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

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August 2008

	(for NQF staff use) NQF Review #: EC-005-08 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): 11/21/08*
2	*Title of Measure:* *CHRONIC KIDNEY DISEASE: MONITORING PHOSPHORUS*
3	**Brief description of measure [1]:** To ensure that members with chronic kidney disease but who are not on dialysis are monitored for blood phosphorus levels at least once annually.
4 (2a)	**Numerator Statement:** Members with phosphorus level blood tests during the 0-365 days after the index date (inclusive of the index date) Note: Index date is defined as the first instance of Denominator Criteria A or B **Time Window:** The 0-365 days after the index date. **Numerator Details** (Definitions, codes with description): Numerator Logic: A [A] Phosphorus level blood test during the 0-365 days after the index date. CPT-4 code(s): 80069, 84100, 84105
5 (2a)	**Denominator Statement:** Members with chronic kidney disease without dialysis during the year prior to the measurement year. **Time Window:** Year prior to the measurement year. **Denominator Details** (Definitions, codes with description): Denominator Logic: CE and (A or B) [CE] Members continuously enrolled during the 0-365 days after the index date [A] Members with at least 1 inpatient encounter with chronic renal disease (Stage ≥ 3) during the year prior to the measurement year.

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

	Chronic Renal Disease: ICD-9 diagnosis code(s):250.4x, 274.1x, 403.01, 403.11, 403.90, 403.91, 404.02, 404.03, 404.10, 404.11, 404.12, 404.13, 404.90, 404.91, 404.92, 404.93, 581.xx, 582.xx, 583.xx, 585.3-585.5, 586, 587, 753.0, 753.10, 753.11, 753.12, 753.13, 753.14, 753.15, 753.16, 753.17, 753.19 DRG code(s): 316 AND Inpatient setting: CPT-4 code(s): 99221-99223, 99231-99233, 99238-99239, 99251-99255, 99261-99263, 99291-99300, 99356-99357, 99431-99440 UB revenue code(s): 0100-0114, 0117-0124, 0127-0134, 0137-0144, 0147-0154, 0157-0159, 0160-0169, 0220-0229, 0190-0219, 0720-0729, 0800-0809, 0987 [B] Members with at least 2 face-to-face outpatient encounters with chronic renal disease (Stage ≥3) during the 2 year period starting 2 years prior to the beginning of the measurement year. Chronic Renal Disease: ICD-9 diagnosis code(s):250.4x, 274.1x, 403.01, 403.11, 403.90, 403.91, 404.02, 404.03, 404.10, 404.11, 404.12, 404.13, 404.90, 404.91, 404.92, 404.93, 581.xx, 582.xx, 583.xx, 585.3-585.5, 586, 587, 753.0, 753.10, 753.11, 753.12, 753.13, 753.14, 753.15, 753.16, 753.17, 753.19 DRG code(s): 316 AND Outpatient setting: CPT-4 code(s): 99201-99205, 99211-99215, 99241-99245, 99271-99275, 99301-99313, 99315-99316, 99318-99337, 99341-99350, 99354-99355, 99381-99387, 99391-99397, 99401-99429, 99450, 99455-99456 UB revenue code(s): 0500-0529, 0570-0599, 0770-0779, 0820-0859, 0882, 0982-0983 Hospital observation: CPT-4 code(s): 99217-99220, 99234-99236
6 (2a, 2d)	**Denominator Exclusions:** Members who on dialysis or in hospice in the 0-365 days after the index date. Note: Index date is defined as the first instance of Denominator Criteria A or B **Denominator Exclusion Details** (Definitions, codes with description): Members who on dialysis or in hospice in the 0-365 days after the index date. Deminator Logic: A or B [A] Members on dialysis or who utilized dialysis in the 0-365 days after the index date. ICD-9 diagnosis code(s): V45.1, V56.0, V56.1, V56.2, V56.31, V56.32, V56.8, E879.1 ICD-9 surgical procedure code(s): 38.95, 39.27, 39.42, 39.93, 39.95, 54.98 DRG code: 317 CPT code(s): 0505F, 0507F, 3066F, 3082F-3084F, 4051F-4055F, 36800, 36810, 36815, 36818-36821, 36825, 36831-36833, 90920, 90921, 90924, 90925, 90935, 90937, 90939, 90940, 90945, 90947, 90989, 90993, 90997, 90999, 99512, G0257, G0314-G0319, G0322, G0323, G0326, G0327, G9013, G9014 UB revenue code(s): 0800-0809, 0820-0859, 0880, 0881, 0882, 0889 HCPCS: A4653, A4671-A4918, E1500-E1699 [B] Members who were in hospice care during the 0-365 days after the index date. ICD-9 diagnosis code(s): V66.7 CPT-4 code(s): 99376*, 99377, 99378 HCPCS code(s): G0065*, G0182, G0337, Q5001-Q5009, S0271, S9126, T2042-T2046 UB revenue code(s): 0115, 0125, 0135, 0145, 0155, 0235, 0650-0652, 0655-0659 UB type of bill code(s): 81x, 82x

	Place of service code(s): 34
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)**:** **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: Member demographics and member enrollment data ☐ Paper Medical Record ☐ Standardized clinical instrument, Name: ☐ Standardized patient survey, Name: ☐ Standardized clinician survey, Name: ☐ Other, Describe: Instrument/survey attached ☐ **OR** Web page URL:
12 (2a)	**Sampling** *If measure is based on a sample, provide instructions and guidance on sample size.* **Minimum sample size:** **Instructions:**
13 (2a)	**Type of Measure:** Process ► If "Other", please describe: ► If part of a composite or paired with another measure, please identify composite or paired measure Measure is intended to be paired with two other HBI-generated measures, both of which have been submitted along with this one: - CHRONIC KIDNEY DISEASE: MONITORING PHOSPHORUS - CHRONIC KIDNEY DISEASE: MONITORING CALCIUM
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 ☐ Integrated delivery system ☒ Health plan ☐ Community/Population

	department/unit, group practice) ☐ Other (*Please describe*): ☐ Facility (e.g., hospital, nursing home)
15 (2a)	**Applicable Care Settings** *Check all that apply* ☐ Can be used in all healthcare settings ☐ Hospice ☒ Ambulatory Care (office/clinic) ☐ Hospital ☐ Behavioral Healthcare ☐ Long term acute care hospital ☐ Community Healthcare ☐ Nursing home/ Skilled Nursing Facility (SNF) ☐ Dialysis Facility ☐ Prescription Drug Plan ☐ Emergency Department ☐ Rehabilitation Facility ☐ EMS emergency medical services ☐ Substance Use Treatment Program/Center ☒ Health Plan ☐ Other (*Please describe*): ☐ Home Health
	IMPORTANCE TO MEASURE AND REPORT
	Note: This is a threshold criterion. If a measure is not judged to be sufficiently important to measure and report, it will not be evaluated against the remaining criteria.
16 (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)*: N/A
17 (1a)	**If not related to NPP goal, identify high impact aspect of healthcare** leading cause of morbidity/mortality **Summary of Evidence:** Approximately 26 million people in the US have chronic kidney disease (CKD),[1] and nearly 400,000 require dialysis.[2] CKD patients account for 27.6% of general Medicare expenditure.[3, 4] In addition, an estimated 80,000 people are diagnosed annually with CKD.[5,6] Nearly all members with CKD would present with osteodystrophy, a disorder of bone remodeling, without appropriate monitoring and treatment for inbalances in calcium phosphate hemeostatis.[7,8] **Citations[2] for Evidence:** 1. Facts about Chronic Kidney Disease. 2008 [cited 2008 November 11, 2008]; Available from: http://www.kidney.org/kidneyDisease/. 2. NKF K/DOQI Clinical Practice Guidelines for Chronic Kidney Disease: Evaluation, Classification, and Stratification. Guideline 13. Factors associated with loss of kidney function in chronic kidney disease. , National kidney foundation. http://www.kidney.org/professionals/doqi/kdoqi/p7_risk_g13.htm. Accessed June 1, 2004. 3. (2007) U.S. Renal Data System, USRDS 2007 Annual Data Report: Atlas of Chronic Kidney Disease and End-Stage Renal Disease in the United States, National Institutes of Health, National Institute of Diabetes and Digestive and Kidney Diseases, Bethesda, MD, 2007. http://www.usrds.org/2007/pdf/00a_precis_07.pdf. Volume, 4. USRDS 2004 Annual Data Report. The National Institues of Health, National Institute of Diabetes and Digestive and Kidney Diseases, in US Renal Data System. 2004: Bethesda, MD. 5. Jones, et al., Serum creatinine levels in the US population: third National Health and Nutrition Examination Survey. Am J Kidney Dis, 1998. 32(6): p. 992-9. 6. Young and E. W., An improved understanding of the causes of end-stage renal disease. Semin Nephrol, 1997. 17(3): p. 170-5. 7. Hamdy NA, Kanis JA, Beneton MN, Brown CB, Juttmann JR, Jordans JG, Josse S, Meyrier A, Lins RL, Fairey IT: Effect of alfacalcidol on natural course of renal bone disease in mild to moderate renal failure. BMJ 310:358-363, 1995 8. Goodman WG, Coburn JW: The use of 1,25-dihydroxyvitamin D3 in early renal failure. Annu Rev Med 43:227-237, 1992
18	**Opportunity for Improvement** *Provide evidence that demonstrates considerable variation, or overall poor performance, across providers.*

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

(1b) **Summary of Evidence:**
A 2007 study examining adherence within a managed care setting to the Kidney Disease Outcomes Quality Initiative (K/DOQI) guidelines found that the percentages of patients with Stage 3, Stage 4 and Stage 5 CKD who received AT LEAST annual phosphorus testing were 26.7% 53.3% and 67.5%, respectively.[1] Additionally, rates of phosphorus testing are low regardless of provider specialty, but especially low among those seen by primary care providers. A 2008 study conducted on a privately insured population found that overall rates of phosphorus testing were low, but were significantly lower among those patients seen by internists, as compared to nephrologists (1.9%, vs 38.2%, P=0.0001).[2]

Citations for Evidence:
1. Hoy, et al., Adherence to K/DOQI practice guidelines for bone metabolism and disease. Am J Manag Care, 2007. 13(11): p. 620-5.
2. Philipneri, et al., Delivery patterns of recommended chronic kidney disease care in clinical practice: administrative claims-based analysis and systematic literature review. Clin Exp Nephrol, 2008. 12(1): p. 41-52.

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

(1b) **Summary of Evidence:** Little research has been done regarding receipt of KDoQI guidelines among disadvantaged groups. However, it has been reported that CKD patients who are female, non diabetic and being treated by an internist (rather than a nephrologist) may be less likely to receive appropriate monitoring.[1,2]

Citations for evidence:
1. Philipneri, et al., Delivery patterns of recommended chronic kidney disease care in clinical practice: administrative claims-based analysis and systematic literature review. Clin Exp Nephrol, 2008. 12(1): p. 41-52.
2. Kausz, et al., General medical care among patients with chronic kidney disease: opportunities for improving outcomes. J Am Soc Nephrol, 2005. 16(10): p. 3092-101.

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

(1c)

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

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

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

Type of Evidence *Check all that apply*

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

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

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

Monitoring of phosphorus levels may lead to timely implementation of appropriate treatments that may help patients avoid the severe consequences of calcium, phosphate, vitamin D, and parathyroid abnormalities in renal disease.

