfy the condition confirmation criteria. This data is extracted from a large (50+ million member) multi-payer benchmark database and contains inpatient, outpatient, pharmacy, and laboratory data. The testing team rigorously checks the creation of denominators (target population), numerators, and exclusions from both.

Regression testing is the part of CAT that verifies the reliability of the product across software releases. For a new release the testing team confirms that every unchanged measure produces the same results as in previous releases, accounting for systematic changes to the software (e.g., code updates, logic changes, etc). Regression testing is conducted at multiple points throughout the software development cycle.

2.5 Validity Testing

Face Validity Testing (FVT) is the final testing step in the software release cycle. One million members are randomly selected from the large multi-payer benchmark database and their claims data is processed through the software. The Medical Director reviews the results to verify that:

- Prevalence rates for a condition are comparable to nationally published rates
- Compliance rates for a measure are comparable to the rates reported in the published literature or by other national sources (e.g. HEDIS). If no comparable sources are available, the rates are judged to be clinically reasonable by practicing physicians and health services researchers
- There are no significant, unexplained variations when looking at results from different health plans and different geographic areas

2.6 Creation of National Benchmarks

National benchmarks are on a population no less than 12 million members. Prevalence is calculated doe each condition. Compliance rates are calculated for each measure.
The Medical Director reviews the results to verify that:

- Prevalence rates for a condition are comparable to nationally published rates
- Compliance rates for a measure are comparable to the rates reported in the published literature or by other national sources (e.g. HEDIS). If no comparable sources are available, the rates are judged to be clinically reasonable by practicing physicians and health services researchers
- There are no significant, unexplained variations when looking at results from different health plans and different geographic areas

Section 3 - Summary

Ensuring quality in the product requires expertise from a variety of disciplines across each step in the development process. These efforts, which are designed to minimize the risk of producing inaccurate results, are particularly important for an application which assesses clinical care and identifies gaps in care. Errors cannot be completely eliminated due to the inherent limitations of administrative and claims data (e.g., incomplete data due to coverage and benefit limitations, coordination across multiple insurers, or complimentary care). None-the-less, administrative and claims data offer a cost effective means of identifying gaps in care, so that limited resources can be directed to the areas most likely to generate a return on investment, either through improved outcomes, reduced costs, or both.

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Input Guide

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What Input Files to Prepare

The following list specifies what input files you prepare for processing:

- The claims data file (required)
- The member data file (required)
- The member term data file (required)

Field Type Definitions and Input File Requirements

This chapter lists the field requirements for your input files. One of the attributes listed among the requirements is defined as "Type". There are four field types used to describe a field's value, and they are defined below.

Field Type	Definition
AlphaNum	A value made of letters and/or numbers. If a value of this type is made of numbers only, it will not be a value that can be operated on mathematically. For example, it would be inappropriate to subtract one procedure code from another procedure code even though both values may contain only numbers.
Num	A value made of numbers only, and which can logically be operated on mathematically. Age is an example of this type. One particular field, while not used in mathematical calculations, is defined in the EBM Connect software as such that it accepts only numeric values. (To enter a non-numeric value would cause EBM Connect processing to stop.) Therefore, this field is defined as Num. It is the Case ID field in the optional disease registry input file.
Date	A value which can be interpreted as a date value. Values should always use four-digit years but the format may vary otherwise.
DecNum	A value made of numbers and a decimal point. These values can also logically be operated on mathematically.

Claims Input File

The claims file contains detailed information on services that were billed or performed or otherwise rendered. The claims file includes:

- Medical claims, including medical services, facility services and clinic services
- Pharmacy claims, including billed prescriptions and drugs
- Lab claims, including lab test and results information

Field Name	Type	Length	Required or Optional
Family ID	AlphaNum	1-30	Always required for all claims
Patient ID	AlphaNum	0-2	Optional
Amount Paid	DecNum	1-11	Required for all claims
Amount Allowed	DecNum	0-11	Required for all claims
Procedure Code	AlphaNum	5	Required if there is no revenue code, NDC, or LOINC® code
Procedure Code Modifier	AlphaNum	2	Required for medical claims
Revenue Code	AlphaNum	0 or 4	Optional (applies to medical claims when used)
First Diagnosis Code	AlphaNum	5 or 6	Required for medical claims
Second Diagnosis Code	AlphaNum	0, 5 or 6	Optional (applies to medical claims when used)
Third Diagnosis Code	AlphaNum	0, 5 or 6	Optional (applies to medical claims when used)
Fourth Diagnosis Code	AlphaNum	0, 5 or 6	Optional (applies to medical claims when used)
First Date of Service	Date	8 or 10	Always required for all claims
Last Date of Service	Date	8 or 10	Required for all claims

Paid Date	Date	0, 8 or 10	Optional
Type of Service	AlphaNum	0-10	Optional
Provider ID	AlphaNum	1-20	Required for medical claims
Ordering Provider ID	AlphaNum	0-20	Optional
Provider Type	AlphaNum	1-10	Required for medical claims
Provider Specialty Type	AlphaNum	1-10	Required for medical claims
Provider Key	AlphaNum	1-20	Required for medical claims
NDC	AlphaNum	0 or 11	Required for Rx claims
Day Supply	Num	0-4	Required for Rx claims
Quantity Count	DecNum	0-10	Required for Rx claims
LOINC®	AlphaNum	0 or 7	Required for lab claims
Lab Test Result	AlphaNum	0-18	Required for lab claims
Place of Service	AlphaNum	1-10	Required for medical claims
Unique Record ID	AlphaNum	1-28	Required for all claims
Claim Number	AlphaNum	1-28	Required for all claims
Bill Type Frequency Indicator	Num	0 or 1	Optional
Patient Status	AlphaNum	1-2	Required for facility claims (involving admission or confinement).
Facility Type	AlphaNum	0-2	Optional
Bed Type	AlphaNum	0-1	Optional
First ICD-9 Procedure Code	AlphaNum	0, 4 or 5	Optional, but will impact results (applies to medical claims when used)
Second ICD-9 Procedure Code	AlphaNum	0, 4 or 5	Optional (see above)
Third ICD-9 Procedure Code	AlphaNum	0, 4 or 5	Optional (see above)
Fourth ICD-9 Procedure Code	AlphaNum	0, 4 or 5	Optional (see above)

Field Descriptions

Instructions for each input field are as follows:

Family ID

This field identifies all members of a family and can be any alphanumeric string.

Note: Remember that each Family ID (and Patient ID) listed in your claims input file must have a corresponding record in your member input data file and your member term data file.

Patient ID

This field identifies individual members within a family. If present, this field must be sorted within Family ID, so that all records for an individual are contiguous. If the Family ID uniquely identifies an individual, this field need not be specified (that is, its length in the dictionary will be zero).

Amount Paid

The amount paid for this claim line.

Amount Allowed

The allowed amount for this claim line. This amount typically represents the total amount reimbursed including deductibles, copays, coinsurance, insurer paid, etc.

Procedure Code

The procedure code must be one of:

- A procedure code specified in the Physician's Current Procedure Terminology, 4th Edition (CPT®-4 codes) defined by the American Medical Association, for the years 1997 and later.
- A procedure code specified by the HCFA Common Procedure Coding System, Level II code (HCPCS) defined by the Centers for Medicare and Medicaid Services (CMS) for the years 1999 and later.
- A National Uniform Billing Committee (NUBC) revenue code.

Note: When the NUBC code is entered in the Procedure Code field, it should be padded to the right with blanks because the Procedure Code field always occupies five characters.

- If your organization defines its own procedure codes and/or revenue codes, they must be mapped to standard procedure and revenue codes.

Procedure Code Modifier

Use this field to specify any procedure code modifier that accompanies the procedure code.

Revenue Code

The revenue code, if one was entered for the claim. Supported values in this field are NUBC revenue codes. If your organization defines its own revenue codes, they must be mapped to standard revenue codes.

The revenue code is an optional field, allowing you to define your input records so that you can place an NUBC revenue code and a CPT/HCPCS procedure code on a single record line.

For claim records that do not have a revenue code, leave the revenue code field blank.

First Diagnosis Code Through Fourth Diagnosis Code

Up to four diagnoses may be entered for each claim, but only the first is required.

If your organization defines its own diagnosis codes, they must be mapped to standard ICD-9 diagnosis codes.

First Date of Service and Last Date of Service

The first date and last date represented by the claim line. If you choose to use a date format with separators (such as YYYY/MM/DD or YYYY-MM-DD), the separators are ignored on input, so you can use any character as a separator. Valid formats include: YYYYMMDD, MMDDYYYY, DDMMYYYY, YYYY/MM/DD, MM/DD/ YYYY, and DD/MM/YYYY, where the separator can be any character.

Paid Date

This field is optional. This is the date the claim was paid. The format of the paid date must be the same as that used in the First and Last Date of Service.

Type of Service

This is an optional code which represents the type of service (TOS) performed for this claim. If no specific value is available for this field, it should be filled with blanks. If this field is not used (i.e., its length is set to zero in the configuration), non-pharmaceutical claims with no procedure code will be treated as ancillary records.

Provider ID

Provider identification number from the claim. Used to identify who performed the service.

Ordering Provider ID

This is an optional field. This is the identification number of the provider who ordered the service.

Provider Type

This code represents the type of provider who performed the service. Examples of provider types would be chiropractor, nurse practitioner, medical doctor, counselor, pharmacy, hospital or treatment facility.

Provider Specialty Type

This code represents the specialty of the provider who performed the service.

Provider Key

Unique number or code for a physician who has multiple provider IDs or specialties. A single health care provider may have multiple provider IDs in your input claims data, but this person or entity should have only one provider key.

NDC

If this is a pharmaceutical claim, this field should contain the drug's NDC code. For non-pharmaceutical claim records, the NDC field should be filled with blanks.

Day Supply

For pharmacy records, the number of days a filled prescription is expected to last. If you have no pharmacy records, the Days Supply is an optional field.

Quantity Count

Quantity of drug dispensed in metric units:

Each - solid oral dosage forms (tablet, capsule), powder filled (dry) vials, packets, patches, units of use packages, suppositories, bars.

Milliliter - (cc) liquid oral dosage forms, liquid filled vials, ampules, reconstituted oral products.

Grams - ointments, bulk powders (not IV).
If you have no pharmacy records, the Quantity Count is an optional field.

LOINC®

Logical Observation Identifiers Names and Codes (LOINC®). The LOINC Code is a universal identifier for a lab test for a particular analyte. The LOINC User's Guide and database can be found at www.regenstrief.org.

Enter a LOINC code if the record is a lab record. For non-lab records, leave the LOINC field blank.

If you have no lab records in your claims input, the LOINC code is optional.

Notes:

(1) When using lab results data that has not been mapped to a LOINC code, map the comparable vendor-specific test number provided by the laboratory vendor(s) to one of these default codes.

(2) This is a retired code which may be present on historical data, or which some laboratories may be continuing to use. Input record data with this code is included in the definition of this test.

Lab Test Result

If the record is a lab record, use this field to enter the result value of lab test. For non-lab records, this field should be blank.

If you have no lab records in your claims input, the Lab Test Result is optional.

Place of Service

Place of service (POS). You must map your internal POS codes to Centers for Medicare and Medicaid Services (CMS) standard POS codes.

Unique Record ID

This required field contains a unique identifier representing the service line from the claim. For medical services, this ID typically represents the service row from the CMS 1500 or CMS 1450/UB92 claim form.

Claim Number

A unique identifier used to link service lines for a specific claim submitted for a member. If a claim has multiple service lines, each service will have a unique record ID and the same claim number to represent the claim.

Bill Type Frequency Indicator

This optional field is used to indicate the disposition of confinements.

Patient Status

This field is required for facility claims. The contents will be the patient status indicator field from the NUBC UB-92 form. This field can denote whether the member died during a confinement.

Facility Type

This field is optional. Space for it is provided to allow for additional post grouping analysis. The contents will typically be the UB-92 facility type data value. This would allow records to be easily selected for diagnosis related grouping (DRG) based on the facility type.

Bed Type

If a value is present, this field acts as an additional discriminator in determining whether a Facility record extends an existing confinement or starts a new confinement.

First ICD-9 Procedure Code Through Fourth ICD-9 Procedure Code

If your claims have ICD-9 procedure codes, include them in your claims input file.

If a decimal point will appear in this field in your claim records, the length should be given as 5. If the decimal separator is not used, the length is 4. If these fields are unused, the length is zero.

Member Input File

The member data file contains the most current information about the member.

Field Descriptions

Field	Type	Length	Required or Optional
Family ID	AlphaNum	1-30	Required
Patient ID	AlphaNum	0-2	Optional
Patient Gender	AlphaNum	1	Required
Date of Birth	Date	8 or 10	Required
Member Beginning Eligibility Date	Date	0, 8 or 10	Optional
Member Ending Eligibility Date	Date	0, 8 or 10	Optional

Instructions for each input field are as follows:

Family ID

This field identifies all members of a family and can be any alphanumeric string. The records in the member file must be sorted first on the Family ID (together with Patient ID, if available) so that all records for an individual are contiguous.

Patient ID

This field identifies individual members within a family. If present, this field must be sorted within Family ID, so that all records for an individual are contiguous. If the Family ID uniquely identifies an individual, this field need not be specified (that is, its length in the dictionary will be zero).

Patient Gender and Date of Birth

The member's gender (F or M) and date of birth. If you choose to use a date format with separators (such as YYYY/MM/DD or YYYY-MM-DD), the separators are ignored on input, so you can use any character as a separator. Valid date formats include: YYYYMMDD, MMDDYYYY, DDMMYYYY, YYYY/MM/DD, MM/DD/YYYY, and DD/MM/YYYY, where the separator can be any character.

Member Beginning Eligibility Date and Ending Eligibility Date

The first date on which the member became covered under the plan and the last date of the member's coverage. If you choose to use a date format with separators (such as YYYY/MM/DD or YYYY-MM-DD), the separators are ignored on input, so you can use any character as a separator. Valid formats include: YYYYMMDD, MMDDYYYY, DDMMYYYY, YYYY/MM/DD, MM/DD/YYYY, and DD/MM/YYYY, where the separator can be any character.

Member Term Input File

The member term data file contains member coverage and term activity information. Plan coverage begin and end dates are required in order to correctly calculate the other fields in the member term file. There may be more than one record per individual member.

Field Descriptions

Field	Type	Length	Required or Optional
Family ID	AlphaNum	1-30	Required
Patient ID	AlphaNum	0-2	Optional
Member Beginning Eligibility Date	Date	8 or 10	Required
Member Ending Eligibility Date	Date	8 or 10	Required
Primary Care Provider	AlphaNum	20	Required
Provider Specialty Type	AlphaNum	1-10	Required
Medical Flag	AlphaNum	1	Required
Pharmacy Flag	AlphaNum	1	Required

Instructions for each input field are as follows:

Family ID

This field identifies all members of a family and can be any alphanumeric string. The records in the member term file must be sorted first on the Family ID (together with Patient ID, if available) so that all records for an individual are contiguous.

Patient ID

This field identifies individual members within a family.

Member Beginning Eligibility Date and Member Ending Eligibility Date

The first date on which the member became covered under the plan and the last date of the member's coverage. If you choose to use a date format with separators (such as YYYY/MM/DD or YYYY-MM-DD), the separators are ignored on input, so you can use any character as a separator. Valid formats include: YYYYMMDD, MMDDYYYY, DDMMYYYY, YYYY/MM/DD, MM/DD/YYYY, and DD/MM/YYYY, where the separator can be any character.

Primary Care Provider

The provider key for the member's primary care physician. A single health care physician may have multiple provider IDs in your input claims data, but this person should have only one provider key.

Provider Specialty Type

This code represents the specialty of the primary care physician.

Medical Flag

Identifies whether the member has medical coverage (Y or N).

Pharmacy Flag

Identifies whether the member has pharmacy coverage (Y or N).

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2007 Benchmarks

									Result Flag Distribution				
Report Case ID	Case Description	Summary Rule ID	Rule Cat. Desc.	Rule Type	Rule Description	Compliance Rate	Non-Compliance Rate	Yes Rate	Y	N	Q	NRX	NA (total)
0	Global Rules	9179002	Global Encounter	CP-C	Patient(s) currently taking a COX-2 inhibitor without a documented indication.	46	54	54	54	46	0	0	0
0	Global Rules	9180015	Global Drug Monitoring	S-M	Adult patient(s) taking warfarin that had three or more prothrombin time tests in last 6 reported months.	69	31	69	69	31	0	0	0
0	Global Rules	9180016	Global Drug Monitoring	S-M	Adult patient(s) taking a statin-containing medication nicotinic acid or fibric acid derivative that had an annual serum ALT	81	19	81	81	19	0	0	0
100311	Diabetes	9000023	Patient Safety	S-M	Patient(s) taking a biguanide (e.g. metformin) ACE-inhibitor or angiotensin II receptor antagonist that had a serum	80	20	80	50	12	0	0	38
100311	Diabetes	9000027	Care Pattern	CP-I	Patient(s) that had an office visit for diabetes care in last 6 reported months.	78	22	78	78	22	0	0	0
100311	Diabetes	9000043	Disease Management	R-2	Adult(s) that had a serum creatinine in last 12 reported months.	76	24	76	75	24	0	0	2
100404	Asthma	9000007	Care Pattern	CP-I	Patient(s) that had an office visit for asthma care in last 6 reported months.	58	42	58	58	42	0	0	0
102500	HTN	9000011	Care Pattern	CP-I	Patient(s) that had an annual physician	82	18	82	82	18	0	0	0
102500	HTN	9000012	Care Pattern	CP-I	Patient(s) that had a serum creatinine in last 12 reported months.	68	32	68	68	32	0	0	0
103300	COPD	9000003	Care Pattern	CP-I	Patient(s) that had an annual physician	81	19	81	81	19	0	0	0
103300	COPD	9000006	Disease Management	R-1	Patient(s) with frequent short-acting inhaled bronchodilator use who are also using a long-acting inhaled bronchodilator.	64	36	64	2	1	0	0	97
103500	Hyperlipidemia	9000006	Care Pattern	CP-I	Patient(s) with a LDL cholesterol test in last 12 reported months.	80	20	80	80	20	0	0	0
103500	Hyperlipidemia	9000012	Care Pattern	CP-I	Patient(s) with a HDL cholesterol test in last 12 reported months.	80	20	80	80	20	0	0	0
103500	Hyperlipidemia	9000014	Care Pattern	CP-I	Patient(s) with a triglyceride test in last 12 reported months.	80	20	80	80	20	0	0	0
104000	Migraine	9000006	Care Pattern	CP-I	Adult patient(s) with frequent use of acute medications that also received prophylactic medications.	62	38	62	2	1	0	0	96
104200	CKD	9000027	Disease Management	R-1	Patient(s) with proteinuria currently taking an ACE-inhibitor or angiotensin II receptor	69	31	69	19	9	0	0	72
104700	Prostate CA - I	9000006	Care Pattern	CP-I	Patient(s) that had a prostate specific antigen test in last 12 reported months.	80	20	80	80	20	0	0	0

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2007 Benchmarks

									Result Flag Distribution				
Report Case ID	Case Description	Summary Rule ID	Rule Cat. Desc.	Rule Type	Rule Description	Compliance Rate	Non-Compliance Rate	Yes Rate	Y	N	Q	NRX	NA (total)
104700	Prostate CA -	9000007	Care Pattern	CP-I	Patient(s) that had an annual physician	87	13	87	87	13	0	0	0
201200	Sinusitis Acute	9000002	Care Pattern	CP-I	Patient(s) treated with an antibiotic for acute sinusitis that received a first line	62	38	62	31	19	0	0	50
201500	Pregnancy Management	9000001	Care Pattern	CP-N	Pregnant women that had HIV testing.	66	34	66	66	34	0	0	0
201500	Pregnancy Management	9000003	Care Pattern	CP-I	Pregnant women less than 25 years of age that had chlamydia screening.	67	33	67	8	4	0	0	88
201500	Pregnancy Management	9000005	Care Pattern	CP-N	Pregnant women that had ABO and Rh blood type testing.	82	18	82	82	18	0	0	0
201500	Pregnancy Management	9000006	Care Pattern	CP-I	Pregnant women that had syphilis screening.	84	16	84	84	16	0	0	0
201500	Pregnancy Management	9000007	Care Pattern	CP-I	Pregnant women that had urine culture.	59	41	59	59	41	0	0	0
201500	Pregnancy Management	9000008	Care Pattern	CP-I	Pregnant women that had HBsAg testing.	83	17	83	83	17	0	0	0
201500	Pregnancy Management	9000009	Disease Management	R-2	Pregnant women that received Group B Streptococcus testing.	71	29	71	69	28	0	0	4

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Overview of Facility Event Methodology

A Facility Event is a unique collection of services performed for a particular member by one to many providers, representing an admission, emergency department visit, or outpatient surgery. There are four types of Facility Events:

1. Confinement/Admission (FIP)
2. Outpatient Surgery (FOS)
3. Emergency Room (FER)
4. Other (OTH)

Each Facility Event Type has a unique set of rules to identify claim detail records as trigger records. A trigger record is a record that meets the criteria for the basis of an event. A trigger record, in turn, serves as a sort of "magnet" for associating additional related claim detail records.

Claim data elements required to trigger specific event types and service date time period:

1. Confinement/Admission (FIP)
   - A confinement record (created by the Confinement/Admission methodology described below) with a revenue code representing inpatient accommodation room and board (revenue code of 0100-0219) triggers a Confinement/Admission (FIP) Event Type.
     - Confinement/Admission Methodology:
       - Confinement/Admission definition: Confinement/Admission represents a member's uninterrupted stay for a defined period of time in a hospital, skilled nursing facility, or other approved health care facility or program, followed by discharge from that same facility or program.
       - A confinement is assigned to a set of one or more medical claim records on which there is:
         1. The same unique patient ID
         2. The same unique provider ID
         3. An inpatient accommodation room and board revenue code of 0100-0219
         4. No gap in dates of service
       - The beginning and the ending dates of the confinement period are identified using the **From** and **Through** dates from the facility claim.
       - In order for multiple inpatient accommodation room and board records to be regarded as one confinement, the following condition must be met:
         - The difference between the **Through date** of the first accommodation room and board revenue code record and the **From date** of the next accommodation room and board revenue code record must be less than or equal to 1 day. The beginning of the confinement represents the earliest **From date** and the ending of the confinement represents the latest **Through date**. If a record has overlapping dates, the record will be included in the confinement for which the record's **From date** and **Through date** are between the dates of the confinement inclusive. If the difference between the **Through date** and the **From date** is > 1, then the next record represents a new confinement.

   - The timeframe for claims included in a Confinement/Admission Facility Event is one day prior to the Confinement admission date through the discharge date of the confinement.

2. Outpatient Surgery (FOS)
   - A claim record based on a CMS Place of Service code representing an outpatient acute care facility or office/clinic, and a Procedure Code Service Type of Surgical Procedures or a Revenue Code representing operating room or ambulatory surgery services triggers an Outpatient Surgery Event.
     - A POS code of 05, 06, 07, 08, 22, or 24 AND a procedure code (CPT or HCPCS) with a Service_Type_High_Code='SURG' (there are 5808 CPT codes and 341 HCPCS codes that fall into this category—see attached list of codes)

FOS_procedure codes.xls

     - **OR** a POS code of 05, 06, 07, 08, 11, 22, 24, 25, 26, 49, 50 or 72 AND a Revenue Code of 0360, 0361, 0369, 0490, 0499.

   - The service date timeframe for claims included in an OP Surgery event is up to +/- 2 days of the service date on the trigger record.
   - To create an Outpatient Surgery event, the claim detail must *not* meet the coding conditions listed for an Admission/Confinement (FIP) event.

3. Emergency Room (FER)
   - An Emergency Room Event is identified on a claim record in which the CPT code or revenue code stands for emergency room or emergency evaluation and management, and the provider specialty represents General Hospital, Psychiatric Hospital or Emergency Care Center.
     - A revenue code of 0450-0452 or 0459
     - **OR** CPT procedure code 99281-99285, 99288 or HCPCS procedure code G0380-G0384 AND a Detail Level Provider Category of General Hospital, Psychiatric Hospital or Emergency Care Center.
     - **OR** CPT procedure code 99281-99285, or 99288 or HCPCS procedure code G0380-G0384 AND [there is at least one other claim detail record which will be associated with the trigger record with a revenue code that is *not* 0456 (Urgent Care) AND a Detail Level Provider Category of General Hospital, Psychiatric Hospital or Emergency Care Center].
   - The service date timeframe for claims included in an Emergency Room (FER) event are up to +/- 2 days of the service date on the trigger record.
   - To create an Emergency Room event, the claim detail must *not* meet any of the coding conditions for an Admission/Confinement (FIP) or Outpatient Surgery (FOS) event.

4. Other (OTH)
   - All service records that are not assigned FIP, FOS, or FER are assigned OTH

Result/EBM/Compliance Flags

Result Flags and Values

The Result flag provides a status for each clinical rule in any condition for which the member has qualified. The five possible Result flag values are described below.

- Yes means the answer to the clinical question is yes.
- No means the answer to the clinical question is no.
- NA (not applicable) means the rule is not applicable to the member. A rule may not be applicable for a number of reasons. The third character of the NA flag contains a number which further defines the reason (see below).
- NRX (no RX benefit) indicates that the member did not have any pharmacy benefit during the reporting period. The NRX value is only applicable to certain rules that are pharmacy dependent.
- Q (questionable) indicates that the member has no claim record for the particular test or treatment during the time window of the rule, but the member did not have coverage throughout the time window or there was insufficient time range of input claims data, and hence, there may be data incompleteness. The Q value is applied only for certain rules and certain setup configurations.

Result Flag Value	Description
NA1	Member did not meet the age or gender criteria.
NA2	Member was not currently taking the medication in question or had not taken it for the required duration.
NA3	Member was taking the medication, but a possession ratio could not be computed [less than two prescriptions during the rule time window].
NA4	Member did not meet the rule specific criteria [e.g., co-morbidity, complexity (diagnosis and medication), intervention not warranted].
NA5	No lab result record or insufficient information.
NA6	Member admitted to a hospital or long term care facility which might cause data incompleteness.
NA7	Member who did not receive treatment or medication had a contraindication or other justification.

EBM Flag

The EBM flag provides a counter for rules in which the result is NOT consistent with evidence based guidelines. There are two possible results for the EBM flag counter:

- 1 when a result is ***not*** consistent with the EBM Connect software's evidence based guidelines, and
- 0 when any of the following are true:
  - the member's care is consistent with the software's evidence based guidelines
  - the rule is not relevant to the member
  - there is insufficient information in the database to analyze the rule
  - the rule is informational only, and does not reflect appropriateness of care

Compliance Flag

The Compliance flag provides a counter for cases in which the result ***is*** consistent with evidence based guidelines. There are two possible results for the Compliance flag counter:

- 1 when a result ***is*** consistent with the EBM Connect software's evidence based guidelines, and
- 0 when any of the following are true:
  - the member's care is not consistent with the software's evidence based guidelines
  - the rule is not relevant to the member
  - there is insufficient information in the database to analyze the rule
  - the rule is informational only, and does not reflect appropriateness of care

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-112-08 **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)***:** 10/22/08
2	**Title of Measure:** Pregnant women that had HBsAg testing.
3	**Brief description of measure [1]:** This measure identifies pregnant women who had a HBsAg (hepatitis B) test during their pregnancy.
4 (2a)	**Numerator Statement:** Did the patient have HBsAg testing (code set PR0149, LC0014, LC0025) during the following time period: 280 days prior to delivery (PRE-EPIS)? **Time Window:** 280 days prior to a claim for a delivery procedure (code set PR0140, PR0141) AND the diagnosis is Full Term Delivery (code set DX0209) **Numerator Details** (Definitions, codes with description): see attached "Pregnancy Management ebm Alg" document
5 (2a)	**Denominator Statement:** See attached "Pregnancy Management ebm Alg" document for member demographics, build event, and member enrollment **Time Window:** 365 days prior to the common report period end date **Denominator Details** (Definitions, codes with description): see attached "Pregnancy Management ebm Alg" document
6 (2a, 2d)	**Denominator Exclusions:** Patients with a diagnosis of hepatitis B are excluded from this measure if there is no claims-based evidence that the HBsAg test was done. **Denominator Exclusion Details** (Definitions, codes with description): see attached "Pregnancy Management ebm Alg" documen
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)**:** ICD-9 codes, CPT codes, Revenue codes, and LOINC 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:** not applicable **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 Not applicable
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	**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:** Using a geographically diverse 12 million member benchmark database (this database represents predominately a commercial population less than 65 year of age) the compliance rate was 83 percent, indicating a clear gap in care and opportunity for care improvement. **Citations for Evidence:** Ingenix EBM Connect benchmark results, December 2007
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: not applicable **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)*: USPSTF grade A classification **Summary of Evidence** (*provide guideline information below*)**:** The U.S. Preventive Services Task Force (USPSTF) strongly recommends screening for hepatitis B virus (HBV) infection in pregnant women at their first prenatal visit. The USPSTF found good evidence that universal prenatal screening for HBV infection

[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 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.

	using HBsAg substantially reduces prenatal transmission of HBV and the subsequent development of chronic HBV infection. The current practice of vaccinating all infants against HBV infection and postexposure prophylaxis with hepatitis B immune globulin administered at birth to infants of HBV-infected mothers substantially reduces the risk for acquiring HBV infection. **Citations for Evidence:** U.S. Preventive Services Task Force. Screening for Hepatitis B Infection: Recommendation Statement. February 2004. Agency for Healthcare Research and Quality, Rockville, MD. http://www.ahrq.gov/clinic/3rduspstf/hepbscr/hepbrs.htm
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:** U.S. Preventive Services Task Force. Screening for Hepatitis B Infection: Recommendation Statement. February 2004. Agency for Healthcare Research and Quality, Rockville, MD. http://www.ahrq.gov/clinic/3rduspstf/hepbscr/hepbrs.htm **Specific guideline recommendation:** The U.S. Preventive Services Task Force (USPSTF) strongly recommends screening for hepatitis B virus (HBV) infection in pregnant women at their first prenatal visit. The USPSTF found good evidence that universal prenatal screening for HBV infection using HBsAg substantially reduces prenatal transmission of HBV and the subsequent development of chronic HBV infection. The current practice of vaccinating all infants against HBV infection and postexposure prophylaxis with hepatitis B immune globulin administered at birth to infants of HBV-infected mothers substantially reduces the risk for acquiring HBV infection. **Guideline author's rating of strength of evidence** (*If different from USPSTF, also describe it and how it relates to USPSTF)*: USPSTF grade A classification **Rationale for using this guideline over others:** This guideline represents a thorough and recent review of the literature regarding this topic. The U.S. Preventive Services Task Force is a well recognized and respected guideline source.
22 (1c)	**Controversy/Contradictory Evidence** *Summarize any areas of controversy, contradictory evidence, or contradictory guidelines and provide citations.* **Summary:** None **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:** It will facilitate maternal care and provide an opportunity to prevent HBV perinatal transmission.
	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:** description attached, see "Testing" document **Analytic Method:** description attached, see "Testing" document **Testing Results:** see attached document, "Benchmark test results"
26 (2c)	**Validity Testing** **Data/sample:** description attached, see "Testing" document