- Patients with CKD have a tendency to retain phosphorus, due to decreased renal filtration, and have diminished renal hydroxylation of 25-hydroxyvitamin D to calcitriol (1, 25-dihydroxyvitamin D), resulting in hyperphosphatemia, calcitriol deficiency and ultimately hypocalcaemia.[9-11]
- In response to hypocalcaemia and hyperphosphatemia, the parathyroid gland appropriately increases its secretion of parathyroid hormone (PTH) to augment the release of calcium phosphate from the bone and decrease the reabsorption of phosphorus within the renal tubules.[1-3]
- However, secondary hyperparathyroidism may result if the deficiencies in calcitriol levels and phosphorus excretion are not corrected in patients with renal failure.[1-5]
- Secondary hyperparathyroidism causes increased bone turnover and renal osteodystrophy.[1-5]
- In addition, abnormal calcium and phosphorus metabolism, which result from abnormal kidney filtration and hyperparathyroidism, lead to elevated calcium phosphorus product, which is associated with increased mortality in dialysis patients.[6]
- Elevated calcium phosphorus product increases the likelihood that calcium phosphate will precipitate in arteries, joints, soft tissues, and the viscera. [7, 8]
- In dermal arterioles, calcium phosphate precipitate leads to tissue ischemia; in coronary arteries, it leads to increased incidence of coronary artery disease.[2, 8]
- Monitoring phosphorus levels leads to more timely treatment for complications arising from phosphorous level abnormalities.[9]
- Hyperphosphatemia in renal disease can be treated via dietary restrictions, phosphate binders, and/or dialysis.[9]

Citations for Evidence:

1. Delmez, et al., Hyperphosphatemia: its consequences and treatment in patients with chronic renal disease. Am J Kidney Dis, 1992. 19(4): p. 303-17.
2. Mucsi, et al., Control of serum phosphate in patients with renal failure--new approaches. Nephrol Dial Transplant, 1998. 13(10): p. 2457-60.
3. Billa, et al., High prevalence of hyperparathyroidism among peritoneal dialysis patients: a review of 176 patients. Perit Dial Int, 2000. 20(3): p. 315-21.
4. Delmez, J.A. and E. Slatopolsky, Hyperphosphatemia: its consequences and treatment in patients with chronic renal disease. Am J Kidney Dis, 1992. 19(4): p. 303-17.
5. Levin, et al., Prevalence of abnormal serum vitamin D, PTH, calcium, and phosphorus in patients with chronic kidney disease: results of the study to evaluate early kidney disease. Kidney Int, 2007. 71(1): p. 31-8.
6. Cofan, et al., Uremic tumoral calcinosis in patients receiving longterm hemodialysis therapy. J Rheumatol, 1999. 26(2): p. 379-85.
7. Goldsmith, et al., Vascular calcification: a stiff challenge for the nephrologist: does preventing bone disease cause arterial disease? Kidney Int, 2004. 66(4): p. 1315-33.
8. Milliner, et al., Soft tissue calcification in pediatric patients with end-stage renal disease. Kidney Int, 1990. 38(5): p. 931-6.
9. Kidney Disease Outcome Quality Initiative: Clinical Practice Guidelines for Bone Metabolism and Disease in Chronic Kidney Disease 2003, National Kidney Foundation.

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

21 (1c) **Clinical Practice Guideline** *Cite the guideline reference; quote the specific guideline recommendation related to the measure and the guideline author's assessment of the strength of the evidence; and summarize the rationale for using this guideline over others.*

Guideline Citation:
Kidney Disease Outcome Quality Initiative: Clinical Practice Guidelines for Bone Metabolism and Disease in Chronic Kidney Disease 2003, National Kidney Foundation.

Specific guideline recommendation:
The National Kidney Foundation recommends that patients with CKD initiate measurement of serum levels of calcium, phosphate, and parathyroid hormone once their glomerular filtration rate (GFR) drops below 60mL/min/1.73m2. Frequency of testing should be based on the stage of CKD. See Table below:

CKD Stage	GFR Range (mL/min/1.73m2)	Measurement of PTH	Measurement of Ca/Phos
3	30-59	Every 12 months	Every 12 Months
4	15-29	Every 3 months	Every 3 months
5	<15 or dialysis	Every 3 months	Every month

Guideline author's rating of strength of evidence (*If different from USPSTF, also describe it and how it relates to USPSTF)*: N/A - Guideline Rated as "Evidence"

Rationale for using this guideline over others: The National Kidney Foundation is a highly regarded organization whose guidelines are well respected within the medical community. Additionally, this guideline will compliment the existing NQF guideline (0255), which recommends monthly serum phosphorous testing for patients undergoing either peritoneal or hemodialysis.

22 (1c) **Controversy/Contradictory Evidence** *Summarize any areas of controversy, contradictory evidence, or contradictory guidelines and provide citations.*
Summary: There is little controversy about the utility of measuring serum phosphorus concentrations among CKD patients. However, it may be that those utilizing this rate may wish to stratify assessment of compliance by specialty. Based on the literature, compliance among nephrologists is quite high, while room for improvement exists among primary care providers.[1] Because 26 million people in the United States have CKD,[2] not all patients with CKD can be supervised by nephrologists. Therefore, it is important that administration of phosphorus testing be assessed for primary care providers as well.

Citations:
1. Philipneri, et al., Delivery patterns of recommended chronic kidney disease care in clinical practice: administrative claims-based analysis and systematic literature review. Clin Exp Nephrol, 2008. 12(1): p. 41-52.
2. Facts about Chronic Kidney Disease. 2008 [cited 2008 November 11, 2008]; Available from: http://www.kidney.org/kidneyDisease/.

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:** This measure is important because it assists in the identification and appropriate treatment abnormal calcium and phosphorus homeostatis at an early stage of chronic kidney disease before the harmful effects take place (i.e., hyperparathyroidism, osteodystrophy, calciphylaxis).

SCIENTIFIC ACCEPTABILITY OF MEASURE PROPERTIES

Note: Testing and results should be summarized in this form. However, additional detail and reports may be submitted as supplemental information or provided as a web page URL. If a measure has not been tested, it is only potentially eligible for time-limited endorsement.

24 **Supplemental Testing Information:** attached ☐ **OR** Web page URL:

25 **Reliability Testing**

(2b) **Data/sample:**

	Data from commercial health plans were used to generate rates of serum calcium testing, according to the algorithm specified above. Included health plans range from 500,000 members to 1.7 million members. **Analytic Method:** Testing rates for Plans A and B were compared for stability over the course of two years. **Testing Results:** PLAN 2006 Rate 2007 Rate 2006 Denominator 2007 Denominator Plan A 19.9% 30.1% 5,632 5,973 Plan B 40.9% 43.4% 5,146 6,013
26 (2c)	**Validity Testing** **Data/sample:** 2007 Data from eight geographically diverse commercial health plans were used to generate rates of serum phosphorus testing, according to the algorithm specified above. The size of the included health plans range from 180,000 members, to 2.4 million members. **Analytic Method:** PART 1: The algorithm for serum phosphorus testing was run on all eight plans. Denominator size and rate were calculated for each plan. PART 2: Rates generated using this algorithm were compared to annual rates for serum phosphorus testing found in the literature. **Testing Results:** PART 1: PLAN RATE DENOMINATOR Plan A 37.6% 3,549 Plan B 38.0% 3,131 Plan C 19.9% 5,632 Plan D 37.3% 429 Plan E 40.9% 5,146 Plan F 26.3% 4,087 Plan G 24.8% 258 Plan H 43.3% 739 Average Rate: 33.5% Standard Deviation: 8.6% Average Denominator: 2,871 PART 2: Several U.S. based studies have examined prevalence of serum phosphorus testing among patients with CKD, and have generally reported rates of testing in commercial settings between 30 and 70%.[1] However, these studies vary greatly by provider specialty (primary care vs nephrology), data source (chart review vs administrative claims), observation period, and kidney function of study cohort members. Testing rates vary significantly by specialty. Rates are lowest among non-nephrology providers 30% among primary care providers (data based on chart review, respectively.[2] Rates of 50% and 53% among samples consisting of 1/2 Primary care and 1/2 nephrology(rates based on administrative claims and chart review respectively) have been reported, [3,4] Rates reported for nephrologists are 69% and 70% (for members seen only by nephrologists, based on administrative claims [5,6] However, a recent administrative claims-based study by Philipneri et al. reported rates of serum phosphorus testing as low as 1.9% among patients seen by primary care providers, and 38.2% among those seen by Nephrologists.[1] However, this study was limited to patients with Stage 3 CKD, (in which lower testing rates would be expected) whereas the majority of other studies have include CKD up to stage 5.

1. Philipneri, et al., Delivery patterns of recommended chronic kidney disease care in clinical practice: administrative claims-based analysis and systematic literature review. Clin Exp Nephrol, 2008. 12(1): p. 41-52.
2. Israni, et al., Management of chronic kidney disease in an academic primary care clinic. Am J Nephrol, 2003. 23(1): p. 47-54.
3. Kausz, et al., Management of patients with chronic renal insufficiency in the Northeastern United States. J Am Soc Nephrol, 2001. 12(7): p. 1501-7.
4. Lafayette, et al., Examining chronic kidney disease management in a single center. Clin Nephrol, 2004. 62(4): p. 260-6.
5. Murray, et al., Delivery of predialysis care in an academic referral nephrology practice. Ren Fail, 2005. 27(5): p. 571-80.
6. Kausz, et al., General medical care among patients with chronic kidney disease: opportunities for improving outcomes. J Am Soc Nephrol, 2005. 16(10): p. 3092-101.

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):
DIALYSIS:
We excluded dialysis patients because administrative data poorly capture routine laboratory testing done on dialyses patients.

HOSPICE:
Members who are on hospice are excluded because the focus of care would be shifted away from avoiding long-term complications to palliative care.

Citations for Evidence:
Expert panel opinion (unable to reliably capture basic labaratory tests sent on dialysis patients via administrative data because they are done in the dialyses center and may not be separately billed).

During testing, we found that laboratory data is incompletely captured for dialysis patients.

Data/sample:

Analytic Method:

Testing Results:

28 (2e)

Risk Adjustment Testing *Summarize the testing used to determine the need (or no need) for risk adjustment and the statistical performance of the risk adjustment method.*
Data/sample: N/A

Analytic Method:

Testing Results:

►**If outcome or resource use measure not risk adjusted, provide rationale:**

29 (2g)

Testing comparability of results when more than 1 data method is specified (*e.g., administrative claims or chart abstraction*)
Data/sample: N/A

Analytic Method:

Results:

30

Provide Measure Results from Testing or Current Use Results from testing

(2f)	**Data/sample:** See boxes 25 and 26 **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:** N/A ►If disparities have been reported/identified, but measure is not specified to detect disparities, provide rationale:
	USABILITY
32 (3)	*Current Use Testing completed If in use, how widely used (select one)* ► *If "other," please describe:* ☐ *Used in a public reporting initiative, name of initiative:* *Sample report attached* ☐ *OR Web page URL:*
33 (3a)	**Testing of Interpretability** (*Testing that demonstrates the results are understood by the potential users for public reporting and quality improvement*) **Data/sample:** Data are reported as rates and denominator size. It was felt that no interpretability testing was needed. Based upon numerous interactions with health plans, performance based on denominator and rate are easily interpreted, as long as the populations captured in numerator, denominator and denominator exclusion are made explicit. **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):** Measure 0255: Measurement of Serum Phosphorus Concentration: Percentage of all adult (>= 18 years of age) peritoneal dialysis and hemodialysis patients included in the sample for analysis with serum phosphorus measured at least once within month. **Are the measure specifications harmonized with existing NQF-endorsed™ measures?** Partially harmonized ►If not fully harmonized, provide rationale: The proposed measure is complimentary to measure 0255. It collects data less frequenly on phosporous levels for patients with CKD, but who are not on dialysis in an effort to prevent complications of altered calcium and phosphorous metabolism commonly seen in CKD. **Describe the distinctive, improved, or additive value this measure provides to existing NQF-endorsed measures:** Unlike measure 0255, our measure looks for serum phosphorus concentration measurement among patients who are NOT on dialysis. Excluding members with dialysis a) allows for the assessment of the receipt of quality of care among a discrete population of patients suffering from CKD and 2) allows for more precise measurement using administrative claims data; laboratory tests received in a dialysis setting are not uniformly recorded. The inclusion of members who were receiving dialysis would artificially lower the true rate of serum phosphorus testing.