	Analytic Method: description attached, see "Testing" document **Testing Results:** see attached document, "Benchmark test 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):** not applicable **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:** not applicable **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:** description attached, see "Testing" document **Analytic Method:** **Results:**
30 (2f)	**Provide Measure Results from Testing or Current Use** Results from testing **Data/sample:** see attached document, "Benchmark test results" **Methods to identify statistically significant and practically/meaningfully differences in performance:** **Results:**
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** Other ► If "other," please describe: Health plans, physicians (individuals and groups), care management, and other vendors/customers are using this on a national level. ☐ 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:** Results are summarized and reported by users/customers depending on their business need. Therefore, this is no single public reporting format. **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):** Prenatal Care (AMA PCPI) **Are the measure specifications harmonized with existing NQF-endorsed™ measures?** Partially harmonized ►If not fully harmonized, provide rationale: Our methodology differs from the AMA PCPI methodology as follows: 1) We use episodic logic to identify a full term delivery and then identify any evidence of the desired intervention during the time period 280 days prior to the delivery. Given this methodology, a greater number of patients can be evaluated assuming that more than 12 months of claims-based data is available. Also, this provides a methodology where numerator compliance can be satisfied using enriched claims-based data that is not solely dependent on the submission of CPT II codes (that methodology used in AMA PCPI specifications). 2) Code sets that we use to identify pregnant women overlap but are not identical to AMA PCPI code sets. Our logic more specifically identifies pregnanct women with a full term delivery. Also, we have enriched our code set with ICD-9 procedure codes that identify pregnancy women. Overall, our methodology improves claims-based data collection opportunities and enhances the measurement of the desired prenatal intervention. **Describe the distinctive, improved, or additive value this measure provides to existing NQF-endorsed measures:** This measure adds value to the existing prenatal care NQF endorsed measures by addressing a recommended aspect of prenatal care that is not represented by current 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:** none are specific to nor dependent on EHR
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:** If a

(4d)	monitoring test is performed and the specific CPT code or LOINC code is not submitted (e.g., hepatitis B testing at a confidential testing site), then a false negative result will be generated. **Describe how could these potential problems be audited:** A chart review audit could define the frequency of this error type. **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: Testing of this measure did not identify any concerns that would cause us to modify code sets or overall logic. Also, cutomers have not notified us of any concerns about the performance of this measure.
	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:** To be defined
41	**Measure Intellectual Property Agreement Owner Point of Contact** **First Name:** Cheri **MI:** **Last Name:** DiGiovanni **Credentials (MD, MPH, etc.):** **Organization:** Ingenix **Street Address:** 1050 Carol Street **City:** Downers Grove **State:** IL **ZIP:** 60516 **Email:** cheri.digiovanni@ingenix.com **Telephone:** 602-276-8913 ext:
42	**Measure Submission Point of Contact** **If different than IP Owner Contact** **First Name:** Kay **MI:** E **Last Name:** Schwebke **Credentials (MD, MPH, etc.):** MD, MPH **Organization:** Ingenix **Street Address:** 12125 Technology Drive **City:** Eden Prairie **State:** MN **ZIP:** 55344 **Email:** kay.schwebke@ingenix.com **Telephone:** 952-833-7154 ext:
43	**Measure Developer Point of Contact** **If different than IP Owner Contact** **First Name:** Kay **MI:** E **Last Name:** Schwebke **Credentials (MD, MPH, etc.):** MD, MPH **Organization:** As above **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:** Kay **MI:**E **Last Name:**Schwebke **Credentials (MD, MPH, etc.):** MD, MPH **Organization:** As above **Street Address:** **City:** **State:** **ZIP:** **Email:** **Telephone:** ext
	ADDITIONAL INFORMATION
45	**Workgroup/Expert Panel involved in measure development** Workgroup/panel used ►If workgroup used, describe the members' role in measure development: Reviewed relevant research/guideline, participated in the development of measure logic, reviewed code sets, reviewed benchmark results ►Provide a list of workgroup/panel members' names and organizations: see document, "Consultant panel members"
46	**Measure Developer/Steward Updates and Ongoing Maintenance** Year the measure was first released: Fall 2005 Month and Year of most recent revision: February 2007 What is the frequency for review/update of this measure? Consultant panel review due June 2009, and then every 3 years

	When is the next scheduled review/update for this measure? June 2009
47	**Copyright statement/disclaimers:** see attached "Pregnancy Management ebm Alg" document
48	**Additional Information:** In addition to the attachments referenced above, the following documents are attached. 1. EBM70Technical document 2. EBM70Concepts document Also, our next EBM Connect release, scheduled for November 2008, will include annual code set updates. Therefore, code sets submitted October 2008 might change slightly due to this routine maintenance process. The anticipated impact is minimal.
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*)**:** 10/30/08

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%

INGENIX

Algorithm

Pregnancy Management

Report Case ID: 201500

November 21, 2008

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Code Sets Utilized

Diagnosis Code Sets	DX0059 Hepatitis B DX0065 HIV/AIDS DX0209 Full Term Delivery DX0210 Group B Streptococcus Infection or Carrier State DX0211 Antenatal Screening for Streptococcus B
Procedure and Revenue Code Sets	PR0020 Chlaymdia Screening (HEDIS) PR0107 Professional Encounter Codes RV0107 Professional Encounter Codes PR0108 Professional Supervision PR0140 Delivery, Global Codes PR0141 Delivery, Non-Global Codes PR0142 HIV Test PR0145 ABO Blood TypeTesting PR0146 Rh Blood Type Testing PR0147 Syphilis PR0148 Urine Culture PR0149 Hepatitis B Surface Antigen PR0150 Group B Streptococcus
LOINC Code Sets	LC0005 Chlamydia Species LC0006 Chlamydia Trachomatis LC0014 Obstetric Panel LC0018 Syphilis LC0020 Chlamydia Trachomatis and Neisseria Gonorrhoeae LC0021 HIV Test LC0022 ABO Blood Type Testing LC0023 Rh Blood Type Testing LC0024 ABO/Rh Blood Type Testing LC0025 Hepatitis B Surface Antigen LC0026 Group B Streptococcus

Study Population

Time Frame Requirements

Period	Backward	Forward
Report Period	12m	
Minimum Medical Coverage	throughout event	
Minimum Pharmacy Coverage	throughout event	
Medical Claims Extraction	24m	
Pharmacy Claims Extraction	21m	
Determine Condition (Denom)	12m	
Determine Treatment (Num)	12m	
Physician Attribution	12m	

Rules

Report Rule ID	Rule Stmnt	Headings, Rules & Detail Description
Member Demographics		
1101001	A	All females that are 12 years of age or older at the end of the report period
Build Event		
6105001	A B	*Build Single Episode/Event which identifies deliveries and create a PRE WINDOW of 40 weeks (280 days) duration.* Begin a Single Episode with the earliest claim during the following window of time: 365 days prior to the common report period end date, where there is a claim for a delivery procedure (code set PR0140, PR0141) AND the diagnosis is Full Term Delivery (code set DX0209) **AND** Extend the episode back 280 days (PRE Period - Set Event Start Date to Episode Start Date minus 280)
Member Enrollment		
8102002	A	Patient must have been continuously enrolled in Medical benefits throughout the event *Note: The standard enrollment break logic allows unlimited breaks of no more than 45 days and no breaks greater than 45 days.* (*see Build Single Event.*)
Condition Exclusions		
		None

Intervention Rules

Report Rule ID	Rule Type & Task No.	Headings, Rules & Detail Description
Pregnant women should have HIV testing.		
9000001	**CP-N (139)**	**Pregnant women that had HIV testing.**
▪ **Result Flag (RF):** IF 1 = Y, set RF to NA4, else if 2=Y, set RF to Y, else set RF to N ▪ **EBM Flag (EF):** IF RF = N, set EF = 1, else set EF = 0		
7123001	A	During the 24 months prior to the end of the report period, did the patient have 2 or more that are at least 14 days apart of the following services, where the diagnosis is HIV/AIDS (code set DX0065): ▪ Professional Encounter (code set PR0107, RV0107) ▪ Professional Supervision Code Set (code set PR0108) ▪ Facility Event – Confinement/Admission ▪ Facility Event – Emergency Room ▪ Facility Event – Outpatient Surgery
7123002	A	Did the patient have HIV testing (code set PR0142, LC0021) during the following time period: 280 days prior to delivery (PRE-EPIS)?
Pregnant women should have chlamydia screening.		
9000003	**CP-I (139)**	**Pregnant women less than 25 years of age that had chlamydia screening.**
▪ **Result Flag (RF):** IF 4=N, set RF to NA1, else IF 5=Y, set RF to Y, else set RF to N ▪ **EBM Flag (EF):** IF RF = N, set EF = 1, else set EF = 0		
7123004	A	Was the patient's age < 25 years on the Episode End Date?
7123005	A	Did the patient have chlamydia testing (code set PR0020, LC0005, LC0006, LC0020) during the following time period: 280 days prior to delivery (PRE-EPIS)?
Pregnant women should have blood type testing (ABO and Rh).		
9000005	**CP-N (139)**	**Pregnant women that had ABO and Rh blood type testing.**
▪ **Result Flag (RF):** IF 7=Y AND 8=Y, set RF to Y, else set to N ▪ **EBM Flag (EF):** IF RF = N, set EF = 1, else set EF = 0		
7123007	A	Did the patient have ABO blood type testing (code set PR0145, LC0014, LC0022, LC0024) during the following time period: 280 days prior to delivery (PRE-EPIS)?
7123008	A	Did the patient have Rh blood type testing (code set PR0146, LC0014, LC0023, LC0024) during the following time period: 280 days prior to delivery (PRE-EPIS)?

Pregnancy Management Intervention Rules

Report Case ID: 201500

Report Rule ID	Rule Type & Task No.	Headings, Rules & Detail Description
Pregnant women should have syphilis screening.		
9000006	**CP-I (139)**	**Pregnant women that had syphilis screening.**
▪ **Result Flag (RF):** ▪ **EBM Flag (EF):**		IF 9=Y, set RF to Y, else set RF to N IF RF = N, set EF = 1, else set EF = 0
7123009	A	Did the patient have syphilis screening (code set PR0147, LC0014, LC0018) during the following time period: 280 days prior to delivery (PRE-EPIS)?
Pregnant women should have urine culture.		
9000007	**CP-I (139)**	**Pregnant women that had urine culture.**
▪ **Result Flag (RF):** ▪ **EBM Flag (EF)**:		IF 10=Y, set RF to Y, else set RF to N IF RF = N, set EF = 1, else set EF = 0
7123010	A	Did the patient have a urine culture (code set PR0148) during the following time period: 280 days prior to delivery (PRE-EPIS)?
Pregnant women should have Hepatitis B Surface antigen (HBsAg) testing.		
9000008	**CP-I (139)**	**Pregnant women that had HBsAg testing.**
▪ **Result Flag (RF):** ▪ **EBM Flag (EF):**		IF 11=Y, set RF to Y, else if 12=Y, set RF to NA7, else set RF to N IF RF = N, set EF = 1, else set EF = 0
7123011	A	Did the patient have HBsAg testing (code set PR0149, LC0014, LC0025) during the following time period: 280 days prior to delivery (PRE-EPIS)?
7123012	A	Did the patient have a claim with a diagnosis of Hepatitis B (code set DX0059) during the following time period: 365 days prior to the episode start date?
Pregnant women should have Group B Streptococcus (GBS) testing.		
9000009	**R-2 (136)**	**Pregnant women that received Group B Streptococcus testing.**
▪ **Result Flag (RF):** ▪ **EBM Flag (EF):**		IF 13=Y, set RF to Y, else if 14=Y, set RF to NA7, else set RF to N IF RF = N, set EF = 1, else set EF = 0
7123013	A	Did the patient have Group B Streptococcus testing (code set PR0150, LC0026) OR a diagnosis of Antenatal Screening for Streptococcus B (code set DX0211) during the following time period: 280 days prior to delivery (PRE-EPIS)?
7123014	A	Did the patient have a claim with a diagnosis of Group B Streptococcus (code set DX0210) during the following time period: 280 days prior to delivery (PRE-EPIS)?

Diagnosis Code Sets

The following tables represent the applicable diagnosis code sets for each condition referenced in the Pregnancy Management rules.

DX0059 HEPATITIS B

ICD-9 Code	Description
070.2	VIRAL HEPATITIS B WITH HEPATIC COMA
070.20	VIRL HEP B W/HEP COMA ACUT/UNS W/O HEP DELTA
070.21	VIRAL HEP B W/HEP COMA ACUTE/UNSPEC W/HEP DELTA
070.22	VIRL HEP B W/HEP COMA CHRN W/O MENTION HEP DELTA
070.23	VIRAL HEP B W/HEP COMA CHRONIC W/HEP DELTA
070.3	VIRAL HEPATITIS B WITHOUT MENTION HEPATIC COMA
070.30	VIRL HEP B W/O HEP COMA ACUT/UNS W/O HEP DELTA
070.31	VIRL HEP B W/O HEP COMA ACUT/UNS W/HEP DELTA
070.32	VIRL HEP B W/O HEP COMA CHRN W/O HEP DELTA
070.33	VIRL HEP B W/O MENTION HEP COMA CHRN W/HEP DELTA
V02.61	HEPATITIS B CARRIER

DX0065 HIV/AIDS

ICD-9 Code	Description
042	HUMAN IMMUNODEFICIENCY VIRUS [HIV]
079.53	HIV TYPE 2 IN CCE & UNS SITE
795.71	NONSPECIFIC SEROLOGIC EVIDENCE OF HIV
V08	ASYMPTOMATIC HIV INFECTION STATUS

DX0209 FULL TERM DELIVERY

ICD-9 Code	Description
642.01	BENIGN ESSENTIAL HYPERTENSION WITH DELIVERY
642.02	BEN ESSENTIAL HYPERTENSION W/DELIV W/CURRENT PPC
642.04	BENIGN ESSENTIAL HYPERTENSION PREVIOUS PPC
642.11	HYPERTENSION SEC TO RENAL DISEASE WITH DELIVERY
642.12	HTN SEC RENAL DISEASE W/DELIV W/CURRENT PP COMPL
642.14	HTN SEC RENAL DISEASE PREVIOUS POSTPARTUM COND
642.21	OTHER PRE-EXISTING HYPERTENSION WITH DELIVERY
642.22	OTH PRE-EXISTING HTN W/DELIV W/CURRENT PP COMPL
642.24	OTH PRE-EXISTING HTN PREVIOUS POSTPARTUM COND
642.31	TRANSIENT HYPERTENSION OF PREGNANCY W/DELIVERY
642.32	TRANSIENT HTN PG W/DELIV W/CURRENT PP COMPL
642.41	MILD OR UNSPECIFIED PRE-ECLAMPSIA WITH DELIVERY
642.42	MILD/UNSPEC PRE-ECLAMPSIA W/DELIV W/CURRENT PPC
642.44	MILD/UNSPEC PRE-ECLAMPSIA PREVIOUS PP COND
642.91	UNSPECIFIED HYPERTENSION WITH DELIVERY
643.01	MILD HYPEREMESIS GRAVIDARUM DELIVERED