	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:* ICD-9 diagnosis codes, ICD-9 Proc Codes, CPT-4 codes, HCPCS codes, UB revenue codes, NDC code, DRG codes
37 (4c)	*Do the specified exclusions require additional data sources beyond what is required for the other specifications?* No ►*If yes, provide justification:*
38 (4d)	*Identify susceptibility to inaccuracies, errors, or unintended consequences of the measure:* This is a administrative claims-based quality indicator with certain potential biases, including coding variation between providers and missing data. Nevertheless, administrative claims data is the widely available and has been used to effectively examine and document patterns of health care utilization, detect opportunities to improve quality of care, estimate incidence of disease, and even assess outcomes of pharmaceutical, radiological, and surgical procedures. *Describe how could these potential problems be audited:* HBI has developed an online tool (currently in use by several health plans), which allows physicians the opportunity to supplement their quality scores through self-report via a secured web site. Via this website, physicians are able to identify specific patients with whom they had an office visit during the measurement period and who reportedly did not have the indicated quality care. Physicians can then review their charts to verify whether in fact the quality care was performed. The physician can then manually enter corrections to the patient record via the website, indicating that the quality care was done. This data is subject to clinical review prior to acceptance. The hybrid quality score (via administrative claims and self report) can be updated on a quarterly basis. *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 LIMITATIONS: Data collected from administrative claims data provides an efficient means of assessing delivery of recommended care for large numbers of patients. One specific limitation of this measure is that laboratory tests administered within a hospital setting are not generally captured. However, testing of serum phosphorus levels on an annual basis represents a minimum guideline: per KDOQI guidelines, patients with Stage 4 kidney failure would ideally have serum phosphorus levels performed every 3 months. The rates of serum phosphorus testing we saw across various plans are in line with those reported in the literature. TIMING OF DATA COLLECTION: Because the measure assesses annual performance, data collection would ideally be done on an annual basis. BURDEN ASSOCIATED WITH DATA COLLECTION: Administrative claims data are automatically collected by commercial health plans.
	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: N/A*
41	**Measure Intellectual Property Agreement Owner Point of Contact** **First Name:** Zak **MI:** **Last Name:** Ramadan-Jradi **Credentials (MD, MPH, etc.):** MD, MPH **Organization:** Health Benchmarks® **Street Address:** 21650 Oxnard St., Suite 550 **City:** Woodland Hills **State:** CA **ZIP:** 91367-7806 **Email:** zramadan@us.imshealth.com **Telephone:** 818-676-2820 ext:
42	**Measure Submission Point of Contact** **If different than IP Owner Contact** **First Name:** Karen **MI:** **Last Name:** Hsu **Credentials (MD, MPH, etc.):** MPH, MBA **Organization:** Health Benchmarks® **Street Address:** 21650 Oxnard St., Suite 550 **City:** Woodland Hills **State:** CA **ZIP:** 91367-7806 **Email:** khsu@us.imshealth.com **Telephone:** 541-550-7983 ext:
43	**Measure Developer Point of Contact** **If different than IP Owner Contact** **First Name:** Judy **MI:** Y **Last Name:** Chen **Credentials (MD, MPH, etc.):** MD, MSHS **Organization:** Health Benchmarks® **Street Address:** 21650 Oxnard St., Suite 550 **City:** Woodland Hills **State:** CA **ZIP:** 91367-7806 **Email:** judy.chen@us.imshealth.com **Telephone:** 818-676-2883 ext:
44	**Measure Steward Point of Contact** **If different than IP Owner Contact** *Identifies the organization that will take responsibility for updating the measure and assuring it is consistent with the scientific evidence and current coding schema; the steward of the measure may be different than the developer.* **First Name:** **MI:** **Last Name:** **Credentials (MD, MPH, etc.):** **Organization:** **Street Address:** **City:** **State:** **ZIP:** **Email:** **Telephone:** ext
	ADDITIONAL INFORMATION
45	**Workgroup/Expert Panel involved in measure development** No workgroup or panel used ►If workgroup used, describe the members' role in measure development: ►Provide a list of workgroup/panel members' names and organizations:
46	*Measure Developer/Steward Updates and Ongoing Maintenance* *Year the measure was first released: 2008* *Month and Year of most recent revision: January, 2008* *What is the frequency for review/update of this measure? Annually* *When is the next scheduled review/update for this measure? January, 2009*
47	**Copyright statement/disclaimers:** © 2008 Health Benchmarks® Confidential and Proprietary All Rights Reserved
48	**Additional Information:** N/A
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*)**:** 11/21/08

PATIENT & FAMILY ENGAGEMENT

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

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

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

POPULATION HEALTH

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

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

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

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

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

SAFETY

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

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

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

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

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

PALLIATIVE CARE

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

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

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

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

CARE COORDINATION

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

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

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

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

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

PATIENT-FOCUSED CARE

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

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

OVERUSE

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

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

THE NATIONAL QUALITY FORUM

MEASURE SUBMISSION FORM VERSION 3.0

August 2008

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

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

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

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

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

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

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

THE NATIONAL QUALITY FORUM

MEASURE SUBMISSION FORM VERSION 3.0
August 2008

	(for NQF staff use) NQF Review #: *EC-006-08* 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): 11/21/08*
2	*Title of Measure:* *CHRONIC KIDNEY DISEASE: MONITORING PARATHYROID HORMONE (PTH)*
3	**Brief description of measure [1]:** To ensure that members with chronic kidney disease, who are not undergoing dialysis, are monitored for PTH levels at least once annually.
4 (2a)	**Numerator Statement:** Members with PTH level tests during the 0-365 days after the index date. Note: Index date is defined as the date of denominator criteria A or B. **Time Window:** The 0-365 days after the index date. **Numerator Details** (Definitions, codes with description): Numerator Logic: A [A] PTH level test during the 0-365 days after the index date. CPT-4 code(s): 75893, 83970
5 (2a)	**Denominator Statement:** Members with chronic kidney disease during the year prior to the measurement year. **Time Window:** The year prior to the measurement year. **Denominator Details** (Definitions, codes with description): Denominator Logic: CE and (A or B) [CE] Members continuously enrolled during the 0-365 days after the index date [A] Members with at least 1 inpatient encounter with chronic renal disease (stage ≥ 3) during the year prior to the measurement year. Chronic Renal Disease:

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

	ICD-9 diagnosis code(s):250.4x, 274.1x, 403.01, 403.11, 403.90, 403.91, 404.02, 404.03, 404.10, 404.11, 404.12, 404.13, 404.90, 404.91, 404.92, 404.93, 581.xx, 582.xx, 583.xx, 585.3-585.5, 586, 587, 753.0, 753.10, 753.11, 753.12, 753.13, 753.14, 753.15, 753.16, 753.17, 753.19 DRG code(s): 316 AND Inpatient setting: CPT-4 code(s): 99221-99223, 99231-99233, 99238-99239, 99251-99255, 99261-99263, 99291-99300, 99356-99357, 99431-99440 UB revenue code(s): 0100-0114, 0117-0124, 0127-0134, 0137-0144, 0147-0154, 0157-0159, 0160-0169, 0220-0229, 0190-0219, 0720-0729, 0800-0809, 0987 [B] Members with at least 2 face-to-face outpatient encounters with chronic renal disease (stage ≥ 3) during the 2 year period starting 2 years prior to the beginning of the measurement year. Chronic Renal Disease: ICD-9 diagnosis code(s):250.4x, 274.1x, 403.01, 403.11, 403.90, 403.91, 404.02, 404.03, 404.10, 404.11, 404.12, 404.13, 404.90, 404.91, 404.92, 404.93, 581.xx, 582.xx, 583.xx, 585.3-585.5, 586, 587, 753.0, 753.10, 753.11, 753.12, 753.13, 753.14, 753.15, 753.16, 753.17, 753.19 DRG code(s): 316 AND Outpatient setting: CPT-4 code(s): 99201-99205, 99211-99215, 99241-99245, 99271-99275, 99301-99313, 99315-99316, 99318-99337, 99341-99350, 99354-99355, 99381-99387, 99391-99397, 99401-99429, 99450, 99455-99456 UB revenue code(s): 0500-0529, 0570-0599, 0770-0779, 0820-0859, 0882, 0982-0983 Hospital observation: CPT-4 code(s): 99217-99220, 99234-99236
6 (2a, 2d)	**Denominator Exclusions:** Patients with parathyroidectomy any time prior to the index date or patients who utilize dialysis 0-365 days after the index date, or patients who have been in hospice care 0-365 days after the index date. Note: Index date is defined as the date of denominator criteria A or B. **Denominator Exclusion Details** (Definitions, codes with description): Denominator Exclusion Logic: A or B or C [A] Parathyroidectomy any time prior to the index date. CPT code(s): 60500, 60502, 60505 [B] Members who were in hospice care during the 0-365 days after the index date. ICD-9 diagnosis code(s): V66.7 CPT-4 code(s): 99376*, 99377, 99378 HCPCS code(s): G0065*, G0182, G0337, Q5001-Q5009, S0271, S9126, T2042-T2046 UB revenue code(s): 0115, 0125, 0135, 0145, 0155, 0235, 0650-0652, 0655-0659 UB type of bill code(s): 81x, 82x Place of service code(s): 34 [C] Members on dialysis or members who utilized dialysis services during the 0-365 days after the index date. ICD-9 surgical procedure code(s): 38.95, 39.27, 39.42, 39.93, 39.95, 54.98 ICD-9 diagnosis code(s): V45.1, V56.0, V56.1, V56.2, V56.31, V56.32, V56.8, E879.1 DRG code(s): 317 CPT code(s): 0505F, 0507F, 3066F, 3082F-3084F, 4051F-4055F, 36800, 36810, 36815, 36818-36821, 36825, 36831-36833, 90920, 90921, 90924, 90925, 90935, 90937, 90939, 90940, 90945, 90947, 90989, 90993, 90997, 90999, 99512, G0257, G0314-G0319, G0322, G0323, G0326, G0327, G9013, G9014 UB revenue code(s): 0800-0809, 0820-0859, 0880, 0881, 0882, 0889 HCPCS: A4653, A4671-A4918, E1500-E1699

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)**:** **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: Member demographics and member enrollment data ☐ Paper Medical Record ☐ Standardized clinical instrument, Name: ☐ Standardized patient survey, Name: ☐ Standardized clinician survey, Name: ☐ Other, Describe: Instrument/survey attached ☐ **OR** Web page URL:
12 (2a)	**Sampling** *If measure is based on a sample, provide instructions and guidance on sample size.* **Minimum sample size:** **Instructions:** N/A
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	**Applicable Care Settings** *Check all that apply*

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

IMPORTANCE TO MEASURE AND REPORT

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

16 (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)*: n/a

17 (1a) **If not related to NPP goal, identify high impact aspect of healthcare**
leading cause of morbidity/mortality

Summary of Evidence:
Approximately 26 million people in the US have chronic kidney disease (CKD),[1] and nearly 400,000 require dialysis.[2] CKD patients account for 27.6% of general Medicare expenditure.[3, 4] In addition, an estimated 80,000 people are diagnosed annually with CKD.[5,6]

Nearly all members with CKD would present with osteodystrophy, a disorder of bone remodeling, without appropriate monitoring and treatment for inbalances in calcium phosphate hemeostatis.[7,8]

Citations[2] for Evidence:
1. Facts about Chronic Kidney Disease. 2008 [cited 2008 November 11, 2008]; Available from: http://www.kidney.org/kidneyDisease/.
2. NKF K/DOQI Clinical Practice Guidelines for Chronic Kidney Disease: Evaluation, Classification, and Stratification. Guideline 13. Factors associated with loss of kidney function in chronic kidney disease. , National kidney foundation. http://www.kidney.org/professionals/doqi/kdoqi/p7_risk_g13.htm. Accessed June 1, 2004.
3. (2007) U.S. Renal Data System, USRDS 2007 Annual Data Report: Atlas of Chronic Kidney Disease and End-Stage Renal Disease in the United States, National Institutes of Health, National Institute of Diabetes and Digestive and Kidney Diseases, Bethesda, MD, 2007. http://www.usrds.org/2007/pdf/00a_precis_07.pdf. Volume,
4. USRDS 2004 Annual Data Report. The National Institues of Health, National Institute of Diabetes and Digestive and Kidney Diseases, in US Renal Data System. 2004: Bethesda, MD.
5. Jones, et al., Serum creatinine levels in the US population: third National Health and Nutrition Examination Survey. Am J Kidney Dis, 1998. 32(6): p. 992-9.
6. Young and E. W., An improved understanding of the causes of end-stage renal disease. Semin Nephrol, 1997. 17(3): p. 170-5.
7. Hamdy NA, Kanis JA, Beneton MN, Brown CB, Juttmann JR, Jordans JG, Josse S, Meyrier A, Lins RL, Fairey IT: Effect of alfacalcidol on natural course of renal bone disease in mild to moderate renal failure. BMJ 310:358-363, 1995
8. Goodman WG, Coburn JW: The use of 1,25-dihydroxyvitamin D3 in early renal failure. Annu Rev Med 43:227-237, 1992

18 (1b) **Opportunity for Improvement** *Provide evidence that demonstrates considerable variation, or overall poor performance, across providers.*
Summary of Evidence:
A 2007 study examining adherence within a managed care setting to the Kidney Disease Outcomes Quality Initiative (K/DOQI) guidelines found that the percentages of patients with Stage 3, Stage 4 and Stage 5 CKD who received AT LEAST annual PTH testing were 7.3% ,17.5%, and 38.2%, respectively.[1]