DX0209 FULL TERM DELIVERY	
643.11	HYPEREMESIS GRAVIDA W/METAB DISTURBANCE DELIV
643.21	LATE VOMITING OF PREGNANCY DELIVERED
643.81	OTHER VOMITING COMPLICATING PREGNANCY DELIVERED
643.91	UNSPECIFIED VOMITING OF PREGNANCY DELIVERED
645.11	POST TERM PG DELIV W/WO MENTION ANTPRTM COND
645.21	PROLONGED PG DELIV W/WO MENTION ANTPRTM COND
646.01	PAPYRACEOUS FETUS DELIV W/WO ANTPRTM COND
646.41	PERIPHERAL NEURITIS IN PREGNANCY WITH DELIVERY
646.42	PERIPH NEURITIS PREGNANCY W/DELIV W/CURRENT PPC
646.51	ASYMPTOMATIC BACTERIURIA IN PREGNANCY W/DELIVERY
646.52	ASX BACTERIURIA PG W/DELIV W/CURRENT PPC
646.54	ASYMPTOMATIC BACTERIURIA PREVIOUS PP COND
646.71	LIVER DISORDERS IN PREGNANCY WITH DELIVERY
646.81	OTHER SPEC COMPLICATION PREGNANCY W/DELIVERY
646.82	OTH SPEC COMPS PREGNANCY W/DELIV W/CURRENT PPC
646.91	UNSPECIFIED COMPLICATION OF PREGNANCY W/DELIVERY
647.01	MATERNAL SYPHILIS COMP PREGNANCY W/DELIVERY
647.02	MTRN SYPHILIS COMP PG W/DELIV W/CURRENT PPC
647.11	MATERNAL GONORRHEA WITH DELIVERY
647.12	MATERNAL GONORRHEA W/DELIVERY W/CURRENT PPC
647.21	OTHER MATERNAL VENEREAL DISEASES WITH DELIVERY
647.22	OTH MATERNAL VENEREAL DZ W/DELIV W/CURRENT PPC
647.31	MATERNAL TUBERCULOSIS WITH DELIVERY
647.32	MATERNAL TUBERCULOSIS W/DELIVERY W/CURRENT PPC
647.41	MATERNAL MALARIA WITH DELIVERY
647.42	MATERNAL MALARIA W/DELIVERY W/CURRENT PPC
647.51	MATERNAL RUBELLA WITH DELIVERY
647.52	MATERNAL RUBELLA W/DELIVERY W/CURRENT PPC
647.61	OTHER MATERNAL VIRAL DISEASE WITH DELIVERY
647.62	OTH MATERNAL VIRAL DISEASE W/DELIV W/CURRENT PPC
647.81	OTH SPEC MATERNAL INF&PARASITIC DISEASE W/DELIV
647.82	OTH SPEC MTRN INF&PARASITIC DZ DELIV W/CURR PPC
647.91	UNSPEC MATERNAL INFECTION/INFESTATION W/DELIVERY
647.92	UNSPEC MATERNAL INF/INFEST W/DELIV W/CURRENT PPC
648.11	MTRN THYROID DYSF DELIV W/WO ANTPRTM COND
648.14	MTRN THYROID DYSF PREVIOUS POSTPARTUM COND/COMP
648.21	MATERNAL ANEMIA, WITH DELIVERY
648.22	MATERNAL ANEMIA W/DELIVERY W/CURRENT PPC
648.41	MATERNAL MENTAL DISORDERS WITH DELIVERY
648.42	MATERNAL MENTAL DISORDERS W/DELIV W/CURRENT PPC
648.51	MATERNAL CONGENITAL CV DISORDERS W/DELIVERY
648.52	MATERNAL CONGEN CV D/O W/DELIV W/CURRENT PPC
648.61	OTH MATERNAL CARDIOVASCULAR DISEASES W/DELIVERY
648.62	OTH MATERNAL CV DISEASES W/DELIV W/CURRENT PPC
648.71	BN&JNT D/O MAT BACK PELVIS&LW LMB W/DEL

DX0209 FULL TERM DELIVERY	
648.72	BN&JNT D/O MAT BACK PELV&LW LMB W/DEL W/PP COMPL
648.81	ABNORMAL MATERNAL GLUCOSE TOLERANCE W/DELIVERY
648.82	ABNORMAL MTRN GLU TOLERNC W/DELIV W/CURRENT PPC
648.84	ABNORMAL MTRN GLU TOLERANCE PREVIOUS PP COND
648.91	OTH CURRENT MATERNAL CCE W/DELIVERY
648.92	OTH CURRENT MATERNAL CCE W/DEL W/CURRNT PP COMPL
650	NORMAL DELIVERY
651.01	TWIN PREGNANCY, DELIVERED
651.11	TRIPLET PREGNANCY, DELIVERED
651.21	QUADRUPLET PREGNANCY, DELIVERED
651.31	TWIN PG W/FETAL LOSS&RETENTION 1 FETUS DELIV
651.41	TRIPLET PG W/FETAL LOSS&RETENTION 1/MORE DELIV
651.51	QUADRUPLET PG W/FETAL LOSS&RETN 1/MORE DELIV
651.61	OTH MX PG W/FETAL LOSS&RETN 1/MORE FETUS DELIV
651.81	OTHER SPECIFIED MULTIPLE GESTATION DELIVERED
651.91	UNSPECIFIED MULTIPLE GESTATION DELIVERED
652.01	UNSTABLE LIE OF FETUS, DELIVERED
652.21	BREECH PRESENTATION W/O MENTION VERSION DELIV
652.31	TRANSVERSE/OBLIQUE FETAL PRESENTATION DELIVERED
652.41	FETAL FACE OR BROW PRESENTATION DELIVERED
652.51	HIGH FETAL HEAD AT TERM, DELIVERED
652.61	MX GEST W/MALPRESENTATION 1 FETUS/MORE DELIV
652.81	OTH SPEC MALPOSITION/MALPRESENTATION FETUS DELIV
653.01	MAJOR ABNORM BONY PELVIS NOT FURTHER SPEC DELIV
653.11	GENERALLY CONTRACTED PELVIS PREGNANCY DELIVERED
653.21	INLET CONTRACTION OF PELVIS PREGNANCY DELIVERED
653.31	OUTLET CONTRACTION OF PELVIS PREGNANCY DELIVERED
653.41	FETOPELVIC DISPROPORTION, DELIVERED
653.51	UNUSUALLY LARGE FETUS CAUS DISPROPRTN DELIVERED
653.61	HYDROCEPHALIC FETUS CAUSING DISPROPRTN DELIVERED
653.71	OTH FETAL ABNORM CAUSING DISPROPRTN DELIVERED
653.81	FETAL DISPROPORTION OF OTHER ORIGIN DELIVERED
653.91	UNSPECIFIED FETAL DISPROPORTION DELIVERED
654.01	CONGENITAL ABNORM PREGNANT UTERUS DELIVERED
654.02	CONGEN ABNORM PG UTERUS DELIV W/MENTION PPC
654.11	TUMORS OF BODY OF UTERUS, DELIVERED
654.12	TUMORS BODY UTERUS DELIVERED W/MENTION PPC
654.14	TUMORS BODY UTERUS POSTPARTUM COND/COMPLICATION
654.21	PREV C/S DELIV DELIV W/WO MENTION ANTPRTM COND
654.31	RETROVERTED&INCARCERATED GRAVID UTERUS DELIVERED
654.32	RETROVRT&INCARCERAT GRAVD UTRUS DELIV W/ PPC
654.41	OTH ABN SHAPE/PSTN GRAVD UTRUS&NGHBR STRCT DELIV
654.42	OTH ABN SHAPE/POS GRAVID UTERUS DEL W/PP COMPL
654.71	CONGENITAL/ACQUIRED ABNORM VAGINA W/DELIVERY
654.72	CONGEN/ACQ ABNORM VAGINA DELIVERED W/MENTION PPC

DX0209 FULL TERM DELIVERY	
654.81	CONGENITAL/ACQUIRED ABNORMALITY VULVA W/DELIVERY
654.82	CONGEN/ACQ ABNORM VULVA DELIVERED W/MENTION PPC
654.91	OTH&UNSPEC ABNORM ORGN&SOFT TISSUES PELV W/DELIV
654.92	OTH&UNS ABN ORGN&SOFT TISS PELVIS DEL W/PP COMPL
659.41	GRAND MULTIPARITY DELIV W/WO ANTPRTM COND
659.51	ELDERLY PRIMIGRAVIDA, DELIVERED
659.61	ELDER MULTIGRAVIDA DELIV W/MENTION ANTPRTM COND
660.01	OBST CAUS MALPOSITION FETUS@ONSET LABR DELIV
660.11	OBSTRUCTION BY BONY PELVIS DURING L&D DELIVERED
660.21	OBST ABN PELV SFT TISS DUR LABRAND DELIV DELIV
660.31	DEEP TRNSVRSE ARREST-OCCIPITOPOSTER-DEL-UNS APC
660.41	SHOULDER DYSTOCIA DURING LABOR&DELIVER DELIVERED
660.51	LOCKED TWINS, DELIVERED
660.91	UNSPECIFIED OBSTRUCTED LABOR WITH DELIVERY
661.01	PRIMARY UTERINE INERTIA WITH DELIVERY
661.11	SECONDARY UTERINE INERTIA WITH DELIVERY
661.21	OTHER AND UNSPECIFIED UTERINE INERTIA W/DELIVERY
661.31	PRECIPITATE LABOR, WITH DELIVERY
661.41	HYPERTON INCOORD/PROLONG UTERINE CONTRACS DELIV
661.91	UNSPECIFIED ABNORMALITY OF LABOR WITH DELIVERY
662.01	PROLONGED FIRST STAGE OF LABOR DELIVERED
662.11	UNSPECIFIED PROLONGED LABOR DELIVERED
662.21	PROLONGED SECOND STAGE OF LABOR DELIVERED
662.31	DELAYED DELIVERY 2 TWIN TRIPLET ETC DELIVERED
664	TRAUMA TO PERINEUM AND VULVA DURING DELIVERY
664.0	FIRST-DEGREE PERINEAL LACERATION DURING DELIVERY
664.01	FIRST-DEGREE PERINEAL LACERATION WITH DELIVERY
664.1	2-DEGREE PERINEAL LACERATION DURING DELIVERY
664.11	SECOND-DEGREE PERINEAL LACERATION WITH DELIVERY
664.2	THIRD-DEGREE PERINEAL LACERATION DURING DELIVERY
664.21	THIRD-DEGREE PERINEAL LACERATION WITH DELIVERY
664.3	FOURTH-DEG PERINEAL LACERATION DURING DELIVERY
664.31	FOURTH-DEGREE PERINEAL LACERATION WITH DELIVERY
664.4	UNSPECIFIED PERINEAL LACERATION DURING DELIVERY
664.41	UNSPECIFIED PERINEAL LACERATION WITH DELIVERY
664.5	VULVAR AND PERINEAL HEMATOMA DURING DELIVERY
664.51	VULVAR AND PERINEAL HEMATOMA WITH DELIVERY
664.8	OTHER SPEC TRAUMA PERINEUM&VULVA DURING DELIVERY
664.81	OTHER SPECIFIED TRAUMA PERINEUM&VULVA W/DELIVERY
664.9	UNSPEC TRAUMA PERINEUM&VULVA DURING DELIVERY
664.91	UNSPECIFIED TRAUMA TO PERINEUM&VULVA W/DELIVERY
665.22	INVERSION UTERUS DELIVERED W/PPC
665.24	INVERSION OF UTERUS, POSTPARTUM
665.31	LACERATION OF CERVIX, WITH DELIVERY
665.41	HIGH VAGINAL LACERATION WITH DELIVERY

DX0209 FULL TERM DELIVERY	
665.51	OTHER INJURY TO PELVIC ORGANS WITH DELIVERY
665.61	DAMAGE TO PELVIC JOINTS AND LIGAMENTS W/DELIVERY
665.71	PELVIC HEMATOMA, WITH DELIVERY
665.81	OTHER SPECIFIED OBSTETRICAL TRAUMA WITH DELIVERY
665.91	UNSPECIFIED OBSTETRICAL TRAUMA WITH DELIVERY
666.02	THIRD-STAGE POSTPARTUM HEMORRHAGE WITH DELIVERY
666.12	OTHER IMMEDIATE POSTPARTUM HEMORRHAGE W/DELIVERY
666.32	POSTPARTUM COAGULATION DEFECTS WITH DELIVERY
667	RETAINED PLACENTA/MEMBRANES WITHOUT HEMORRHAGE
667.0	RETAINED PLACENTA WITHOUT HEMORRHAGE
667.00	RETAIN PLACENTA W/O HEMORR UNSPEC AS EPIS CARE
667.02	RETN PLACNTA W/O HEMORR DEL W/MENTION PP COMPL
667.04	RETAINED PLACENTA WITHOUT HEMORR PP COND/COMP
667.1	RETAINED PRTNS PLACENTA/MEMBRANES WITHOUT HEMORR
667.10	RETN PORTIONS PLACNTA/MEMB W/O HEMORR UNS EOC
667.12	RETN PORTIONS PLCNTA/MEMB W/O HEMORR DEL W/COMPL
667.14	RETN PORTIONS PLACNTA/MEMB W/O HEMOR PP COMPL
669.5	FORCEPS/VAC EXT DELIV WITHOUT MENTION INDICATION
669.50	FORCEPS/VAC EXT DELIV W/O INDICAT UNS EPIS CARE
669.51	FORCEPS/EXTRACTOR DEL W/O INDICATION-DELIVERED
669.6	BREECH EXTRACTION WITHOUT MENTION OF INDICATION
669.60	BREECH XTRAC W/O MENTION INDICAT UNS EPIS CARE
669.61	BREECH XTRAC W/O INDICAT DELIV W/WO ANTPRTM COND
669.7	CESAREAN DELIVERY WITHOUT MENTION OF INDICATION
669.70	C/S DELIV W/O MENTION INDICAT UNS AS EPIS CARE
669.71	C/S DELIV W/O INDICAT DELIV W/WO ANTPRTM COND
669.81	OTH COMP L&D DELIVERED W/WO MENTION ANTPRTM COND
669.91	UNSPEC COMP L&D DELIV W/WO MENTION ANTPRTM COND
671.01	VARICOSE VNS LEGS DELIV W/WO ANTPRTM COND
671.02	VARICOSE VEINS LEGS W/DELIVERY W/MENTION PPC
671.11	VARICOSE VNS VULVA&PERIN DELIV W/WO ANTPRTM COND
671.12	VARICOSE VEINS VULVA&PERIN W/DELIV W/MENTION PPC
671.21	SUP THROMBOPHLEB DELIV W/WO MENTION ANTPRTM COND
671.22	SUP THROMBOPHLEBITIS W/DELIV W/MENTION PPC
V27.0	OUTCOME OF DELIVERY SINGLE LIVEBORN
V27.2	OUTCOME OF DELIVERY TWINS BOTH LIVEBORN
V27.3	OUTCOME DELIVERY TWINS 1 LIVEBORN& 1 STILLBORN
V27.5	OUTCOME DELIVERY OTH MULTIPLE BIRTH ALL LIVEBORN
V27.6	OUTCOME DELIV OTH MULTIPLE BIRTH SOME LIVEBORN
V27.9	OUTCOME OF DELIVERY, UNSPECIFIED

DX0210 GROUP B STREP INFECTION OR CARRIER STATE	
ICD-9 Code	**Description**
041.02	STREPTOCOCCUS INFECTION CCE & UNS SITE GROUP B
V02.51	CARRIER/SUSPECTED CARRIER GROUP B STREPTOCOCCUS

DX0211 ANTENATAL SCREENING FOR STRETOCOCCUS B	
ICD-9 Code	**Description**
V28.6	ANTENATAL SCREENING FOR STREPTOCOCCUS B

Procedure and Revenue Code Sets

The following tables represent the applicable code sets for each procedure that is referenced by the Pregnancy Management rules.