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

	Additionally, rates of phosphorus testing are low regardless of provider specialty, but especially low among those seen by primary care providers. A 2008 study conducted on a privately insured population found that overall rates of PTH testing were low, but were significantly lower among those patients seen by internists, as compared to nephrologists (0.6%, vs 7.1%, P=0.0002).[2] **Citations for Evidence:** 1. Hoy, et al., Adherence to K/DOQI practice guidelines for bone metabolism and disease. Am J Manag Care, 2007. 13(11): p. 620-5. 2. Philipneri, et al., Delivery patterns of recommended chronic kidney disease care in clinical practice: administrative claims-based analysis and systematic literature review. Clin Exp Nephrol, 2008. 12(1): p. 41-52.
19 (1b)	**Disparities** *Provide evidence that demonstrates disparity in care/outcomes related to the measure focus among populations.* **Summary of Evidence:** Little research has been done regarding receipt of KDoQI guidelines among disadvantaged groups. However, it has been reported that CKD patients who are female, non diabetic and being treated by an internist (rather than a nephrologist) may be less likely to receive appropriate monitoring.[1,2] **Citations for evidence:** 1. Philipneri, et al., Delivery patterns of recommended chronic kidney disease care in clinical practice: administrative claims-based analysis and systematic literature review. Clin Exp Nephrol, 2008. 12(1): p. 41-52. 2. Kausz, et al., General medical care among patients with chronic kidney disease: opportunities for improving outcomes. J Am Soc Nephrol, 2005. 16(10): p. 3092-101.
20 (1c)	**If measuring an Outcome** Describe relevance to the national health goal/priority, condition, population, and/or care being addressed: N/A **If not measuring an outcome, provide evidence supporting this measure topic and grade the strength of the evidence** *Summarize the evidence (including citations to source) supporting the focus of the measure as follows:* • Intermediate outcome – evidence that the measured intermediate outcome (e.g., blood pressure, Hba1c) leads to improved health/avoidance of harm or cost/benefit. • Process – evidence that the measured clinical or administrative process leads to improved health/avoidance of harm and if the measure focus is on one step in a multi-step care process, it measures the step that has the greatest effect on improving the specified desired outcome(s). • Structure – evidence that the measured structure supports the consistent delivery of effective processes or access that lead to improved health/avoidance of harm or cost/benefit. • Patient experience – evidence that an association exists between the measure of patient experience of health care and the outcomes, values and preferences of individuals/ the public. • Access – evidence that an association exists between access to a health service and the outcomes of, or experience with, care. • Efficiency– demonstration of an association between the measured resource use and level of performance with respect to one or more of the other five IOM aims of quality. **Type of Evidence** *Check all that apply* ☒ Evidence-based guideline ☐ Quantitative research studies ☐ Meta-analysis ☐ Qualitative research studies ☐ Systematic synthesis of research ☐ Other (*Please describe*): **Overall Grade for Strength of the Evidence**[3] (*Use the USPSTF system, or if different, also describe how it relates to the USPSTF system)*: B

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

	Summary of Evidence (*provide guideline information below*)**:** • Patients with CKD have a tendency to retain phosphorus due to decreased renal filtration, and additionally have diminished renal hydroxylation of 25-hydroxyvitamin-D to calcitriol (1, 25-dihydroxyvitamin D), resulting in hyperphosphatemia, calcitriol deficiency, and ultimately hypocalcemia.[1-3] • In response to hypocalcemia and hyperphosphatemia, the parathyroid gland appropriately increases secretion of parathyroid hormone (PTH) to augment the release of calcium phosphate from bone and to decrease the reabsorption of phosphorus within the renal tubules.[1-3] • However, secondary hyperparathyroidism may result if deficiencies in calcitriol levels and phosphorus excretion are not corrected in patients with renal failure.[1-5] • Secondary hyperparathyroidism causes increased bone turnover and renal osteodystrophy. [1-5] • In addition, the abnormal calcium and phosphorus metabolism which results from altered kidney filtration and hyperparathyroidism, leads to elevated calcium phosphorus product, which is associated with increased mortality in dialysis patients.[6] • Elevated calcium phosphorus product also increases the likelihood that calcium phosphate will precipitate in arteries, joints, soft tissues, and the viscera. [7,9] • Hyperparathyroidism can be treated by calcitriol supplementation or parathyroidectomy.[9] **Citations for Evidence:** 1. Delmez, et al., Hyperphosphatemia: its consequences and treatment in patients with chronic renal disease. Am J Kidney Dis, 1992. 19(4): p. 303-17. 2. Mucsi, et al., Control of serum phosphate in patients with renal failure--new approaches. Nephrol Dial Transplant, 1998. 13(10): p. 2457-60. 3. Billa, et al., High prevalence of hyperparathyroidism among peritoneal dialysis patients: a review of 176 patients. Perit Dial Int, 2000. 20(3): p. 315-21. 4. Delmez, J.A. and E. Slatopolsky, Hyperphosphatemia: its consequences and treatment in patients with chronic renal disease. Am J Kidney Dis, 1992. 19(4): p. 303-17. 5. Levin, et al., Prevalence of abnormal serum vitamin D, PTH, calcium, and phosphorus in patients with chronic kidney disease: results of the study to evaluate early kidney disease. Kidney Int, 2007. 71(1): p. 31-8. 6. Cofan, et al., Uremic tumoral calcinosis in patients receiving longterm hemodialysis therapy. J Rheumatol, 1999. 26(2): p. 379-85. 7. Goldsmith, et al., Vascular calcification: a stiff challenge for the nephrologist: does preventing bone disease cause arterial disease? Kidney Int, 2004. 66(4): p. 1315-33. 8. Milliner, et al., Soft tissue calcification in pediatric patients with end-stage renal disease. Kidney Int, 1990. 38(5): p. 931-6. 9. Kidney Disease Outcome Quality Initiative: Clinical Practice Guidelines for Bone Metabolism and Disease in Chronic Kidney Disease 2003, National Kidney Foundation.
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:** Kidney Disease Outcome Quality Initiative: Clinical Practice Guidelines for Bone Metabolism and Disease in Chronic Kidney Disease 2003, National Kidney Foundation. **Specific guideline recommendation:** The National Kidney Foundation recommends that patients with CKD initiate measurement of serum levels of calcium, phosphate, and parathyroid hormone once their glomerular filtration rate (GFR) drops below 60mL/min/1.73m2. Frequency of testing should be based on the stage of CKD. See Table below: CKD Stage GFR Range (mL/min/1.73m2) Measurement of PTH Measurement of Ca/Phos

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.

	3	30-59	Every 12 months	Every 12 Months
	4	15-29	Every 3 months	Every 3 months
	5	<15 or dialysis	Every 3 months	Every month

Guideline author's rating of strength of evidence (*If different from USPSTF, also describe it and how it relates to USPSTF)*: N/A - Guideline Rated as "Evidence"

Rationale for using this guideline over others: The National Kidney Foundation is a highly regarded organization whose guidelines are well respected within the medical community.

22 (1c) **Controversy/Contradictory Evidence** *Summarize any areas of controversy, contradictory evidence, or contradictory guidelines and provide citations.*

Summary: There is little controversy about the utility of measuring PTH concentrations among CKD patients. However, it may be that those utilizing this rate may wish to stratify assessment of compliance by specialty. Based on the literature, compliance among nephrologists is quite high, while room for improvement exists among primary care providers.[1] Because 26 million people in the United States have CKD,[2] not all patients with CKD can be supervised by nephrologists. Therefore, it is important that administration of PTH testing be assessed for primary care providers as well.

Citations:

1. Philipneri, et al., Delivery patterns of recommended chronic kidney disease care in clinical practice: administrative claims-based analysis and systematic literature review. Clin Exp Nephrol, 2008. 12(1): p. 41-52.
2. Facts about Chronic Kidney Disease. 2008 [cited 2008 November 11, 2008]; Available from: http://www.kidney.org/kidneyDisease/.

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:**

This measure is important because it assists in the identification of elevated levels of PTH at a stage of chronic kidney disease before the harmful effects of calcium and phosphorus hemostasis, and may even prevent the development of severe hyperparathyroidism which would require parathyroidectomy.

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:

Data from commercial health plans were used to generate rates of PTH testing, according to the algorithm specified above. Included health plans range from 500,000 members to 1.7 million members.

Analytic Method:

Testing rates for Plans A and B were compared for stability over the course of 2006 and 2007. .

Testing Results:

PLAN	2006 Rate	2007 Rate	2006 Denominator	2007 Denominator
Plan A	4.6%	10.7%	5623	5974
Plan B	16.3%	22.5%	429	449

26 (2c) **Validity Testing**

Data/sample: 2007 Data from eight geographically diverse commercial health plans were used to generate rates of PTH testing, according to the algorithm specified above. The size of the included health plans range from 180,000 members, to 2.4 million members.

Analytic Method:
PART 1: The algorithm for serum phosphorus testing was run on all eight plans. Denominator size and rate were calculated for each plan.
PART 2: Rates generated using this algorithm were compared to annual rates for PTH testing found in the literature.

Testing Results:
PART 1:

PLAN	RATE	DENOMINATOR
Plan A	13.4%	3,542
Plan B	14.0%	3,125
Plan C	4.6%	5,623
Plan D	16.3%	429
Plan E	9.2%	5,149
Plan F	9.6%	4,083
Plan G	4.7%	258
Plan H	19.9%	738

Average Rate: 11.5% Standard Deviation:5.4%
Average Denominator: 2868

PART 2:

Several U.S.-based studies have examined prevalence of PTH testing among patients with CKD, and have generally reported rates of testing in commercial settings between 3 and 15%.[1]

Rates based on chart review have reported rates of 5%, 9% and 15% [2-4], while those based on administrative claims have reported PTH testing rates of 3.4% and 12%.[5,6]

However, a recent administrative claims-based study by Philipneri et al. reported rates of PTH testing as low as 0.6% among patients seen by primary care providers and 7.1% among those seen by nephrologists.[1] However, this study was limited to patients with stage 3 CKD, in which lower testing rates would be expected) whereas the majority of other studies have included CKD up to stage 5.

1. Philipneri, et al., Delivery patterns of recommended chronic kidney disease care in clinical practice: administrative claims-based analysis and systematic literature review. Clin Exp Nephrol, 2008. 12(1): p. 41-52.
2. Lafayette, et al., Examining chronic kidney disease management in a single center. Clin Nephrol, 2004. 62(4): p. 260-6.
3. Murray, et al., Delivery of predialysis care in an academic referral nephrology practice. Ren Fail, 2005. 27(5): p. 571-80.
4. Kausz, et al., Management of patients with chronic renal insufficiency in the Northeastern United States. J Am Soc Nephrol, 2001. 12(7): p. 1501-7.
5. Winkelmayer, et al., Identification of individuals with CKD from Medicare claims data: a validation study. Am J Kidney Dis, 2005. 46(2): p. 225-32.
6. Kausz, et al., General medical care among patients with chronic kidney disease: opportunities for improving outcomes. J Am Soc Nephrol, 2005. 16(10): p. 3092-101.

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):
PARATHYROIDECTOMY: We excluded patients with parathyroidectomy any time in history because although it is important for patients with parathyroidectomy to have at least one PTH within 1 year post op to check for possible etopic parathyorid adenomas, if their PTH low they do not require yearly monitoring.

DIALYSIS:

	We excluded dialysis patients because administrative data poorly capture routine laboratory testing done on dialyses patients. HOSPICE: Members who are on hospice are excluded because the focus of care would be shifted away from avoiding long-term complications to palliative care. **Citations for Evidence:** Expert panel opinion (unable to reliably capture basic lab sent on dialysis patients via administrative data because it is done in the dialyses center and and may not separately billed). During testing we found that laboratory data is incompletely captured for dialysis patients. **Data/sample:** **Analytic Method:** **Testing Results:**
28 (2e)	**Risk Adjustment Testing** *Summarize the testing used to determine the need (or no need) for risk adjustment and the statistical performance of the risk adjustment method.* **Data/sample:** N/A **Analytic Method:** **Testing Results:** ►**If outcome or resource use measure not risk adjusted, provide rationale:**
29 (2g)	**Testing comparability of results when more than 1 data method is specified** (*e.g., administrative claims or chart abstraction*) **Data/sample:** N/A **Analytic Method:** **Results:**
30 (2f)	**Provide Measure Results from Testing or Current Use** Results from testing **Data/sample:** See boxes 25 and 26 **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:** N/A ►If disparities have been reported/identified, but measure is not specified to detect disparities, provide rationale:
	USABILITY
32 (3)	*Current Use Testing completed* *If in use, how widely used (select one)* ► *If "other," please describe:* ☐ *Used in a public reporting initiative, name of initiative:* *Sample report attached* ☐ *OR Web page URL:*
33	**Testing of Interpretability** (*Testing that demonstrates the results are understood by the potential users for public reporting and quality improvement*)