PR0020 CHLAMYDIA SCREENING (HEDIS®)	
CPT® Code	**Description**
87110	Culture, chlamydia, any source
87270	Infectious agent antigen detection by immunofluorescent technique; Chlamydia trachomatis
87320	Infectious agent antigen detection by enzyme immunoassay technique, qualitative or semiquantitative, multiple step method; Chlamydia trachomatis
87490	Infectious agent detection by nucleic acid (DNA or RNA); Chlamydia trachomatis, direct probe technique
87491	Infectious agent detection by nucleic acid (DNA or RNA); Chlamydia trachomatis, amplified probe technique
87492	Infectious agent detection by nucleic acid (DNA or RNA); Chlamydia trachomatis, quantification
87810	Infectious agent detection by immunoassay with direct optical observation; Chlamydia trachomatis

PR0107 PROFESSIONAL ENCOUNTER		
CPT Code	**Specific Encounter Type**	**General Encounter Category**
99201-99215	Office Visit	Outpatient Professional
99217-99220	Observation Care	Observation Care
99221-99239	Inpatient Visit	Inpatient Visit
99241-99245	Office Consult	Outpatient Professional
99251-99263	Inpatient Consult	Inpatient Consult
99271-99275	Confirmatory Consultation	Confirmatory Consultation
99281-99285	ER Physician Visit	ER Professional Visit
99301-99318	Nursing Facility Services	Nursing Facility Services
99341-99350	Home Visit	Outpatient Professional
99381-99397	Preventive Medicine Visit	Outpatient Professional
99401-99429	Counseling/Risk Factor Visit	Counseling/Risk Factor Visit
RV0107 PROFESSIONAL ENCOUNTER		
Rev Code	**Specific Encounter Type**	**General Encounter Category**
0510-0526, 0528-0529	Clinic Visit (Facility Component)	Clinic Visit (Facility Component)
0981	ER Visit (Professional Component)	ER Professional Visit
0983	Clinic Visit (Professional Component)	Outpatient Professional

PR0108 PROFESSIONAL SUPERVISION		
CPT Code	**Specific Encounter Type**	**General Encounter Category**
99321 - 99337	Domiciliary or Rest Home Visit	Rest Home Visit
99339 - 99340	Physician Supervision of Rest Home Patient	Rest Home Supervision
99371 - 99373	Telephone call for consultation or medical management or coordination	Telephonic service
99374 - 99375	Supervision of Home Health Care	Home Care Supervision
99377 - 99378	Physician Supervision of Hospice Care	Hospice Care Supervision
99379 - 99380	Physician Supervision of Nursing Facility Patient	Nursing Facility Supervision
HCPCS Code	**Specific Encounter Type**	**General Encounter Category**
G0182	Physician Supervision of Hospice Care	Hospice Care Supervision

PR0140 DELIVERY, GLOBAL CODES	
CPT Code	**Description**
59400	Routine obstetric care including antepartum care, vaginal delivery (with or w/o episiotomy, and/or forceps) and postpartum care
59510	Routine obstetric care including antepartum care, cesarean delivery (with or w/o episiotomy, and/or forceps) and postpartum care
59610	Routine obstetric care including antepartum care, vaginal delivery (with or w/o episiotomy, and/or forceps) and postpartum care, after previous cesarean delivery
59618	Routine obstetric care including antepartum care, cesarean delivery, and postpartum care, following attempted vaginal delivery after previous cesarean delivery

PR0141 DELIVERY, NON-GLOBAL CODES	
CPT Code	**Description**
59409	Vaginal delivery only (with or w/o episiotomy, and/or forceps)
59410	Vaginal delivery only (with or w/o episiotomy, and/or forceps), including postpartum care
59514	Cesarean delivery only
59515	Cesarean delivery only, including postpartum care
59612	Vaginal delivery only, after previous cesarean delivery (with or w/o episiotomy, and/or forceps)
59614	Vaginal delivery only, after previous cesarean delivery (with or w/o episiotomy, and/or forceps),
59620	Cesarean delivery only, following attempted vaginal delivery after previous cesarean delivery
59622	Cesarean delivery only, following attempted vaginal delivery after previous cesarean delivery,
ICD-9 Code	**Description**
72.0	Low forceps operation
72.1	Low forceps operation with episiotomy
72.2	Mid forceps operation
72.21	Mid forceps operation with episiotomy
72.29	Other mid forceps operation
72.3	High forceps operation
72.31	High forceps operation with episiotomy
72.39	Other high forceps operation
72.4	Forceps rotation of fetal head
72.5	Breech extraction
72.51	Partial breech extraction with forceps to aftercoming head
72.52	Other partial breech extraction
72.53	Total breech extraction with forceps to aftercoming head
72.54	Other total breech extraction
72.6	Forceps application to aftercoming head
72.7	Vacuum extraction
72.71	Vacuum extraction with episiotomy
72.79	Other vacuum extraction
72.8	Other specified instrumental delivery
72.9	Unspecified instrumental delivery
73.0	Artificial rupture of membranes
73.01	Induction of labor by artificial rupture of membranes
73.09	Other artificial rupture of membranes
73.1	Other surgical induction of labor

73.2	Internal and combined version and extraction
73.21	Internal and combined version without extraction
73.22	Internal and combined version with extraction
73.3	Failed forceps
73.4	Medical induction of labor
73.5	Manually assisted delivery
73.51	Manual rotation of fetal head
73.59	Other manually assisted delivery
73.6	Episiotomy
73.8	Operations on fetus to facilitate delivery
73.9	Other operations assisting delivery
73.91	External version to assist delivery
73.92	Replacement of prolapsed umbilical cord
73.93	Incision of cervix to assist delivery
73.94	Pubiotomy to assist delivery
73.99	Other operations to assist delivery
74.0	Classical cesarean section
74.1	Low cervical cesarean section
74.2	Extraperitoneal cesarean section
74.3	Removal of extratubal ectopic pregnancy
74.4	Cesarean section of other specified type
74.9	Cesarean section of unspecified type
74.91	Hysterotomy to terminate pregnancy
74.99	Other cesarean section of unspecified type

PR0142 HIV TEST	
CPT Code	**Description**
86689	Antibody; HTLV or HIV antibody, confirmatory test (eg, Western Blot)
86701	Antibody; HIV-1
86702	Antibody; HIV-2
86703	Antibody; HIV-1 and HIV-2, single assay
87390	Infectious agent antigen detection by enzyme immunoassay technique, qualitative or semiquantitative, multiple step method; HIV-1
87391	Infectious agent antigen detection by enzyme immunoassay technique, qualitative or semiquantitative, multiple step method; HIV-2
87534	Infectious agent detection by nucleic acid (DNA or RNA); HIV-1, direct probe technique
87535	Infectious agent detection by nucleic acid (DNA or RNA); HIV-1, amplified probe technique
87536	Infectious agent detection by nucleic acid (DNA or RNA); HIV-1, quantification
87537	Infectious agent detection by nucleic acid (DNA or RNA); HIV-2, direct probe technique
87538	Infectious agent detection by nucleic acid (DNA or RNA); HIV-2, amplified probe technique
87539	Infectious agent detection by nucleic acid (DNA or RNA); HIV-2, quantification

PR0145 ABO BLOOD TYPE TESTING	
CPT Code	**Description**
80055	**Obstetric panel** This panel must include the following: Blood count, complete (CBC), automated

	and automated differential WBC count (85025 or 85027 and 85004) OR Blood count, complete (CBC), automated (85027) and appropriate manual differential WBC count (85007 or 85009) Hepatitis B surface antigen (HBsAg) (87340) Antibody, rubella (86762) Syphilis test, qualitative (eg, VDRL, RPR, ART) (86592) Antibody screen, RBC, each serum technique (86850) Blood typing, ABO (86900) AND Blood typing, Rh (D) (86901)
86900	Blood typing; ABO

PR0146 RH BLOOD TYPE TESTING	
CPT Code	**Description**
80055	**Obstetric panel** This panel must include the following: Blood count, complete (CBC), automated and automated differential WBC count (85025 or 85027 and 85004) OR Blood count, complete (CBC), automated (85027) and appropriate manual differential WBC count (85007 or 85009) Hepatitis B surface antigen (HBsAg) (87340) Antibody, rubella (86762) Syphilis test, qualitative (eg, VDRL, RPR, ART) (86592) Antibody screen, RBC, each serum technique (86850) Blood typing, ABO (86900) AND Blood typing, Rh (D) (86901)
86901	Blood typing; Rh (D)

PR0147 SYPHILIS	
CPT Code	**Description**
80055	**Obstetric panel** This panel must include the following: Blood count, complete (CBC), automated and automated differential WBC count (85025 or 85027 and 85004) OR Blood count, complete (CBC), automated (85027) and appropriate manual differential WBC count (85007 or 85009) Hepatitis B surface antigen (HBsAg) (87340) Antibody, rubella (86762) Syphilis test, qualitative (eg, VDRL, RPR, ART) (86592) Antibody screen, RBC, each serum technique (86850) Blood typing, ABO (86900) AND Blood typing, Rh (D) (86901)
86592	Syphilis test; qualitative (eg, VDRL, RPR, ART)
86593	Syphilis test; quantitative
86781	Antibody; Treponema pallidum, confirmatory test (eg, FTA-abs)
87285	Infectious agent antigen detection by immunofluorescent technique; Treponema pallidum

PR0148 URINE CULTURE	
CPT Code	**Description**
87086	Urine culture, bacterial, quantitative colony count
87088	Urine culture, bacterial, quantitative colony count, with isolation and presumptive identification of isolates

PR0149 HEPATITIS B SURFACE ANTIGEN	
CPT Code	**Description**
80055	**Obstetric panel** - This panel must include the following: Hemogram, automated, and manual differential WBC count (CBC) (85022) OR Hemogram and platelet count, automated, and automated complete differential WBC count (CBC) (85025) Hepatitis B surface antigen (HBsAg) (87340) Antibody, rubella (86762) Syphilis test, qualitative (e.g., VDRL, RPR, ART) (86592) Antibody screen, RBC, each serum technique (86850) Blood typing, ABO (86900) AND Blood typing, Rh (D) (86901)
87340	Hepatitis B surface antigen (HBsAg)

PR0150 GROUP B STREPTOCOCCUS	
CPT Code	**Description**
87081	Culture, presumptive, pathogenic organisms, screening only;
87149	Culture, typing; identification by nucleic acid probe
87653	Infectious agent detection by nucleic acid (DNA or RNA); Streptococcus, group B, amplified probe technique
87802	Infectious agent detection by immunoassay with direct optical observation, Streptococcus, group B

Laboratory Result Values – LOINC® Code Sets

The following codes represent the lab result values that are referenced in the Pregnancy Management rules.

LC0005 CHLAMYDIA SPECIES

Note	LOINC Code	Component	Property	Time	System	Scale	Method Type	Units
	557-9	CHLAMYDIA SP IDENTIFIED	PRID	PT	GEN	NOM	ORGANISM SPECIFIC CULTURE	
	560-3	CHLAMYDIA SP IDENTIFIED	PRID	PT	XXX	NOM	ORGANISM SPECIFIC CULTURE	

LC0006 CHLAMYDIA TRACHOMATIS

Note	LOINC Code	Component	Property	Time	System	Scale	Method Type	Units
	14463-4	CHLAMYDIA TRACHOMATIS	ACNC	PT	CVX	ORD	ORGANISM SPECIFIC CULTURE	
	14464-2	CHLAMYDIA TRACHOMATIS	ACNC	PT	GENV	ORD	ORGANISM SPECIFIC CULTURE	
	14467-5	CHLAMYDIA TRACHOMATIS	ACNC	PT	URNS	ORD	ORGANISM SPECIFIC CULTURE	
	14470-9	CHLAMYDIA TRACHOMATIS AG	ACNC	PT	CVX	ORD	EIA	
	14471-7	CHLAMYDIA TRACHOMATIS AG	ACNC	PT	GENV	ORD	EIA	
	14474-1	CHLAMYDIA TRACHOMATIS AG	ACNC	PT	URNS	ORD	EIA	
	14509-4	CHLAMYDIA TRACHOMATIS AG	ACNC	PT	CVX	ORD	IF	
	14510-2	CHLAMYDIA TRACHOMATIS AG	ACNC	PT	GENV	ORD	IF	
	14513-6	CHLAMYDIA TRACHOMATIS AG	ACNC	PT	URNS	ORD	IF	
	16600-9	CHLAMYDIA TRACHOMATIS DNA	ACNC	PT	GEN	ORD	PROBE	
	16601-7	CHLAMYDIA TRACHOMATIS DNA	ACNC	PT	UR	ORD	PROBE	
	16602-5	CHLAMYDIA TRACHOMATIS RRNA	ACNC	PT	UR	ORD	PROBE	
2	20993-2	CHLAMYDIA TRACHOMATIS DNA	ACNC	PT	XXX	ORD	PROBE	
	21189-6	CHLAMYDIA TRACHOMATIS DNA	ACNC	PT	CVM	ORD	PROBE.AMP. TAR	
	21190-4	CHLAMYDIA TRACHOMATIS DNA	ACNC	PT	CVX	ORD	PROBE.AMP. TAR	
	21191-2	CHLAMYDIA TRACHOMATIS DNA	ACNC	PT	URTH	ORD	PROBE.AMP. TAR	
	21192-0	CHLAMYDIA TRACHOMATIS DNA	ACNC	PT	URTH	ORD	PROBE	
1	21613-5	CHLAMYDIA TRACHOMATIS DNA	ACNC	PT	XXX	ORD	PROBE.AMP. TAR	
	23838-6	CHLAMYDIA TRACHOMATIS DNA	ACNC	PT	GENF	ORD	PROBE	
	31771-9	CHLAMYDIA TRACHOMATIS AG	ACNC	PT	CVX	ORD		
	31772-7	CHLAMYDIA TRACHOMATIS AG	ACNC	PT	GENV	ORD		