(3a)	**Data/sample:** Data are reported as rates and denominator size. It was felt that no interpretability testing was needed. Based upon numerous interactions with health plans, performance based on denominator and rate are easily interpreted, as long as the populations captured in numerator, denominator and denominator exclusion are made explicit. **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: N/A **Describe the distinctive, improved, or additive value this measure provides to existing NQF-endorsed measures:**
	FEASIBILITY
35 (4a)	*How are the required data elements generated? Check all that apply* ☐ *Data elements are generated concurrent with and as a byproduct of care processes during care delivery (e.g., blood pressure or other assessment recorded by personnel conducting the assessment)* ☐ *Data elements are generated from a patient survey (e.g., CAHPS)* ☒ *Data elements are generated through coding performed by someone other than the person who obtained the original information (e.g., DRG or ICD-9 coding on claims)* ☐ *Other, Please describe:*
36 (4b)	*Electronic Sources All data elements* ►*If all data elements are not in electronic sources, specify the near-term path to electronic collection by most providers:* ►*Specify the data elements for the electronic health record: ICD-9 diagnosis codes, ICD-9 Proc Codes, CPT-4 codes, HCPCS codes, UB revenue codes, NDC code, DRG codes*
37 (4c)	*Do the specified exclusions require additional data sources beyond what is required for the other specifications? No* ►*If yes, provide justification:*
38 (4d)	*Identify susceptibility to inaccuracies, errors, or unintended consequences of the measure: This is a administrative claims-based quality indicator with certain potential biases, including coding variation between providers and missing data. Nevertheless, administrative claims data is the widely available and has been used to effectively examine and document patterns of health care utilization, detect opportunities to improve quality of care, estimate incidence of disease, and even assess outcomes of pharmaceutical, radiological, and surgical procedures.* *Describe how could these potential problems be audited: HBI has developed an online tool (currently in use by several health plans), which allows physicians the opportunity to supplement their quality scores through self-report via a secured web site. Via this website, physicians are able to identify specific patients with whom they had an office visit during the measurement period and who reportedly did not have the indicated quality care. Physicians can then review their charts to verify whether in fact the quality care was performed. The physician can then manually enter corrections to the patient record via*

	the website, indicating that the quality care was done. This data is subject to clinical review prior to acceptance. The hybrid quality score (via administrative claims and self report) can be updated on a quarterly basis. *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 LIMITATIONS: Data collected from administrative claims data provides an efficient means of assessing delivery of recommended care for large numbers of patients. One specific limitation of this measure is that laboratory tests administered within a hospital setting are not generally captured. However, testing of PTHs levels on an annual basis represents a minimum guideline: per KDOQI guidelines, patients with Stage 4 kidney failure would ideally have PTH levels performed every 3 months. The rates of PTH testing we saw across various plans are in line with those reported in the literature.* *TIMING OF DATA COLLECTION: Because the measure assesses annual performance, data collection would ideally be done on an annual basis.* *BURDEN ASSOCIATED WITH DATA COLLECTION: Administrative claims data are automatically collected by commercial health plans.*
	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:* N/A
41	**Measure Intellectual Property Agreement Owner Point of Contact** **First Name:** Zak **MI:** **Last Name:** Ramadan-Jradi **Credentials (MD, MPH, etc.):** MD, MPH **Organization:** Health Benchmarks® **Street Address:** 21650 Oxnard St., Suite 550 **City:** Woodland Hills **State:** CA **ZIP:** 91367-7806 **Email:** zramadan@us.imshealth.com **Telephone:** 818-676-2820 ext:
42	**Measure Submission Point of Contact** **If different than IP Owner Contact** **First Name:** Karen **MI:** **Last Name:** Hsu **Credentials (MD, MPH, etc.):** MPH, MBA **Organization:** Health Benchmarks® **Street Address:** 21650 Oxnard St., Suite 550 **City:** Woodland Hills **State:** CA **ZIP:** 91367-7806 **Email:** khsu@us.imshealth.com **Telephone:** 541-550-7983 ext:
43	**Measure Developer Point of Contact** **If different than IP Owner Contact** **First Name:** Judy **MI:** Y **Last Name:** Chen **Credentials (MD, MPH, etc.):** MD, MSHS **Organization:** Health Benchmarks® **Street Address:** 21650 Oxnard St., Suite 550 **City:** Woodland Hills **State:** CA **ZIP:** 91367-7806 **Email:** judy.chen@us.imshealth.com **Telephone:** 818-676-2883 ext:
44	**Measure Steward Point of Contact** **If different than IP Owner Contact** *Identifies the organization that will take responsibility for updating the measure and assuring it is consistent with the scientific evidence and current coding schema; the steward of the measure may be different than the developer.* **First Name:** **MI:** **Last Name:** **Credentials (MD, MPH, etc.):** **Organization:** **Street Address:** **City:** **State:** **ZIP:** **Email:** **Telephone:** ext
	ADDITIONAL INFORMATION
45	**Workgroup/Expert Panel involved in measure development** No workgroup or panel used ►If workgroup used, describe the members' role in measure development: ►Provide a list of workgroup/panel members' names and organizations:

46	*Measure Developer/Steward Updates and Ongoing Maintenance* *Year the measure was first released: 2008* *Month and Year of most recent revision: January, 2008* *What is the frequency for review/update of this measure? Annually* *When is the next scheduled review/update for this measure? January, 2009*
47	**Copyright statement/disclaimers:** © 2008 Health Benchmarks® Confidential and Proprietary All Rights Reserved
48	**Additional Information:** N/A
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*)**:** 11/21/08

PATIENT & FAMILY ENGAGEMENT

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

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

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

POPULATION HEALTH

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

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

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

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

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

SAFETY

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

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

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

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

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

PALLIATIVE CARE

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

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

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

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

CARE COORDINATION

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

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

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

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

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

PATIENT-FOCUSED CARE

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

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

OVERUSE

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

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

THE NATIONAL QUALITY FORUM

MEASURE SUBMISSION FORM VERSION 3.0

August 2008

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

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

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

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

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

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

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

THE NATIONAL QUALITY FORUM

MEASURE SUBMISSION FORM VERSION 3.0
August 2008

	(for NQF staff use) NQF Review #: EC-012-08 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): 11/21/08 original submission; 3/25/09 revised*
2	*Title of Measure:* *CHRONIC KIDNEY DISEASE: MONITORING CALCIUM*
3	**Brief description of measure [1]:** To ensure that members with chronic kidney disease, but who are not on dialysis, are monitored for blood calcium levels at least annually.
4 (2a)	**Numerator Statement:** Members with calcium level blood tests during the 0-365 days after the index date. Note: Index date is defined as the first instance during the year prior to the measurement year of denominator criteria [A] or [B] **Time Window:** The 0-365 days after the index date (inclusive of the index date). **Numerator Details** (Definitions, codes with description): Numberator Logic: A only [A] Calcium level blood test during the 0-365 days after the index date (inclusive of the index date). CPT-4 code(s): 80048, 80050, 80053, 80069, 82310, 82330, 82331
5 (2a)	**Denominator Statement:** Members with chronic kidney disease without dialysis during the year prior to the measurement year. **Time Window:** The year prior to the measurement year. **Denominator Details** (Definitions, codes with description): Denominator Logic: DEMO and CE and (A or B) [DEMO] Members age 19 years or older by the end of the measurement year. [CE] Members continuously enrolled in the 0-365 days after index date. [A] Members with at least 1 inpatient encounter with chronic renal disease (Stage ≥ 3) during the year prior to the measurement year. Chronic Renal Disease: ICD-9 diagnosis code(s):250.4x, 274.1x, 403.01, 403.11, 403.90, 403.91, 404.02, 404.03, 404.10, 404.11, 404.12, 404.13, 404.90, 404.91, 404.92, 404.93, 581.xx, 582.xx, 583.xx, 585.3-585.5, 586, 587, 753.0, 753.10, 753.11, 753.12, 753.13, 753.14, 753.15, 753.16, 753.17, 753.19 DRG code(s): 316 AND

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

	Inpatient setting: CPT-4 code(s): 99221-99223, 99231-99233, 99238-99239, 99251-99255, 99261-99263, 99291-99300, 99356-99357, 99431-99440 UB revenue code(s): 0100-0114, 0117-0124, 0127-0134, 0137-0144, 0147-0154, 0157-0159, 0160-0169, 0220-0229, 0190-0219, 0720-0729, 0800-0809, 0987 [B] Members with at least 2 face-to-face outpatient encounters with chronic renal disease (stage ≥3) during the 2 year period starting 2 years prior to the beginning of the measurement year. Chronic Renal Disease: ICD-9 diagnosis code(s):250.4x, 274.1x, 403.01, 403.11, 403.90, 403.91, 404.02, 404.03, 404.10, 404.11, 404.12, 404.13, 404.90, 404.91, 404.92, 404.93, 581.xx, 582.xx, 583.xx, 585.3-585.5, 586, 587, 753.0, 753.10, 753.11, 753.12, 753.13, 753.14, 753.15, 753.16, 753.17, 753.19 DRG code(s): 316 AND Outpatient setting: CPT-4 code(s): 99201-99205, 99211-99215, 99241-99245, 99271-99275, 99301-99313, 99315-99316, 99318-99337, 99341-99350, 99354-99355, 99381-99387, 99391-99397, 99401-99429, 99450, 99455-99456 UB revenue code(s): 0500-0529, 0570-0599, 0770-0779, 0820-0859, 0882, 0982-0983 Hospital observation: CPT-4 code(s): 99217-99220, 99234-99236
6 (2a, 2d)	**Denominator Exclusions:** Members who are on dialysis or in hospice in the 0-365 day period after the index date. Note: Index date is defined as the first instance during the year prior to the measurement year of denominator criteria [A] or [B] **Denominator Exclusion Details** (Definitions, codes with description): Members who are on dialysis or in hospice in the 0-365 day period after the index date (inclusive of the index date). Denominator Exclusion Logic: A or B [A] Members on dialysis or who utilized dialysis during the 0-365 days after the index date. ICD-9 diagnosis code(s): 38.95, 39.27, 39.42, 39.93, 39.95, 54.98, V45.1, V56.0, V56.1, V56.2, V56.31, V56.32, V56.8, E879.1 ICD-9 surgical proc code(s): 38.95, 39.27, 39.42, 39.93, 39.95, 54.98 DRG code: 317 CPT code(s): 0505F, 0507F, 3066F, 3082F-3084F, 4051F-4055F, 36800, 36810, 36815, 36818-36821, 36825, 36831-36833, 90920, 90921, 90924, 90925, 90935, 90937, 90939, 90940, 90945, 90947, 90989, 90993, 90997, 90999, 99512, G0257, G0314-G0319, G0322, G0323, G0326, G0327, G9013, G9014 UB revenue code(s): 0800-0809, 0820-0859, 0880, 0881, 0882, 0889 HCPCS code (s): A4653, A4671-A4918, E1500-E1699 [B] Members who were in hospice care during the 0-365 days after the index date. ICD-9 diagnosis code(s): V66.7 CPT-4 code(s): 99376*, 99377, 99378 HCPCS code(s): G0065*, G0182, G0337, Q5001-Q5009, S0271, S9126, T2042-T2046 UB revenue code(s): 0115, 0125, 0135, 0145, 0155, 0235, 0650-0652, 0655-0659 UB type of bill code(s): 81x, 82x Place of service code(s): 34
7	**Stratification** Do the measure specifications require the results to be stratified? No

(2a, 2h)	► 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)**:** **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: Member demographics and member enrollment data 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:** N/A **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 Measure is intended to be paired with two other HBI-generated measures, both of which have been submitted along with this one: - CHRONIC KIDNEY DISEASE: MONITORING PHOSPHORUS - CHRONIC KIDNEY DISEASE: MONITORING PARATHYROID HORMONE (PTH)
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	**Applicable Care Settings** *Check all that apply*