	31775-0	CHLAMYDIA TRACHOMATIS AG	ACNC	PT	URNS	ORD		
	31777-6	CHLAMYDIA TRACHOMATIS AG	ACNC	PT	XXX	ORD		
	42931-6	CHLAMYDIA TRACHOMATIS RRNA	ACNC	PT	UR	ORD	PROBE.AMP. TAR DETECTION LIMIT = 50 IU/ML	
	4993-2	CHLAMYDIA TRACHOMATIS RRNA	ACNC	PT	XXX	ORD	PROBE	
	6349-5	CHLAMYDIA TRACHOMATIS	ACNC	PT	XXX	ORD	ORGANISM SPECIFIC CULTURE	
	6354-5	CHLAMYDIA TRACHOMATIS AG	ACNC	PT	XXX	ORD	EIA	
	6355-2	CHLAMYDIA TRACHOMATIS AG	ACNC	PT	XXX	ORD	IF	
	6356-0	CHLAMYDIA TRACHOMATIS DNA	ACNC	PT	GEN	ORD	PROBE.AMP. TAR	
	6357-8	CHLAMYDIA TRACHOMATIS DNA	ACNC	PT	UR	ORD	PROBE.AMP. TAR	

LC0014 OBSTETRIC PANEL

Note	LOINC Code	Component	Property	Time	System	Scale	Method Type	Units
1	24364-2	OBSTETRIC HCFA 96 PANEL		PT	SER+BLD			

LC0018 SYPHILIS

Note	LOINC Code	Component	Property	Time	System	Scale	Method Type	Units
	11084-1	REAGIN AB	TITR	PT	SER	QN		TITER
	11597-2	TREPONEMA PALLIDUM AB	ACNC	PT	SER	QN		
	17723-8	TREPONEMA PALLIDUM AB	ACNC	PT	SER	ORD	IMMOBILIZATION	
	17724-6	TREPONEMA PALLIDUM AB	ACNC	PT	SER	QN	IF	
	17725-3	TREPONEMA PALLIDUM AB	ACNC	PT	SER	QN	LA	
	17726-1	TREPONEMA PALLIDUM AB.IGG	ACNC	PT	SER	ORD	IF	
	17727-9	TREPONEMA PALLIDUM AB.IGG	ACNC	PT	SER	QN	IF	
	17728-7	TREPONEMA PALLIDUM AB.IGM	ACNC	PT	SER	QN	IF	
	17729-5	TREPONEMA PALLIDUM AB.IGM	ACNC	PT	SER	ORD	IF	
	20507-0	REAGIN AB	ACNC	PT	SER	ORD	RAPID TEST	
	20508-8	REAGIN AB	ACNC	PT	SER	QN	RAPID TEST	
	22461-8	REAGIN AB	ACNC	PT	SER	ORD		
	22462-6	REAGIN AB	ACNC	PT	SER	QN		
	22587-0	TREPONEMA PALLIDUM AB	ACNC	PT	SER	ORD		
	22590-4	TREPONEMA PALLIDUM AB	TITR	PT	SER	QN		TITER
	22592-0	TREPONEMA PALLIDUM AB.IGG	ACNC	PT	SER	QN		
	22594-6	TREPONEMA PALLIDUM AB.IGM	ACNC	PT	SER	QN		
	24110-9	TREPONEMA PALLIDUM AB	ACNC	PT	SER	ORD	EIA	
	24312-1	TREPONEMA PALLIDUM AB	ACNC	PT	SER	ORD	AGGL	

	26009-1	TREPONEMA PALLIDUM AB	TITR	PT	SER	QN	HA	TITER
	31147-2	REAGIN AB	TITR	PT	SER	QN	RAPID TEST	
	34382-2	TREPONEMA PALLIDUM AB	TITR	PT	SER	QN	IF	
	5291-0	REAGIN AB	ACNC	PT	SER	QN	FLOC	
1	5292-8	REAGIN AB	ACNC	PT	SER	ORD	FLOC	
	5392-6	TREPONEMA PALLIDUM AB	ACNC	PT	SER	QN	IMMOBILIZATION	
	5393-4	TREPONEMA PALLIDUM AB	ACNC	PT	SER	ORD	IF	
	5394-2	TREPONEMA PALLIDUM AB	TITR	PT	SER	QN	LA	TITER
	6561-5	TREPONEMA PALLIDUM AB.IGG	ACNC	PT	SER	ORD		
	6562-3	TREPONEMA PALLIDUM AB.IGM	ACNC	PT	SER	ORD		
	660-1	MICROSCOPIC OBSERVATION	PRID	PT	XXX	NOM	DARK FIELD EXAMINATION	
	8041-6	TREPONEMA PALLIDUM AB	ACNC	PT	SER	ORD	HA	

LC0020 CHLAMYDIA TRACHOMATIS AND NEISSERIA GONORRHOEAE

Note	LOINC Code	Component	Property	Time	System	Scale	Method Type	Units
	36902-5	CHLAMYDIA TRACHOMATIS+NEISSERIA GONORRHOEAE DNA	ACNC	PT	XXX	ORD	PROBE.AMP. TAR	
	36903-3	CHLAMYDIA TRACHOMATIS+NEISSERIA GONORRHOEAE DNA	PRID	PT	XXX	NOM	PROBE.AMP. TAR	
	43406-8	CHLAMYDIA TRACHOMATIS+NEISSERIA GONORRHOEAE DNA	ACNC	PT	XXX	ORD	PROBE.AMP. SIG	

LC0021 HIV TEST

Note	LOINC Code	Component	Property	Time	System	Scale	Method Type	Units
	14092-1	HIV 1 AB	ACNC	PT	SER	ORD	IF	
	24012-7	HIV 1 AG	ACNC	PT	SER	ORD		
	29893-5	HIV 1 AB	ACNC	PT	SER	ORD	EIA	
	31201-7	HIV 1+2 AB	ACNC	PT	SER	ORD	EIA	
	5221-7	HIV 1 AB	ACNC	PT	SER	ORD	IB	
	5222-5	HIV 1 AG	ACNC	PT	SER	ORD	EIA	
	7917-8	HIV 1 AB	ACNC	PT	SER	ORD		
	7918-6	HIV 1+2 AB	ACNC	PT	SER	ORD		

LC0022 ABO BLOOD TYPE TESTING

Note	LOINC Code	Component	Property	Time	System	Scale	Method Type	Units
	883-9	ABO GROUP	TYPE	PT	BLD	NOM		

LC0023 RH BLOOD TYPE TESTING

Note	LOINC Code	Component	Property	Time	System	Scale	Method Type	Units

	10331-7	RH	TYPE	PT	BLD	NOM		
	34961-3	RH	TYPE	PT	BLD	NOM	CONFIRM	

LC0024 ABO/RH BLOOD TYPE TESTING

Note	LOINC Code	Component	Property	Time	System	Scale	Method Type	Units
	34530-6	ABO & RH GROUP PANEL	TYPE	PT	BLD	NOM		
	882-1	ABO+RH GROUP	TYPE	PT	BLD	NOM		
	884-7	ABO+RH GROUP	TYPE	PT	BLDC	NOM		

LC0025 HEPATITIS B SURFACE ANTIGEN

Note	LOINC Code	Component	Property	Time	System	Scale	Method Type	Units
	10674-0	HEPATITIS B VIRUS SURFACE AG	ACNC	PT	TISS	ORD	IMMUNE STAIN	
	10675-7	HEPATITIS B VIRUS SURFACE AG	PRID	PT	TISS	NOM	ORCEIN STAIN	
	7905-3	HEPATITIS B VIRUS SURFACE AG	ACNC	PT	SER	ORD	NEUT	

LC0026 GROUP B STREPTOCOCCUS

Note	LOINC Code	Component	Property	Time	System	Scale	Method Type	Units
	11266-4	STREPTOCOCCUS AGALACTIAE AG	ACNC	PT	XXX	ORD		
	20488-3	STREPTOCOCCUS AGALACTIAE AG	ACNC	PT	CSF	ORD		
	5034-4	STREPTOCOCCUS AGALACTIAE RRNA	ACNC	PT	XXX	ORD	PROBE	
	584-3	STREPTOCOCCUS AGALACTIAE IDENTIFIED	PRID	PT	GENV	NOM	ORGANISM SPECIFIC CULTURE	
	6551-6	STREPTOCOCCUS AGALACTIAE AG	ACNC	PT	THRT	ORD	IF	

Notes:

(1) When using lab results data that has not been mapped to a LOINC code, customers should map the comparable vendor specific test number provided by their laboratory vendor(s) to one of these “default” codes.

(2) This is a deprecated code which may be present on historical data, or which some laboratories may be continuing to use. Result records with these codes are included on the definition of this test.

Pregnancy Management Glossary

<table>
<tr><th>Term</th><th>Definition</th></tr>
<tr><td>℞</td><td>The presence of ℞ in the Report Rule ID column indicates that the rule candidate is exclusively or primarily dependent on pharmacy claims information. Members who do not have a managed pharmacy benefit, as determined from the Member Term input data file, will be assigned a default value of ‘N’ for these rule candidates, thus eliminating unnecessary processing time.</td></tr>
<tr><td>Result Flag ‘Y’</td><td>A Result Flag of ‘Y’ is assigned to indicate that the result of the rule is affirmative; the treatment was provided, the diagnostic test was performed, the lab value was normal, etc. If a rule has an affirmative result, the result flag of Y will be assigned regardless of the patient’s length of eligibility.</td></tr>
<tr><td>Result Flag ‘N’</td><td>A Result Flag of ‘N’ is assigned to indicate that the result of the rule is negative AND the patient met the minimum eligibility requirements for that particular rule. For example, if the rule is looking for a drug within the last 120 days, the patient must be enrolled in a drug benefit for at least the last 120 days.</td></tr>
<tr><td>Result Flag ‘Q’</td><td>A Result Flag of ‘Q’ is assigned to indicate that there was no claim record indicating that the patient received a particular test or treatment, but there may be data incompleteness due to lack of continuous enrollment. If a patient is not continuously enrolled in medical or pharmacy benefits throughout the window of time during which the service was being evaluated, there is no way to know whether the test was performed or not. The absence of a claim record for the test might be due to data incompleteness prior to the onset of medical benefits, or it might reflect the fact that the patient did not actually receive the test.</td></tr>
<tr><td>Result Flag ‘NA’</td><td>A Result Flag of ‘NA’ is assigned to indicate that the member has clinical characteristics or contraindications that render a particular rule “not applicable” to that particular member. There are seven (7) breakdowns of the NA result flag, which provide a method for further identification and clarification of this flag:
<table>
<tr><th>FLAG</th><th>DESCRIPTION</th></tr>
<tr><td>NA1</td><td>Patient did not meet the age or gender criteria.</td></tr>
<tr><td>NA2</td><td>Patient was not currently taking the medication in question or had not taken it for the required duration.</td></tr>
<tr><td>NA3</td><td>Patient was taking the medication, but a possession ratio could not be computed [less than two prescriptions during the rule time window].</td></tr>
<tr><td>NA4</td><td>Patient did not meet the rule specific criteria [e.g., co-morbidity, complexity (diagnosis and medication), intervention not warranted].</td></tr>
<tr><td>NA5</td><td>No lab result record or insufficient information.</td></tr>
<tr><td>NA6</td><td>Patient admitted to long term care facility or hospital which might cause data incompleteness.</td></tr>
<tr><td>NA7</td><td>Patient who did not receive treatment or medication had a contraindication or other justification.</td></tr>
</table></td></tr>
<tr><td>Result Flag ‘NRX’</td><td>A Result Flag of ‘NRX’ is assigned under the following circumstances to the rule types noted below: 1) the member did not have a pharmacy benefit at the end of the report period (applies to chronic and some preventive cases (case ID = 1xxxxx or 3xxxxx)) or 2) the member did not have a pharmacy benefit throughout the duration of episodic condition (case ID = 2xxxxx).

Research Based rules (R-1, R-2)
Medication Adherence rules (A)
Patient Safety rules (S-M, S-DI)

These rule types are exclusively or primarily dependent on pharmacy claims. For Care Pattern rules (CP-I, CP-R, CP-E), a Q flag will be assigned if the patient does not meet the minimum pharmacy eligibility requirements for the particular rule. In addition to the above, some national standard rules may also have NRX flags assigned if the member did not have pharmacy benefit at the end of the report period.</td></tr>
<tr><td>MCE</td><td>In order to assign a Result Flag of 'Q', each rule has a specific Minimum Continuous Enrollment (MCE) period for medical and pharmacy benefits which reflects the time frame of the recommended services (e.g., if the rule is looking for a test within 12 months the medical MCE is 12 months). When a test or treatment is absent, the MCE is used to determine whether to assign a result flag of ‘N’ or ‘Q’. A Result Flag of ‘N’ is assigned when the patient meets the MCE requirements. A Result Flag of ‘Q’ is assigned when the patient does not meet the MCE requirements.</td></tr>
</table>

INGENIX®

Quality Processes

10/27/08

INGENIX®

Table of Contents

INGENIX®

Section 1 - Overview

1.1 Purpose of Document

This document describes the quality processes from clinical measure creation to final product delivery. These processes ensure that the information provided to our clients has maximum quality and integrity.

1.2 Overview

Evidence-based treatment guidelines have been developed with the belief that adherence to them lowers costs, increases quality of care, or both. Health service organizations, payers, and employers want to provide the best care at the best cost. By integrating clinically relevant research evidence with actual care patterns, as evidenced through claims and other administrative data, gaps in care can be identified and interventions can be targeted to improve outcomes (cost and quality).

Measures are created through a well-defined process involving careful review at every step. Quality checks are performed in five different phases of development:

1. Clinical Measure Creation
2. Conversion of Clinical Measures to Machine Code
3. Clinical Measures Processing Engine (i.e., component-ware)
4. End to End Testing (Customer Acceptance Testing)
5. Validation of Results

1.3 Testing Through Multiple Methods

Quality assurance of each measure is accomplished through the testing using multiple methods. Types of testing, data samples and volume vary to ensure the integrity of the measure. Rigorous development, analysis and testing processes are deployed for creating of the measure specifications. Software testing ensures the software is working as designed. Reliability and validity testing of measures is based on differing data samples and volume of members. National benchmarks are created on a large volume set of data representing members throughout the United States. All quality checks for all measure results must have consistent results and meet expected outcomes based on industry knowledge and experience.

Section 2 - Quality Processes

2.1 Creation of Clinical Measures

2.1.1 Literature Review

The process of measure creation begins with the clinician, who reviews published literature on evidence-based medicine. Various resources are examined, including but not limited to:

- MEDLINE
- Professional and specialty organization (e.g. ADA, ACC/AHA) guidelines
- Agency for Healthcare Research and Quality (AHRQ) including national clearinghouse guidelines
- National standards (e.g. HEDIS, AMA PCPI, AQA, NQF)
- Institute for Clinical Systems Improvement (ICSI)
- Food and Drug Administration (FDA) Advisories
- Published clinical trials and other relevant articles

- Pharmaceutical manufacturer's recommendations

Based upon the supporting literature and the ability to adequately define and measure care using electronic claims data, proposed new measures are developed. Note: this same process is employed when deciding whether to update or retire an existing measure.

2.1.2 Expert Panel Review

The proposed measures and current treatment guidelines are then reviewed by the Clinical Consultant Panel. This expert panel plays a critical role in the creation and maintenance of measures. The panel is currently comprised of 21 clinicians, including 18 physicians and 3 Pharmacologists. Each physician is board certified in their area of specialty and has more than 15 years of clinical practice.

The specialties / sub-specialties represented on the panel are:

Specialty	
Cardiology (2)	Oncology
Endocrinology	Ophthalmology
Family Practice	Orthopedics
Gastrointestinal	Otolaryngology
Geriatrics	Pediatrics
Hematology	Psychiatry (2)
Infectious Disease	Pulmonary
Internal Medicine	Rad Oncology
Nephrology	Rheumatology
Neurology (4)	Surgery
OB/GYN	

The physicians on the panel are practicing physicians in settings such as a university hospital, VA hospital, medical center, clinic, independent or group practice. The Pharmacologists have more than 10 years of clinical practice. All clinicians, with the exception of the Medical Director, have no affiliation with UnitedHealth Group outside of their responsibilities on the Clinical Consultant Panel. An annual training session is held for all panel members to provide updates on future product enhancements.

2.1.3 Summary of Evidence Basis

When the expert panel has reached consensus on the proposed measures, a synopsis of the evidence basis for each measure is developed. This synopsis includes citations for published research and guidelines that support the measure, as well as strength of evidence ratings when these rankings are available.

2.1.4 Clinical Algorithms

In conjunction with the synopsis a clinical algorithm is developed which indicates how to define and evaluate the clinical measures. This document includes condition confirmation criteria, exclusion rules, intervention rules, and compliance criteria, as well as high-level details of diagnostic, procedural, revenue, pharmaceutical, and laboratory code sets. These code sets are defined and maintained in a secure product database.

2.1.5 Maintenance Review Cycle

Existing measures are reviewed every 12-24 months as part of an ongoing product maintenance cycle. Any member of the expert panel may suggest changes to a measure at any point, even outside of the regular review cycle, if new evidence is published which relates to the measure.

2.2 Conversion of Clinical Measures into Software Code

The clinical algorithms are converted into software code. A team of business analysts, nurses, and health services researchers translates the words from the clinical algorithm into machine readable language. The team members independently peer review and sign off on each measure to ensure that the software code accurately reflects the original measure specifications.

2.3 Testing of Engine Software Code

The software code from is processed to produce compliance results. Per the product development life cycle there are multiple types of testing activities associated with this component-ware engine. Security requirements, performance requirements, legal requirements (e.g. HIPAA), content requirements, and usability are all tested and verified.

2.3.1 Unit and Integration Testing

During unit and integration testing each engine component is tested discretely by the developer or software engineer who programmed it. In unit testing the developer tests functional features, environmental requirements, system behavior and performance aspects. When the software moves into integration testing, the developer performs positive and negative testing of system interfaces to verify that the functions which were tested at the unit level perform correctly in a full system build and deployment.

2.3.2 Functional Testing

Functional testing is conducted at the end of each software iteration to test the alignment of the product to the functional requirements. The QA team performs positive and negative testing of product requirements and architecture. At the end of functional testing, the decision is made either to move on to the next iteration or to move the software into system testing.

2.3.3 System Testing

There are three types of system testing initiatives which are conducted using sample data to simulate business processes. The table below describes the purpose of each type of system test.

Test Type	Description
Volume testing	Determine whether the engine can handle the required volume of data
Performance testing	Determine whether the engine meets its performance requirements
Platform testing	Ensure that the component-ware works appropriately for all supported operating systems

2.4 Reliability Testing

Customer Acceptance Testing (CAT) is another important quality process. CAT ensures that the clinical measures are functioning as intended and that they generate accurate results for typical billing patterns. Using actual claims data a team of business analysts, nurses, and health services researchers conducts a detailed analysis of the output. For each clinical condition in the product (e.g., Diabetes Mellitus, Coronary Artery Disease, etc.) there is a set of CAT data with at least 4000 members who satisfy the condition confirmation criteria. This data is extracted from a large (50+ million member) multi-payer benchmark database and contains inpatient, outpatient, pharmacy, and laboratory data. The testing team rigorously checks the creation of denominators (target population), numerators, and exclusions from both.

Regression testing is the part of CAT that verifies the reliability of the product across software releases. For a new release the testing team confirms that every unchanged measure produces the same results as in previous releases, accounting for systematic changes to the software (e.g., code updates, logic changes, etc). Regression testing is conducted at multiple points throughout the software development cycle.

2.5 Validity Testing

Face Validity Testing (FVT) is the final testing step in the software release cycle. One million members are randomly selected from the large multi-payer benchmark database and their claims data is processed through the software. The Medical Director reviews the results to verify that:

- Prevalence rates for a condition are comparable to nationally published rates
- Compliance rates for a measure are comparable to the rates reported in the published literature or by other national sources (e.g. HEDIS). If no comparable sources are available, the rates are judged to be clinically reasonable by practicing physicians and health services researchers
- There are no significant, unexplained variations when looking at results from different health plans and different geographic areas

2.6 Creation of National Benchmarks

National benchmarks are on a population no less than 12 million members. Prevalence is calculated doe each condition. Compliance rates are calculated for each measure.
The Medical Director reviews the results to verify that:

- Prevalence rates for a condition are comparable to nationally published rates
- Compliance rates for a measure are comparable to the rates reported in the published literature or by other national sources (e.g. HEDIS). If no comparable sources are available, the rates are judged to be clinically reasonable by practicing physicians and health services researchers
- There are no significant, unexplained variations when looking at results from different health plans and different geographic areas

Section 3 - Summary

Ensuring quality in the product requires expertise from a variety of disciplines across each step in the development process. These efforts, which are designed to minimize the risk of producing inaccurate results, are particularly important for an application which assesses clinical care and identifies gaps in care. Errors cannot be completely eliminated due to the inherent limitations of administrative and claims data (e.g., incomplete data due to coverage and benefit limitations, coordination across multiple insurers, or complimentary care). None-the-less, administrative and claims data offer a cost effective means of identifying gaps in care, so that limited resources can be directed to the areas most likely to generate a return on investment, either through improved outcomes, reduced costs, or both.

INGENIX®

Input Guide

Release 7.0, Technical Guide for Windows, February 2008

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What Input Files to Prepare

The following list specifies what input files you prepare for processing:

- The claims data file (required)
- The member data file (required)
- The member term data file (required)

Field Type Definitions and Input File Requirements

This chapter lists the field requirements for your input files. One of the attributes listed among the requirements is defined as "Type". There are four field types used to describe a field's value, and they are defined below.

Field Type	Definition
AlphaNum	A value made of letters and/or numbers. If a value of this type is made of numbers only, it will not be a value that can be operated on mathematically. For example, it would be inappropriate to subtract one procedure code from another procedure code even though both values may contain only numbers.
Num	A value made of numbers only, and which can logically be operated on mathematically. Age is an example of this type. One particular field, while not used in mathematical calculations, is defined in the EBM Connect software as such that it accepts only numeric values. (To enter a non-numeric value would cause EBM Connect processing to stop.) Therefore, this field is defined as Num. It is the Case ID field in the optional disease registry input file.
Date	A value which can be interpreted as a date value. Values should always use four-digit years but the format may vary otherwise.
DecNum	A value made of numbers and a decimal point. These values can also logically be operated on mathematically.

Claims Input File

The claims file contains detailed information on services that were billed or performed or otherwise rendered. The claims file includes:

- Medical claims, including medical services, facility services and clinic services
- Pharmacy claims, including billed prescriptions and drugs
- Lab claims, including lab test and results information

Field Name	Type	Length	Required or Optional
Family ID	AlphaNum	1-30	Always required for all claims
Patient ID	AlphaNum	0-2	Optional
Amount Paid	DecNum	1-11	Required for all claims
Amount Allowed	DecNum	0-11	Required for all claims
Procedure Code	AlphaNum	5	Required if there is no revenue code, NDC, or LOINC® code
Procedure Code Modifier	AlphaNum	2	Required for medical claims
Revenue Code	AlphaNum	0 or 4	Optional (applies to medical claims when used)
First Diagnosis Code	AlphaNum	5 or 6	Required for medical claims
Second Diagnosis Code	AlphaNum	0, 5 or 6	Optional (applies to medical claims when used)
Third Diagnosis Code	AlphaNum	0, 5 or 6	Optional (applies to medical claims when used)
Fourth Diagnosis Code	AlphaNum	0, 5 or 6	Optional (applies to medical claims when used)
First Date of Service	Date	8 or 10	Always required for all claims
Last Date of Service	Date	8 or 10	Required for all claims

Paid Date	Date	0, 8 or 10	Optional
Type of Service	AlphaNum	0-10	Optional
Provider ID	AlphaNum	1-20	Required for medical claims
Ordering Provider ID	AlphaNum	0-20	Optional
Provider Type	AlphaNum	1-10	Required for medical claims
Provider Specialty Type	AlphaNum	1-10	Required for medical claims
Provider Key	AlphaNum	1-20	Required for medical claims
NDC	AlphaNum	0 or 11	Required for Rx claims
Day Supply	Num	0-4	Required for Rx claims
Quantity Count	DecNum	0-10	Required for Rx claims
LOINC®	AlphaNum	0 or 7	Required for lab claims
Lab Test Result	AlphaNum	0-18	Required for lab claims
Place of Service	AlphaNum	1-10	Required for medical claims
Unique Record ID	AlphaNum	1-28	Required for all claims
Claim Number	AlphaNum	1-28	Required for all claims
Bill Type Frequency Indicator	Num	0 or 1	Optional
Patient Status	AlphaNum	1-2	Required for facility claims (involving admission or confinement).
Facility Type	AlphaNum	0-2	Optional
Bed Type	AlphaNum	0-1	Optional
First ICD-9 Procedure Code	AlphaNum	0, 4 or 5	Optional, but will impact results (applies to medical claims when used)
Second ICD-9 Procedure Code	AlphaNum	0, 4 or 5	Optional (see above)
Third ICD-9 Procedure Code	AlphaNum	0, 4 or 5	Optional (see above)
Fourth ICD-9 Procedure Code	AlphaNum	0, 4 or 5	Optional (see above)

Field Descriptions

Instructions for each input field are as follows:

Family ID

This field identifies all members of a family and can be any alphanumeric string.

Note: Remember that each Family ID (and Patient ID) listed in your claims input file must have a corresponding record in your member input data file and your member term data file.

Patient ID

This field identifies individual members within a family. If present, this field must be sorted within Family ID, so that all records for an individual are contiguous. If the Family ID uniquely identifies an individual, this field need not be specified (that is, its length in the dictionary will be zero).

Amount Paid

The amount paid for this claim line.

Amount Allowed

The allowed amount for this claim line. This amount typically represents the total amount reimbursed including deductibles, copays, coinsurance, insurer paid, etc.

Procedure Code

The procedure code must be one of:

- A procedure code specified in the Physician's Current Procedure Terminology, 4th Edition (CPT®-4 codes) defined by the American Medical Association, for the years 1997 and later.
- A procedure code specified by the HCFA Common Procedure Coding System, Level II code (HCPCS) defined by the Centers for Medicare and Medicaid Services (CMS) for the years 1999 and later.
- A National Uniform Billing Committee (NUBC) revenue code.

Note: When the NUBC code is entered in the Procedure Code field, it should be padded to the right with blanks because the Procedure Code field always occupies five characters.

- If your organization defines its own procedure codes and/or revenue codes, they must be mapped to standard procedure and revenue codes.

Procedure Code Modifier

Use this field to specify any procedure code modifier that accompanies the procedure code.

Revenue Code

The revenue code, if one was entered for the claim. Supported values in this field are NUBC revenue codes. If your organization defines its own revenue codes, they must be mapped to standard revenue codes.

The revenue code is an optional field, allowing you to define your input records so that you can place an NUBC revenue code and a CPT/HCPCS procedure code on a single record line.

For claim records that do not have a revenue code, leave the revenue code field blank.

First Diagnosis Code Through Fourth Diagnosis Code

Up to four diagnoses may be entered for each claim, but only the first is required.

If your organization defines its own diagnosis codes, they must be mapped to standard ICD-9 diagnosis codes.

First Date of Service and Last Date of Service

The first date and last date represented by the claim line. If you choose to use a date format with separators (such as YYYY/MM/DD or YYYY-MM-DD), the separators are ignored on input, so you can use any character as a separator. Valid formats include: YYYYMMDD, MMDDYYYY, DDMMYYYY, YYYY/MM/DD, MM/DD/ YYYY, and DD/MM/YYYY, where the separator can be any character.

Paid Date

This field is optional. This is the date the claim was paid. The format of the paid date must be the same as that used in the First and Last Date of Service.

Type of Service

This is an optional code which represents the type of service (TOS) performed for this claim. If no specific value is available for this field, it should be filled with blanks. If this field is not used (i.e., its length is set to zero in the configuration), non-pharmaceutical claims with no procedure code will be treated as ancillary records.

Provider ID

Provider identification number from the claim. Used to identify who performed the service.

Ordering Provider ID

This is an optional field. This is the identification number of the provider who ordered the service.

Provider Type

This code represents the type of provider who performed the service. Examples of provider types would be chiropractor, nurse practitioner, medical doctor, counselor, pharmacy, hospital or treatment facility.

Provider Specialty Type

This code represents the specialty of the provider who performed the service.

Provider Key

Unique number or code for a physician who has multiple provider IDs or specialties. A single health care provider may have multiple provider IDs in your input claims data, but this person or entity should have only one provider key.

NDC

If this is a pharmaceutical claim, this field should contain the drug's NDC code. For non-pharmaceutical claim records, the NDC field should be filled with blanks.

Day Supply

For pharmacy records, the number of days a filled prescription is expected to last. If you have no pharmacy records, the Days Supply is an optional field.

Quantity Count

Quantity of drug dispensed in metric units:

Each - solid oral dosage forms (tablet, capsule), powder filled (dry) vials, packets, patches, units of use packages, suppositories, bars.

Milliliter - (cc) liquid oral dosage forms, liquid filled vials, ampules, reconstituted oral products.

Grams - ointments, bulk powders (not IV).
If you have no pharmacy records, the Quantity Count is an optional field.

LOINC®

Logical Observation Identifiers Names and Codes (LOINC®). The LOINC Code is a universal identifier for a lab test for a particular analyte. The LOINC User's Guide and database can be found at www.regenstrief.org.

Enter a LOINC code if the record is a lab record. For non-lab records, leave the LOINC field blank.

If you have no lab records in your claims input, the LOINC code is optional.

Notes:

(1) When using lab results data that has not been mapped to a LOINC code, map the comparable vendor-specific test number provided by the laboratory vendor(s) to one of these default codes.

(2) This is a retired code which may be present on historical data, or which some laboratories may be continuing to use. Input record data with this code is included in the definition of this test.

Lab Test Result

If the record is a lab record, use this field to enter the result value of lab test. For non-lab records, this field should be blank.

If you have no lab records in your claims input, the Lab Test Result is optional.

Place of Service

Place of service (POS). You must map your internal POS codes to Centers for Medicare and Medicaid Services (CMS) standard POS codes.

Unique Record ID

This required field contains a unique identifier representing the service line from the claim. For medical services, this ID typically represents the service row from the CMS 1500 or CMS 1450/UB92 claim form.

Claim Number

A unique identifier used to link service lines for a specific claim submitted for a member. If a claim has multiple service lines, each service will have a unique record ID and the same claim number to represent the claim.

Bill Type Frequency Indicator

This optional field is used to indicate the disposition of confinements.

Patient Status

This field is required for facility claims. The contents will be the patient status indicator field from the NUBC UB-92 form. This field can denote whether the member died during a confinement.

Facility Type

This field is optional. Space for it is provided to allow for additional post grouping analysis. The contents will typically be the UB-92 facility type data value. This would allow records to be easily selected for diagnosis related grouping (DRG) based on the facility type.