(2a)	☐ Can be used in all healthcare settings ☒ Ambulatory Care (office/clinic) ☐ Behavioral Healthcare ☐ Community Healthcare ☐ Dialysis Facility ☐ Emergency Department ☐ EMS emergency medical services ☒ Health Plan ☐ Home Health ☐ Hospice ☐ Hospital ☐ Long term acute care hospital ☐ Nursing home/ Skilled Nursing Facility (SNF) ☐ Prescription Drug Plan ☐ Rehabilitation Facility ☐ Substance Use Treatment Program/Center ☐ Other (*Please describe*):
	IMPORTANCE TO MEASURE AND REPORT
	Note: This is a threshold criterion. If a measure is not judged to be sufficiently important to measure and report, it will not be evaluated against the remaining criteria.
16 (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)*:
17 (1a)	**If not related to NPP goal, identify high impact aspect of healthcare** leading cause of morbidity/mortality **Summary of Evidence:** Approximately 26 million people in the US have chronic kidney disease (CKD),[1] and nearly 400,000 require dialysis.[2] CKD patients account for 27.6% of general Medicare expenditure.[3, 4] In addition, an estimated 80,000 people are diagnosed annually with CKD.[5,6] Nearly all members with CKD would present with osteodystrophy, a disorder of bone remodeling, without appropriate monitoring and treatment for inbalances in calcium phosphate hemeostatis.[7,8] **Citations[2] for Evidence:** 1. Facts about Chronic Kidney Disease. 2008 [cited 2008 November 11, 2008]; Available from: http://www.kidney.org/kidneyDisease/. 2. NKF K/DOQI Clinical Practice Guidelines for Chronic Kidney Disease: Evaluation, Classification, and Stratification. Guideline 13. Factors associated with loss of kidney function in chronic kidney disease. , National kidney foundation. http://www.kidney.org/professionals/doqi/kdoqi/p7_risk_g13.htm. Accessed June 1, 2004. 3. (2007) U.S. Renal Data System, USRDS 2007 Annual Data Report: Atlas of Chronic Kidney Disease and End-Stage Renal Disease in the United States, National Institutes of Health, National Institute of Diabetes and Digestive and Kidney Diseases, Bethesda, MD, 2007. http://www.usrds.org/2007/pdf/00a_precis_07.pdf. Volume, 4. USRDS 2004 Annual Data Report. The National Institues of Health, National Institute of Diabetes and Digestive and Kidney Diseases, in US Renal Data System. 2004: Bethesda, MD. 5. Jones, et al., Serum creatinine levels in the US population: third National Health and Nutrition Examination Survey. Am J Kidney Dis, 1998. 32(6): p. 992-9. 6. Young and E. W., An improved understanding of the causes of end-stage renal disease. Semin Nephrol, 1997. 17(3): p. 170-5. 7. Hamdy NA, Kanis JA, Beneton MN, Brown CB, Juttmann JR, Jordans JG, Josse S, Meyrier A, Lins RL, Fairey IT: Effect of alfacalcidol on natural course of renal bone disease in mild to moderate renal failure. BMJ 310:358-363, 1995 8. Goodman WG, Coburn JW: The use of 1,25-dihydroxyvitamin D3 in early renal failure. Annu Rev Med 43:227-237, 1992
18 (1b)	**Opportunity for Improvement** *Provide evidence that demonstrates considerable variation, or overall poor performance, across providers.* **Summary of Evidence:** A 2007 study examining adherence within a managed care setting to the Kidney Disease Outcomes Quality Initiative (K/DOQI) guidelines found that the percentages of patients with Stage 3, Stage 4 and Stage 5

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

	CKD who received AT LEAST annual calcium testing were 90.8% 94.8% and 93.0%, respectively.[1] However, a 2008 study conducted on a privately insured population found that rates of serum calcium testing were signigicantly higher among those seen by nephrologists, as compared to internists (97.6%, vs 82.4%, P=0.008).[2] Another study conducted on Medicaid patients with CKD, who had not yet begun dialysis, found that calcium testing levels were also high among this sub population but varied by comorbidity. Those with diabetes were significantly more likely to have calcium testing prior to initiation of dialysis than those without diabetes 95% vs 82% (p<0.0001).[3] **Citations for Evidence:** 1. Hoy, et al., Adherence to K/DOQI practice guidelines for bone metabolism and disease. Am J Manag Care, 2007. 13(11): p. 620-5. 2. Philipneri, et al., Delivery patterns of recommended chronic kidney disease care in clinical practice: administrative claims-based analysis and systematic literature review. Clin Exp Nephrol, 2008. 12(1): p. 41-52. 3. Kausz, et al., General medical care among patients with chronic kidney disease: opportunities for improving outcomes. J Am Soc Nephrol, 2005. 16(10): p. 3092-101.
19 (1b)	**Disparities** *Provide evidence that demonstrates disparity in care/outcomes related to the measure focus among populations.* **Summary of Evidence:** Little research has been done regarding receipt of KDoQI guidelines among disadvantaged groups. However, it has been reported that women, non-diabetics and those being treated by an internist (rather than a nephrologist) may be less likely to receive appropriate monitoring.[1,2] **Citations for evidence:** 1. Philipneri, et al., Delivery patterns of recommended chronic kidney disease care in clinical practice: administrative claims-based analysis and systematic literature review. Clin Exp Nephrol, 2008. 12(1): p. 41-52. 2. Kausz, et al., General medical care among patients with chronic kidney disease: opportunities for improving outcomes. J Am Soc Nephrol, 2005. 16(10): p. 3092-101.
20 (1c)	**If measuring an Outcome** Describe relevance to the national health goal/priority, condition, population, and/or care being addressed: N/A **If not measuring an outcome, provide evidence supporting this measure topic and grade the strength of the evidence** *Summarize the evidence (including citations to source) supporting the focus of the measure as follows:* • Intermediate outcome – evidence that the measured intermediate outcome (e.g., blood pressure, Hba1c) leads to improved health/avoidance of harm or cost/benefit. • Process – evidence that the measured clinical or administrative process leads to improved health/avoidance of harm and if the measure focus is on one step in a multi-step care process, it measures the step that has the greatest effect on improving the specified desired outcome(s). • Structure – evidence that the measured structure supports the consistent delivery of effective processes or access that lead to improved health/avoidance of harm or cost/benefit. • Patient experience – evidence that an association exists between the measure of patient experience of health care and the outcomes, values and preferences of individuals/ the public. • Access – evidence that an association exists between access to a health service and the outcomes of, or experience with, care. • Efficiency- demonstration of an association between the measured resource use and level of performance with respect to one or more of the other five IOM aims of quality. **Type of Evidence** *Check all that apply* ☒ Evidence-based guideline ☐ Quantitative research studies ☐ Meta-analysis ☐ Qualitative research studies ☐ Systematic synthesis of research ☐ Other (*Please describe*):

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

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

- Mineral metabolism changes begin early in CKD; there is a tendency to retain phosphorus, and to have diminished renal hydroxylation of 25-hydroxyvitamine D to calcitriol (1, 25-dihydroxyvitamine D). This results in hyperphosphatemia, calcitriol deficiency, and ultimately hypocalcaemia.[1-3]
- In response to hypocalcaemia and hyperphosphatemia, the parathyroid gland appropriately increases its secretion of parathyroid hormone (PTH) to augment the release of calcium phosphate from the bone and decrease the reabsorption of phosphorus within the renal tubules.[1-3]
- However, secondary hyperparathyroidism may result if the deficiencies in calcitriol levels and phosphorus excretion are not corrected in patients with renal failure.[1-5]
- Secondary hyperparathyroidism causes increased bone turnover and renal osteodystrophy.[1-5]
- In addition, abnormal calcium and phosphorus metabolism which results from abnormal kidney filtration and hyperparathyroidism lead to elevated calcium phosphorus product, which is associated with increased mortality in dialysis patients.[6]
- Elevated calcium phosphorus product increases the likelihood that calcium phosphate will precipitate in arteries, joints, soft tissues, and the viscera.[7,8]
- In dermal arterioles, this precipitation of calcium phosphate leads to tissue ischemia; in coronary arteries, it leads to increased incidence of coronary artery disease.[7,9]
- These ailments lead to a substantial economic impact on hospitalizations and costs.[10-12]
- Monitoring of calcium levels may lead to timely implementation of appropriate treatments that may help patients avoid the severe consequences of calcium, phosphate, vitamin D, and parathyroid abnormalities in renal disease.[12]
- Hyperphosphatemia in renal disease can be treated via dietary restrictions, phosphate binders, and/or dialysis.[12]
- Hypocalcaemia in renal disease is treated by calcium supplementation.[12]

Citations for Evidence:

1. Delmez, et al., Hyperphosphatemia: its consequences and treatment in patients with chronic renal disease. Am J Kidney Dis, 1992. 19(4): p. 303-17.
2. Mucsi, et al., Control of serum phosphate in patients with renal failure--new approaches. Nephrol Dial Transplant, 1998. 13(10): p. 2457-60.
3. Billa, et al., High prevalence of hyperparathyroidism among peritoneal dialysis patients: a review of 176 patients. Perit Dial Int, 2000. 20(3): p. 315-21.
4. Delmez, J.A. and E. Slatopolsky, Hyperphosphatemia: its consequences and treatment in patients with chronic renal disease. Am J Kidney Dis, 1992. 19(4): p. 303-17.
5. Levin, et al., Prevalence of abnormal serum vitamin D, PTH, calcium, and phosphorus in patients with chronic kidney disease: results of the study to evaluate early kidney disease. Kidney Int, 2007. 71(1): p. 31-8.
6. Cofan, et al., Uremic tumoral calcinosis in patients receiving longterm hemodialysis therapy. J Rheumatol, 1999. 26(2): p. 379-85.
7. Goldsmith, et al., Vascular calcification: a stiff challenge for the nephrologist: does preventing bone disease cause arterial disease? Kidney Int, 2004. 66(4): p. 1315-33.
8. Milliner, et al., Soft tissue calcification in pediatric patients with end-stage renal disease. Kidney Int, 1990. 38(5): p. 931-6.
9. Jones, et al., Serum creatinine levels in the US population: third National Health and Nutrition Examination Survey. Am J Kidney Dis, 1998. 32(6): p. 992-9.
10. Dowling and T. C., Prevalence, etiology, and consequences of anemia and clinical and economic benefits of anemia correction in patients with chronic kidney disease: an overview. Am J Health Syst Pharm, 2007. 64(13 Suppl 8): p. S3-7; quiz S23-5.
11. Craver, et al., Mineral metabolism parameters throughout chronic kidney disease stages 1-5--achievement of K/DOQI target ranges. Nephrol Dial Transplant, 2007. 22(4): p. 1171-6.
12. Kidney Disease Outcome Quality Initiative: Clinical Practice Guidelines for Bone Metabolism and Disease in Chronic Kidney Disease 2003, National Kidney Foundation.

[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 -

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:
Kidney Disease Outcome Quality Initiative: Clinical Practice Guidelines for Bone Metabolism and Disease in Chronic Kidney Disease 2003, National Kidney Foundation.

Specific guideline recommendation:
National Kidney Foundation recommends that patients with CKD initiate measurement of serum levels of calcium, phosphate, and parathyroid hormone once the glomerular filtration rate (GFR) drops below 60mL/min/1.73m2. The frequency of testing should be based on the stage of CKD. See Table below.

CKD Stage	GFR Range (mL/min/1.73m2)	Measurement of PTH	Measurement of Ca/PO4
3	30-59	Every 12 months	Every 12 Months
4	15-29	Every 3 months	Every 3 months
5	<15 or dialysis	Every 3 months	Every month

Guideline author's rating of strength of evidence (*If different from USPSTF, also describe it and how it relates to USPSTF)*: N/A - Guideline Rated as "Evidence"

Rationale for using this guideline over others: The National Kidney Foundation is a highly regarded organization whose guidelines are well respected within the medical community. Additionally, this guideline will compliment the existing NQF guideline (0261), which recommends monthly serum calcium testing for dialysis patients.

22 (1c)

Controversy/Contradictory Evidence *Summarize any areas of controversy, contradictory evidence, or contradictory guidelines and provide citations.*

Summary: There is little controversy about the utility of measuring serum calcium concentrations among CKD patients. However, it may be that those utilizing this rate may wish to stratify assessment of compliance by specialty. Based on the literature, compliance among nephrologists is quite high, while room for improvement exists among primary care providers.[1] Because 26 million people in the United States have CKD,[2] it is not possible for all patients with CKD can be supervised by nephrologists. Therefore, it is important that administration of serum calcium testing be assessed for primary care providers as well.

Citations:
1. Philipneri, et al., Delivery patterns of recommended chronic kidney disease care in clinical practice: administrative claims-based analysis and systematic literature review. Clin Exp Nephrol, 2008. 12(1): p. 41-52.
2. Facts about Chronic Kidney Disease. 2008 [cited 2008 November 11, 2008]; Available from: http://www.kidney.org/kidneyDisease/.

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:
This measure is important because it assists in the identification and appropriate treatment abnormal calcium and phosphorus homeostatis at an early stage of chronic kidney disease before the harmful effects take place (i.e., hyperparathyroidism, osteodystrophy, calciphylaxis).

SCIENTIFIC ACCEPTABILITY OF MEASURE PROPERTIES

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.