Bed Type

If a value is present, this field acts as an additional discriminator in determining whether a Facility record extends an existing confinement or starts a new confinement.

First ICD-9 Procedure Code Through Fourth ICD-9 Procedure Code

If your claims have ICD-9 procedure codes, include them in your claims input file.

If a decimal point will appear in this field in your claim records, the length should be given as 5. If the decimal separator is not used, the length is 4. If these fields are unused, the length is zero.

Member Input File

The member data file contains the most current information about the member.

Field Descriptions

Field	Type	Length	Required or Optional
Family ID	AlphaNum	1-30	Required
Patient ID	AlphaNum	0-2	Optional
Patient Gender	AlphaNum	1	Required
Date of Birth	Date	8 or 10	Required
Member Beginning Eligibility Date	Date	0, 8 or 10	Optional
Member Ending Eligibility Date	Date	0, 8 or 10	Optional

Instructions for each input field are as follows:

Family ID

This field identifies all members of a family and can be any alphanumeric string. The records in the member file must be sorted first on the Family ID (together with Patient ID, if available) so that all records for an individual are contiguous.

Patient ID

This field identifies individual members within a family. If present, this field must be sorted within Family ID, so that all records for an individual are contiguous. If the Family ID uniquely identifies an individual, this field need not be specified (that is, its length in the dictionary will be zero).

Patient Gender and Date of Birth

The member's gender (F or M) and date of birth. If you choose to use a date format with separators (such as YYYY/MM/DD or YYYY-MM-DD), the separators are ignored on input, so you can use any character as a separator. Valid date formats include: YYYYMMDD, MMDDYYYY, DDMMYYYY, YYYY/MM/DD, MM/DD/YYYY, and DD/MM/YYYY, where the separator can be any character.

Member Beginning Eligibility Date and Ending Eligibility Date

The first date on which the member became covered under the plan and the last date of the member's coverage. If you choose to use a date format with separators (such as YYYY/MM/DD or YYYY-MM-DD), the separators are ignored on input, so you can use any character as a separator. Valid formats include: YYYYMMDD, MMDDYYYY, DDMMYYYY, YYYY/MM/DD, MM/DD/YYYY, and DD/MM/YYYY, where the separator can be any character.

Member Term Input File

The member term data file contains member coverage and term activity information. Plan coverage begin and end dates are required in order to correctly calculate the other fields in the member term file. There may be more than one record per individual member.

Field Descriptions

Field	Type	Length	Required or Optional
Family ID	AlphaNum	1-30	Required
Patient ID	AlphaNum	0-2	Optional
Member Beginning Eligibility Date	Date	8 or 10	Required
Member Ending Eligibility Date	Date	8 or 10	Required
Primary Care Provider	AlphaNum	20	Required
Provider Specialty Type	AlphaNum	1-10	Required
Medical Flag	AlphaNum	1	Required
Pharmacy Flag	AlphaNum	1	Required

Instructions for each input field are as follows:

Family ID

This field identifies all members of a family and can be any alphanumeric string. The records in the member term file must be sorted first on the Family ID (together with Patient ID, if available) so that all records for an individual are contiguous.

Patient ID

This field identifies individual members within a family.

Member Beginning Eligibility Date and Member Ending Eligibility Date

The first date on which the member became covered under the plan and the last date of the member's coverage. If you choose to use a date format with separators (such as YYYY/MM/DD or YYYY-MM-DD), the separators are ignored on input, so you can use any character as a separator. Valid formats include: YYYYMMDD, MMDDYYYY, DDMMYYYY, YYYY/MM/DD, MM/DD/YYYY, and DD/MM/YYYY, where the separator can be any character.

Primary Care Provider

The provider key for the member's primary care physician. A single health care physician may have multiple provider IDs in your input claims data, but this person should have only one provider key.

Provider Specialty Type

This code represents the specialty of the primary care physician.

Medical Flag

Identifies whether the member has medical coverage (Y or N).

Pharmacy Flag

Identifies whether the member has pharmacy coverage (Y or N).

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2007 Benchmarks

									Result Flag Distribution				
Report Case ID	Case Description	Summary Rule ID	Rule Cat. Desc.	Rule Type	Rule Description	Compliance Rate	Non-Compliance Rate	Yes Rate	Y	N	Q	NRX	NA (total)
0	Global Rules	9179002	Global Encounter	CP-C	Patient(s) currently taking a COX-2 inhibitor without a documented indication.	46	54	54	54	46	0	0	0
0	Global Rules	9180015	Global Drug Monitoring	S-M	Adult patient(s) taking warfarin that had three or more prothrombin time tests in last 6 reported months.	69	31	69	69	31	0	0	0
0	Global Rules	9180016	Global Drug Monitoring	S-M	Adult patient(s) taking a statin-containing medication nicotinic acid or fibric acid derivative that had an annual serum ALT	81	19	81	81	19	0	0	0
100311	Diabetes	9000023	Patient Safety	S-M	Patient(s) taking a biguanide (e.g. metformin) ACE-inhibitor or angiotensin II receptor antagonist that had a serum	80	20	80	50	12	0	0	38
100311	Diabetes	9000027	Care Pattern	CP-I	Patient(s) that had an office visit for diabetes care in last 6 reported months.	78	22	78	78	22	0	0	0
100311	Diabetes	9000043	Disease Management	R-2	Adult(s) that had a serum creatinine in last 12 reported months.	76	24	76	75	24	0	0	2
100404	Asthma	9000007	Care Pattern	CP-I	Patient(s) that had an office visit for asthma care in last 6 reported months.	58	42	58	58	42	0	0	0
102500	HTN	9000011	Care Pattern	CP-I	Patient(s) that had an annual physician	82	18	82	82	18	0	0	0
102500	HTN	9000012	Care Pattern	CP-I	Patient(s) that had a serum creatinine in last 12 reported months.	68	32	68	68	32	0	0	0
103300	COPD	9000003	Care Pattern	CP-I	Patient(s) that had an annual physician	81	19	81	81	19	0	0	0
103300	COPD	9000006	Disease Management	R-1	Patient(s) with frequent short-acting inhaled bronchodilator use who are also using a long-acting inhaled bronchodilator.	64	36	64	2	1	0	0	97
103500	Hyperlipidemia	9000006	Care Pattern	CP-I	Patient(s) with a LDL cholesterol test in last 12 reported months.	80	20	80	80	20	0	0	0
103500	Hyperlipidemia	9000012	Care Pattern	CP-I	Patient(s) with a HDL cholesterol test in last 12 reported months.	80	20	80	80	20	0	0	0
103500	Hyperlipidemia	9000014	Care Pattern	CP-I	Patient(s) with a triglyceride test in last 12 reported months.	80	20	80	80	20	0	0	0
104000	Migraine	9000006	Care Pattern	CP-I	Adult patient(s) with frequent use of acute medications that also received prophylactic medications.	62	38	62	2	1	0	0	96
104200	CKD	9000027	Disease Management	R-1	Patient(s) with proteinuria currently taking an ACE-inhibitor or angiotensin II receptor	69	31	69	19	9	0	0	72
104700	Prostate CA - I	9000006	Care Pattern	CP-I	Patient(s) that had a prostate specific antigen test in last 12 reported months.	80	20	80	80	20	0	0	0

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2007 Benchmarks

									Result Flag Distribution				
Report Case ID	Case Description	Summary Rule ID	Rule Cat. Desc.	Rule Type	Rule Description	Compliance Rate	Non-Compliance Rate	Yes Rate	Y	N	Q	NRX	NA (total)
104700	Prostate CA -	9000007	Care Pattern	CP-I	Patient(s) that had an annual physician	87	13	87	87	13	0	0	0
201200	Sinusitis Acute	9000002	Care Pattern	CP-I	Patient(s) treated with an antibiotic for acute sinusitis that received a first line	62	38	62	31	19	0	0	50
201500	Pregnancy Management	9000001	Care Pattern	CP-N	Pregnant women that had HIV testing.	66	34	66	66	34	0	0	0
201500	Pregnancy Management	9000003	Care Pattern	CP-I	Pregnant women less than 25 years of age that had chlamydia screening.	67	33	67	8	4	0	0	88
201500	Pregnancy Management	9000005	Care Pattern	CP-N	Pregnant women that had ABO and Rh blood type testing.	82	18	82	82	18	0	0	0
201500	Pregnancy Management	9000006	Care Pattern	CP-I	Pregnant women that had syphilis screening.	84	16	84	84	16	0	0	0
201500	Pregnancy Management	9000007	Care Pattern	CP-I	Pregnant women that had urine culture.	59	41	59	59	41	0	0	0
201500	Pregnancy Management	9000008	Care Pattern	CP-I	Pregnant women that had HBsAg testing.	83	17	83	83	17	0	0	0
201500	Pregnancy Management	9000009	Disease Management	R-2	Pregnant women that received Group B Streptococcus testing.	71	29	71	69	28	0	0	4

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Overview of Facility Event Methodology

A Facility Event is a unique collection of services performed for a particular member by one to many providers, representing an admission, emergency department visit, or outpatient surgery. There are four types of Facility Events:

1. Confinement/Admission (FIP)
2. Outpatient Surgery (FOS)
3. Emergency Room (FER)
4. Other (OTH)

Each Facility Event Type has a unique set of rules to identify claim detail records as trigger records. A trigger record is a record that meets the criteria for the basis of an event. A trigger record, in turn, serves as a sort of "magnet" for associating additional related claim detail records.

Claim data elements required to trigger specific event types and service date time period:

1. Confinement/Admission (FIP)
   - A confinement record (created by the Confinement/Admission methodology described below) with a revenue code representing inpatient accommodation room and board (revenue code of 0100-0219) triggers a Confinement/Admission (FIP) Event Type.
     - Confinement/Admission Methodology:
       - Confinement/Admission definition: Confinement/Admission represents a member's uninterrupted stay for a defined period of time in a hospital, skilled nursing facility, or other approved health care facility or program, followed by discharge from that same facility or program.
       - A confinement is assigned to a set of one or more medical claim records on which there is:
         1. The same unique patient ID
         2. The same unique provider ID
         3. An inpatient accommodation room and board revenue code of 0100-0219
         4. No gap in dates of service
       - The beginning and the ending dates of the confinement period are identified using the **From** and **Through** dates from the facility claim.
       - In order for multiple inpatient accommodation room and board records to be regarded as one confinement, the following condition must be met:
         - The difference between the **Through date** of the first accommodation room and board revenue code record and the **From date** of the next accommodation room and board revenue code record must be less than or equal to 1 day. The beginning of the confinement represents the earliest **From date** and the ending of the confinement represents the latest **Through date**. If a record has overlapping dates, the record will be included in the confinement for which the record's **From date** and **Through date** are between the dates of the confinement inclusive. If the difference between the **Through date** and the **From date** is > 1, then the next record represents a new confinement.

   - The timeframe for claims included in a Confinement/Admission Facility Event is one day prior to the Confinement admission date through the discharge date of the confinement.

2. Outpatient Surgery (FOS)
   - A claim record based on a CMS Place of Service code representing an outpatient acute care facility or office/clinic, and a Procedure Code Service Type of Surgical Procedures or a Revenue Code representing operating room or ambulatory surgery services triggers an Outpatient Surgery Event.
     - A POS code of 05, 06, 07, 08, 22, or 24 AND a procedure code (CPT or HCPCS) with a Service_Type_High_Code='SURG' (there are 5808 CPT codes and 341 HCPCS codes that fall into this category—see attached list of codes)

FOS_procedure codes.xls

     - **OR** a POS code of 05, 06, 07, 08, 11, 22, 24, 25, 26, 49, 50 or 72 AND a Revenue Code of 0360, 0361, 0369, 0490, 0499.

   - The service date timeframe for claims included in an OP Surgery event is up to +/- 2 days of the service date on the trigger record.
   - To create an Outpatient Surgery event, the claim detail must *not* meet the coding conditions listed for an Admission/Confinement (FIP) event.

3. Emergency Room (FER)
   - An Emergency Room Event is identified on a claim record in which the CPT code or revenue code stands for emergency room or emergency evaluation and management, and the provider specialty represents General Hospital, Psychiatric Hospital or Emergency Care Center.
     - A revenue code of 0450-0452 or 0459
     - **OR** CPT procedure code 99281-99285, 99288 or HCPCS procedure code G0380-G0384 AND a Detail Level Provider Category of General Hospital, Psychiatric Hospital or Emergency Care Center.
     - **OR** CPT procedure code 99281-99285, or 99288 or HCPCS procedure code G0380-G0384 AND [there is at least one other claim detail record which will be associated with the trigger record with a revenue code that is *not* 0456 (Urgent Care) AND a Detail Level Provider Category of General Hospital, Psychiatric Hospital or Emergency Care Center].
   - The service date timeframe for claims included in an Emergency Room (FER) event are up to +/- 2 days of the service date on the trigger record.
   - To create an Emergency Room event, the claim detail must *not* meet any of the coding conditions for an Admission/Confinement (FIP) or Outpatient Surgery (FOS) event.

4. Other (OTH)
   - All service records that are not assigned FIP, FOS, or FER are assigned OTH

Result/EBM/Compliance Flags

Result Flags and Values

The Result flag provides a status for each clinical rule in any condition for which the member has qualified. The five possible Result flag values are described below.

- Yes means the answer to the clinical question is yes.
- No means the answer to the clinical question is no.
- NA (not applicable) means the rule is not applicable to the member. A rule may not be applicable for a number of reasons. The third character of the NA flag contains a number which further defines the reason (see below).
- NRX (no RX benefit) indicates that the member did not have any pharmacy benefit during the reporting period. The NRX value is only applicable to certain rules that are pharmacy dependent.
- Q (questionable) indicates that the member has no claim record for the particular test or treatment during the time window of the rule, but the member did not have coverage throughout the time window or there was insufficient time range of input claims data, and hence, there may be data incompleteness. The Q value is applied only for certain rules and certain setup configurations.

Result Flag Value	Description
NA1	Member did not meet the age or gender criteria.
NA2	Member was not currently taking the medication in question or had not taken it for the required duration.
NA3	Member was taking the medication, but a possession ratio could not be computed [less than two prescriptions during the rule time window].
NA4	Member did not meet the rule specific criteria [e.g., co-morbidity, complexity (diagnosis and medication), intervention not warranted].
NA5	No lab result record or insufficient information.
NA6	Member admitted to a hospital or long term care facility which might cause data incompleteness.
NA7	Member who did not receive treatment or medication had a contraindication or other justification.

EBM Flag

The EBM flag provides a counter for rules in which the result is NOT consistent with evidence based guidelines. There are two possible results for the EBM flag counter:

- 1 when a result is ***not*** consistent with the EBM Connect software's evidence based guidelines, and
- 0 when any of the following are true:
  - the member's care is consistent with the software's evidence based guidelines
  - the rule is not relevant to the member
  - there is insufficient information in the database to analyze the rule
  - the rule is informational only, and does not reflect appropriateness of care

Compliance Flag

The Compliance flag provides a counter for cases in which the result ***is*** consistent with evidence based guidelines. There are two possible results for the Compliance flag counter:

- 1 when a result ***is*** consistent with the EBM Connect software's evidence based guidelines, and
- 0 when any of the following are true:
  - the member's care is not consistent with the software's evidence based guidelines
  - the rule is not relevant to the member
  - there is insufficient information in the database to analyze the rule
  - the rule is informational only, and does not reflect appropriateness of care