	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:** Data from commercial health plans were used to generate rates of serum calcium testing, according to the algorithm specified above. Included health plans range from 500,000 members, to 1.7 million members. **Analytic Method:** Testing rates for Plans A and B were compared for stability over the course of two years. Plan A consisted of data from 2005 and 2006. Plan B consisted of data from 2006 and 2007. **Testing Results:** PLAN Year 1 Rate Year 2 Rate Year 1 Denominator Year 2 Denominator Plan A 75.1% 78.6% 2612 3131 Plan B 90.9% 90.7% 429 450
26 (2c)	**Validity Testing** **Data/sample:** 2006 Data from eight geographically diverse commercial health plans were used to generate rates of serum calcium testing, according to the algorithm specified above. The size of the included health plans range from 180,000 members, to 2.4 million members. **Analytic Method:** PART 1: The algorithm for serum calcium testing was run on all eight plans. Denominator size and rate were calculated for each plan. PART 2: Rates generated using this algorithm were compared to annual rates for serum calcium testing found in the literature. **Testing Results:** PART 1: PLAN RATE DENOMINATOR Plan A 85.3% 3,549 Plan B 78.6% 3,131 Plan C 80.5% 5,632 Plan D 90.9% 429 Plan E 93.5% 5,146 Plan D 79.9% 4,087 Plan F 66.3% 238 Plan G 86.7% 739 Average Rate: 82.7%, Standard Deviation: 8.5% Average Denominator: 2,871 PART 2: Several U.S. based studies have examined prevalence of serum calcium testing among patients with CKD, and have reported testing rates between 60 and 95%.[1] However, these studies vary greatly by provider specialty (primary care vs nephrology), data source (chart review vs administrative claims), observation period, and kidney function of study cohort members. Studies using chart review have reported rates of testing of 60%, 72%, 76% and 95% [2-5]. However, rates of testing in these samples do not seem to correlate well with specialty.[1] However, studies based on administrative claims data appear to have more consistent results. In a sample of 519 patients with Phase 3, CKD, Philipneri et al found serum calcium testing rates of 82.4% within a year among those seen by primary care providers, vs 97.6% among those seen by nephrologists.[1]

	Similarly, a study based on 24,778 patients with CKD found testing serum calcium rates of 82% within 2 years prior to the start of dialysis.[6] While a fair amount of variation was seen among health care plans on which this algorithm was tested, this variation fell well within the rates reported by the literature. Additionally, the average plan rate of 82.7% that we report is highly consistent with rates reported by other administrative claims-based studies. 1. Philipneri, et al., Delivery patterns of recommended chronic kidney disease care in clinical practice: administrative claims-based analysis and systematic literature review. Clin Exp Nephrol, 2008. 12(1): p. 41-52. 2. Israni, et al., Management of chronic kidney disease in an academic primary care clinic. Am J Nephrol, 2003. 23(1): p. 47-54. 3. Kausz, et al., Management of patients with chronic renal insufficiency in the Northeastern United States. J Am Soc Nephrol, 2001. 12(7): p. 1501-7. 4. Lafayette, et al., Examining chronic kidney disease management in a single center. Clin Nephrol, 2004. 62(4): p. 260-6. 5. Murray, et al., Delivery of predialysis care in an academic referral nephrology practice. Ren Fail, 2005. 27(5): p. 571-80. 1. Philipneri, et al., Delivery patterns of recommended chronic kidney disease care in clinical practice: administrative claims-based analysis and systematic literature review. Clin Exp Nephrol, 2008. 12(1): p. 41-52. 2. Israni, et al., Management of chronic kidney disease in an academic primary care clinic. Am J Nephrol, 2003. 23(1): p. 47-54. 3. Kausz, et al., Management of patients with chronic renal insufficiency in the Northeastern United States. J Am Soc Nephrol, 2001. 12(7): p. 1501-7. 4. Lafayette, et al., Examining chronic kidney disease management in a single center. Clin Nephrol, 2004. 62(4): p. 260-6. 5. Murray, et al., Delivery of predialysis care in an academic referral nephrology practice. Ren Fail, 2005. 27(5): p. 571-80. 6. Kausz, et al., General medical care among patients with chronic kidney disease: opportunities for improving outcomes. J Am Soc Nephrol, 2005. 16(10): p. 3092-101.
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):** DIALYSIS: We excluded dialysis patients because administrative data poorly capture routine laboratory testing done on dialyses patients. HOSPICE: Members who are on hospice are excluded because the focus of care would be shifted away from avoiding long-term complications to palliative care. **Citations for Evidence:** Expert panel opinion (unable to reliably capture basic lab sent on dialysis patients via administrative data because it is done in the dialyses center and may not be separately billed). During testing we found that laboratory data is incompletely captured for dialysis patients. **Data/sample:** **Analytic Method:** **Testing Results:**
28 (2e)	**Risk Adjustment Testing** *Summarize the testing used to determine the need (or no need) for risk adjustment and the statistical performance of the risk adjustment method.* **Data/sample:** N/A

	Analytic Method: **Testing Results:** ►**If outcome or resource use measure not risk adjusted, provide rationale:**
29 (2g)	**Testing comparability of results when more than 1 data method is specified** (*e.g., administrative claims or chart abstraction*) **Data/sample:** N/A **Analytic Method:** **Results:**
30 (2f)	**Provide Measure Results from Testing or Current Use** Results from testing **Data/sample:** See Boxes 25 and 26. **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:** N/A ►If disparities have been reported/identified, but measure is not specified to detect disparities, provide rationale:
	USABILITY
32 (3)	*Current Use Testing completed If in use, how widely used (select one)* ► *If "other," please describe:* ☐ *Used in a public reporting initiative, name of initiative:* *Sample report attached* ☐ *OR Web page URL:*
33 (3a)	**Testing of Interpretability** (*Testing that demonstrates the results are understood by the potential users for public reporting and quality improvement*) **Data/sample:** Data are reported as rates and denominator size. It was felt that no interpretability testing was needed. Based upon numerous interactions with health plans, performance based on denominator and rate are easily interpreted, as long as the populations captured in numerator, denominator and denominator exclusion are made explicit. **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):** 0261 - Measurement of Serum Calcium - Percentage of all adult peritoneal dialysis and hemodialysis patients included in the sample for analysis with serum calcium measured at least once within month Concentration

	This is a similar measure, but does NOT target the same population. Measure 0261 is for CKD patients who are on dialysis while this measure focus on measurement of serum calcium on chronic renal disease members NOT on dialysis. **Are the measure specifications harmonized with existing NQF-endorsed™ measures?** Partially harmonized ►If not fully harmonized, provide rationale: The proposed measure is complimentary to measure 0261. It collects data less frequenly than measure 0261 on serum calcium levels for patients with CKD, but not on dialysis in an effort to prevent complications of altered calcium and phosphorous metabolism commonly seen in CKD. **Describe the distinctive, improved, or additive value this measure provides to existing NQF-endorsed measures:** Unlike measure 0261, our measure looks for serum calcium concentration measurement among patients who are NOT on dialysis. Excluding members with dialysis a) allows for the assessment of the receipt of quality of care among a discrete population of patient suffering from CKD and 2) allows for more precise measurement using administrative claims data; lab tests received in a dialysis setting are not uniformly recorded. The inclusion of members who were receiving dialysis would artificially lower the true rate of serum calcium testing.
	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: ICD-9 diagnosis codes, ICD-9 Proc Codes, CPT-4 codes, HCPCS codes, UB revenue codes, NDC code, DRG codes*
37 (4c)	*Do the specified exclusions require additional data sources beyond what is required for the other specifications? No* ►*If yes, provide justification:*
38 (4d)	*Identify susceptibility to inaccuracies, errors, or unintended consequences of the measure:* *This is a administrative claims-based quality indicator with certain potential biases, including coding variation between providers and missing data. Nevertheless, administrative claims data are widely available and have been used to effectively examine and document patterns of health care utilization, detect opportunities to improve quality of care, estimate incidence of disease, and even assess outcomes of pharmaceutical, radiological, and surgical procedures.* *Describe how could these potential problems be audited:* *HBI has developed an online tool (currently in use by several health plans), which allows physicians the opportunity to supplement their quality scores through self-report via a secured web site. Via this website, physicians are able to identify specific patients with whom they had an office visit during the measurement period and who reportedly did not have the indicated quality care. Physicians can then review their charts to verify whether in fact the quality care was performed. The physician can then manually enter corrections to the patient record via the website, indicating that the quality care was done. This data is subject to clinical review prior to acceptance. The hybrid quality score (via administrative claims and self report) can be updated on a quarterly basis.* *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 LIMITATIONS: Data collected from administrative claims data provides an efficient means of assessing delivery of recommended care for large numbers of patients. One specific limitation of this measure is that laboratory tests administered within a hospital setting are not generally captured. However, testing of serum calcium levels on an annual basis represents a minimum guideline: per KDOQI guidelines, patients with Stage 4 kidney failure would ideally have serum calcium levels performed every 3 months.* *The rates of serum calcium testing we saw across various plans are in line with those reported in the literature. However, it is possible that plans with lower testing rates (see Box 26, Plan F) truly have lower rates of testing, or that CKD is more likely to be treated in an in-patient setting within these plans.* *TIMING OF DATA COLLECTION: Because the measure assesses annual performance, data collection would ideally be done on an annual basis.* *BURDEN ASSOCIATED WITH DATA COLLECTION: Administrative claims data are automatically collected by commercial health plans.*
	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: N/A*
41	**Measure Intellectual Property Agreement Owner Point of Contact** **First Name:** Zak **MI:** **Last Name:** Ramadan-Jradi **Credentials (MD, MPH, etc.):** MD, MPH **Organization:** Health Benchmarks® **Street Address:** 21650 Oxnard St., Suite 550 **City:** Woodland Hills **State:** CA **ZIP:** 91367-7806 **Email:** zramadan@us.imshealth.com **Telephone:** 818-676-2820 ext:
42	**Measure Submission Point of Contact** **If different than IP Owner Contact** **First Name:** Karen **MI:** **Last Name:** Hsu **Credentials (MD, MPH, etc.):** MPH, MBA **Organization:** Health Benchmarks® **Street Address:** 21650 Oxnard St., Suite 550 **City:** Woodland Hills **State:** CA **ZIP:** 91367-7806 **Email:** khsu@us.imshealth.com **Telephone:** 541-550-7983 ext:
43	**Measure Developer Point of Contact** **If different than IP Owner Contact** **First Name:** Judy **MI:** Y **Last Name:** Chen **Credentials (MD, MPH, etc.):** MD, MSHS **Organization:** Health Benchmarks® **Street Address:** 21650 Oxnard St., Suite 550 **City:** Woodland Hills **State:** CA **ZIP:** 91367-7806 **Email:** judy.chen@us.imshealth.com **Telephone:** 818-676-2883 ext:
44	**Measure Steward Point of Contact** **If different than IP Owner Contact** *Identifies the organization that will take responsibility for updating the measure and assuring it is consistent with the scientific evidence and current coding schema; the steward of the measure may be different than the developer.* **First Name:** **MI:** **Last Name:** **Credentials (MD, MPH, etc.):** **Organization:** **Street Address:** **City:** **State:** **ZIP:** **Email:** **Telephone:** ext
	ADDITIONAL INFORMATION
45	**Workgroup/Expert Panel involved in measure development** No workgroup or panel used ►If workgroup used, describe the members' role in measure development: ►Provide a list of workgroup/panel members' names and organizations:
46	*Measure Developer/Steward Updates and Ongoing Maintenance*

	Year the measure was first released: 2008 *Month and Year of most recent revision: January, 2008* *What is the frequency for review/update of this measure? Annually* *When is the next scheduled review/update for this measure? January, 2009*
47	**Copyright statement/disclaimers:** © 2008 Health Benchmarks® Confidential and Proprietary All Rights Reserved
48	**Additional Information:** N/A
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*)**:** 11/21/08

PATIENT & FAMILY ENGAGEMENT

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

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

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

POPULATION HEALTH

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

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

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

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

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

SAFETY

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

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

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

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

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

PALLIATIVE CARE

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

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

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

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

CARE COORDINATION

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

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

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

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

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

PATIENT-FOCUSED CARE

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

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

OVERUSE

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

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

THE NATIONAL QUALITY FORUM

MEASURE SUBMISSION FORM VERSION 3.0

August 2008

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

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

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

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

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

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

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

THE NATIONAL QUALITY FORUM

MEASURE SUBMISSION FORM VERSION 3.0
August 2008

	(for NQF staff use) *NQF Review #: EC-238-08* *NQF Project: National Voluntary Consensus Standards for Ambulatory Care Using Clinically Enriched Administrative Data*
	MEASURE SPECIFICATIONS & DESCRIPTIVE INFORMATION
1	*Information current as of (date- MM/DD/YY): 06/26/09*
2	*Title of Measure: Non-Diabetic Nephropathy - Use of ACE Inhibitor or ARB Therapy*
3	**Brief description of measure [1]:** Percentage of patients with proteinuria that have a current refill for an angiotensin converting enzyme inhibitor (ACE-I) or angiotensin receptor blocker (ARB)
4 (2a)	**Numerator Statement:** Patients with a current refill for an ACE-I or ARB **Time Window:** A drug day-supply that extends within 30 days of the measurement date **Numerator Details** (Definitions, codes with description): see attached
5 (2a)	**Denominator Statement:** All patients, 18-75 years of age, with a urine protein >= 200 mg/g **Time Window:** 6 months **Denominator Details** (Definitions, codes with description): see attached
6 (2a, 2d)	**Denominator Exclusions:** Patients with contraindication to an ACE inhibitor or ARB, including pregnancy, prior angioedema, hypotension, hyperkalemia, rising creatinine, chronic kidney disease stage 3-5 (without dialysis), aortic stenosis, hypertrophic cardiomyopathy, multiple myeloma with treatment; diabetes diagnosis; renal transplant; immunosuppresive therapy **Denominator Exclusion Details** (Definitions, codes with description): see attached
7 (2a, 2h)	**Stratification** Do the measure specifications require the results to be stratified? No ► If "other" describe: **Identification of stratification variable(s):** **Stratification Details** (Definitions, codes with description):
8 (2a, 2e)	**Risk Adjustment** Does the measure require risk adjustment to account for differences in patient severity before the onset of care? No ► **If yes,** (select one) ► Is there a separate proprietary owner of the risk model? (select one) **Identify Risk Adjustment Variables:** **Detailed risk model:** attached ☐ **OR** Web page URL:

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

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

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

10 **Identify the required data elements**(e.g., primary diagnosis, lab values, vital signs)**:** ICD9, CPT, pharmacy claims, lab values, patient derived data from a personal health record or disease management program

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

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

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

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

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

(2a)
Instructions:

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

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

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

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

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

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

IMPORTANCE TO MEASURE AND REPORT

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

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

(1a)	*to this measure (see list of goals on last page)*: 2.1,2.2,6.1
17 (1a)	**If not related to NPP goal, identify high impact aspect of healthcare** (select one) **Summary of Evidence:** **Citations[2] for Evidence:**
18 (1b)	**Opportunity for Improvement** *Provide evidence that demonstrates considerable variation, or overall poor performance, across providers.* **Summary of Evidence:** In our book of business experience for 2008, a total of 1509 clinical alerts were sent to patients with proteinuria who did not have a current refill for an ACE inhibitor or ARB. **Citations for Evidence:**
19 (1b)	**Disparities** *Provide evidence that demonstrates disparity in care/outcomes related to the measure focus among populations.* **Summary of Evidence:** There is documentation of disparity in members with diabetes and proteinuria and ACE inhibitor use; though there is no direct data with non-diabetic proteinuria alone, I would expect results to be similar. PATIENTS Individuals (N= 38,887) with diabetes who were continuously enrolled with pharmacy benefits during the year 2000, and had self-reported ethnicity data on survey. INTERVENTIONS AND MEASUREMENTS Pharmacy dispensing of ACE/ARB. RESULTS Forty-one percent of the cohort had both hypertension and albuminuria, 30% had hypertension alone, and 12% had albuminuria alone. Fourteen percent were black, 11% Latino, 13% Asian, and 63% non-Latino white. Overall, 61% of the cohort received an ACE/ARB. ACE/ARB was dispensed to 74% of patients with both hypertension and albuminuria, 64% of those with hypertension alone, and 54% of those with albuminuria alone. ACE/ARB was dispensed to 61% of whites, 63% of blacks, 59% of Latinos, and 60% of Asians. Among those with albuminuria alone, blacks were significantly (P = .0002) less likely than whites to receive ACE/ARB (47% vs 56%, respectively). No other ethnic disparities were found. CONCLUSIONS In this cohort, the majority of eligible patients received indicated ACE/ARB therapy in 2000. However, up to 45% to 55% of high-risk clinical groups (most notably individuals with isolated albuminuria) were not receiving indicated therapy. Additional targeted efforts to increase use of ACE/ARB could improve quality of care and reduce ESRD incidence, both overall and in high-risk ethnic groups. Policymakers might consider use of ACE/ARB for inclusion in diabetes performance measurement sets. **Citations for evidence:** Use of Angiotensin-converting Enzyme Inhibitors and Angiotensin Receptor Blockers in High-risk Clinical and Ethnic Groups with Diabetes. Gen Intern Med. 2004 June; 19(6): 669–675
20 (1c)	**If measuring an Outcome** Describe relevance to the national health goal/priority, condition, population, and/or care being addressed: **If not measuring an outcome, provide evidence supporting this measure topic and grade the strength of the evidence** *Summarize the evidence (including citations to source) supporting the focus of the measure as follows:* • Intermediate outcome – evidence that the measured intermediate outcome (e.g., blood pressure, Hba1c) leads to improved health/avoidance of harm or cost/benefit. • Process – evidence that the measured clinical or administrative process leads to improved health/avoidance of harm and if the measure focus is on one step in a multi-step care process, it measures the step that has the greatest effect on improving the specified desired outcome(s). • Structure – evidence that the measured structure supports the consistent delivery of effective processes or access that lead to improved health/avoidance of harm or cost/benefit. • Patient experience – evidence that an association exists between the measure of patient experience of

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

	health care and the outcomes, values and preferences of individuals/ the public. • Access – evidence that an association exists between access to a health service and the outcomes of, or experience with, care. • Efficiency– demonstration of an association between the measured resource use and level of performance with respect to one or more of the other five IOM aims of quality. **Type of Evidence** *Check all that apply* ☒ Evidence-based guideline ☐ Quantitative research studies ☐ Meta-analysis ☐ Qualitative research studies ☐ Systematic synthesis of research ☐ Other (*Please describe*): **Overall Grade for Strength of the Evidence**[3] (*Use the USPSTF system, or if different, also describe how it relates to the USPSTF system)*: Authors graded the recommendation as strong. This would be most consistent with a USPSTF grade A. **Summary of Evidence** (*provide guideline information below*)**:** Nondiabetic kidney diseases include glomerular diseases other than diabetes, vascular diseases other than renal artery disease, tubulointerstitial diseases, and cystic disease. Among these diseases, the level of proteinuria is useful for diagnosis and prognosis. Glomerular diseases are characterized by higher levels of proteinuria than other diseases. Higher levels of proteinuria are associated with faster progression of kidney disease and increased risk of CVD. 9.1 Target blood pressure in nondiabetic kidney disease should be <130/80 mm Hg (Guideline 7) (Table 111). 9.2 Patients with nondiabetic kidney disease and spot urine total protein to creatinine ratio ≥200 mg/g, with or without hypertension, should be treated with an ACE inhibitor or ARB (Table 111). ACE inhibitors are more effective than other antihypertensive agents in slowing the progression of most nondiabetic kidney diseases (Strong). The beneficial effect is greater in patients with higher levels of proteinuria (Strong). Several large, randomized trials of participants with nondiabetic kidney disease determined that regimens including ACE inhibitors are more effective in reducing the occurrence of kidney endpoints compared to regimens not including ACE inhibitors (Table 115). Most early studies were relatively small, less than 100 patients, and reported variable efficacy based on surrogate endpoints (such as doubling of serum creatinine or decrement in proteinuria). Two of these studies, the ACE Inhibition in Progressive Renal Insufficiency (AIPRI) Study and Ramipril Efficacy in Nephropathy (REIN) Study, were large, multicenter studies that showed conclusive results. However, only the REIN Study showed a beneficial effect on ACE inhibitors in reducing the incidence of kidney failure. Some studies suggested that the beneficial effect of ACE inhibitors was mediated by factors in addition to their antihypertensive effect. Most of the trials enrolled patients with a variety of nondiabetic kidney diseases, and subgroup analyses from some trials suggested a greater beneficial effect in patients with glomerular diseases, as compared with nonglomerular diseases (Table 116). **Citations for Evidence:** K/DOQI (Kidney Disease Outcomes Quality Initiative) Clinical Practice Guidelines on Hypertension and Antihypertensive Agents in Chronic Kidney Disease. Am J Kidney Dis. 2004; 43:S65-S230.
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.*

[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.

	Guideline Citation: K/DOQI (Kidney Disease Outcomes Quality Initiative) Clinical Practice Guidelines on Hypertension and Antihypertensive Agents in Chronic Kidney Disease. Am J Kidney Dis. 2004; 43:S65-S230. **Specific guideline recommendation:** Patients with nondiabetic kidney disease and spot urine total protein to creatinine ratio ≥200 mg/g, with or without hypertension, should be treated with an ACE inhibitor or ARB (Table 111). ACE inhibitors are more effective than other antihypertensive agents in slowing the progression of most nondiabetic kidney diseases (Strong). The beneficial effect is greater in patients with higher levels of proteinuria (Strong). **Guideline author's rating of strength of evidence** (*If different from USPSTF, also describe it and how it relates to USPSTF)*: Authors graded the recommendation as strong. This would be most consistent with a USPSTF grade A. **Rationale for using this guideline over others:** Several studies have documented the benefit of ACE inhibitors and ARBs in the management of proteinuric renal disease. The NKF guidelines summarize their findings and provide a convincing argument for the use of these drugs. NKF guidelines are also nationally recognized.
22 (1c)	**Controversy/Contradictory Evidence** *Summarize any areas of controversy, contradictory evidence, or contradictory guidelines and provide citations.* **Summary:** **Citations:**
23 (1)	**Briefly describe how this measure (as specified) will facilitate significant gains in healthcare quality related to the specific priority goals and quality problems identified above:** Identification of patients with proteinuria who are not receiving ACE I or ARB therapy will facilitate prevention of end stage renal disease by sending reminders to providers regarding these high risk members who are not receiving ACE I/ARB treatment. Inhibitors of the renin-angiotensin-aldosterone system slow the progression proteinuria renal disease and may not only decrease the incidence of end-stage renal disease and dialysis, but also decrease cardiovascular mortality. The use of these drugs is often avoided because of misplaced concerns about accelerating renal failure and other drug side effects.
	SCIENTIFIC ACCEPTABILITY OF MEASURE PROPERTIES
	Note: Testing and results should be summarized in this form. However, additional detail and reports may be submitted as supplemental information or provided as a web page URL. If a measure has not been tested, it is only potentially eligible for time-limited endorsement.
24	**Supplemental Testing Information:** attached ☒ **OR** Web page URL:
25 (2b)	**Reliability Testing** **Data/sample:** **Analytic Method:** **Testing Results:**
26 (2c)	**Validity Testing** **Data/sample:** **Analytic Method:**

	Testing Results:
27 (2d)	**Measure Exclusions** *Provide evidence to justify exclusion(s) and analysis of impact on measure results during testing.* **Summary of Evidence supporting exclusion(s):** **Citations for Evidence:** **Data/sample:** **Analytic Method:** **Testing Results:**
28 (2e)	**Risk Adjustment Testing** *Summarize the testing used to determine the need (or no need) for risk adjustment and the statistical performance of the risk adjustment method.* **Data/sample:** **Analytic Method:** **Testing Results:** ►**If outcome or resource use measure not risk adjusted, provide rationale:**
29 (2g)	**Testing comparability of results when more than 1 data method is specified** (*e.g., administrative claims or chart abstraction*) **Data/sample:** **Analytic Method:** **Results:**
30 (2f)	**Provide Measure Results from Testing or Current Use** (select one) **Data/sample:** **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:** ►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 Health plan or sytem* ► *If "other," please describe:* ☐ *Used in a public reporting initiative, name of initiative:* *Sample report attached* ☐ *OR Web page URL:*
33 (3a)	**Testing of Interpretability** (*Testing that demonstrates the results are understood by the potential users for public reporting and quality improvement*) **Data/sample:** Administrative claims database from health plans; lab results data

	Methods: The performance measure is similar in message to a clinical alert that has been operational since 2002. Compliance to the clinical alert is measured using an analysis of subsequent claims, in this case the appearance of pharmacy claims for an ACE inhibitor or ARB. In addition, a feedback tool accompanies every clinical alert message, and includes options indicating agreement or disagreement with the message. **Results:** In practice, fewer than 1% of the respondents disagreed with the medical literature, and 28% show objective evidence of compliance.
34 (3b, 3c)	**Relation to other NQF-endorsed™ measures** ►Is this measure similar or related to measure(s) already endorsed by NQF (on the same topic or the same target population)? *Measures can be found at www.qualityforum.org under Core Documents.* *Check all that apply* ☐ Have not looked at other NQF measures ☐ Other measure(s) on same topic ☐ Other measure(s) for same target population ☒ No similar or related measures **Name of similar or related NQF-endorsed™ measure(s):** **Are the measure specifications harmonized with existing NQF-endorsed™ measures?** (select one) ►If not fully harmonized, provide rationale: **Describe the distinctive, improved, or additive value this measure provides to existing NQF-endorsed measures:**
	FEASIBILITY
35 (4a)	*How are the required data elements generated? Check all that apply* ☒ *Data elements are generated concurrent with and as a byproduct of care processes during care delivery (e.g., blood pressure or other assessment recorded by personnel conducting the assessment)* ☐ *Data elements are generated from a patient survey (e.g., CAHPS)* ☒ *Data elements are generated through coding performed by someone other than the person who obtained the original information (e.g., DRG or ICD-9 coding on claims)* ☒ *Other, Please describe: Data obtained through electronic personal health records and telephonic, nurse-driven disease management programs*
36 (4b)	*Electronic Sources All data elements* ►*If all data elements are not in electronic sources, specify the near-term path to electronic collection by most providers:* ►*Specify the data elements for the electronic health record: ICD9, CPT, NDC and LOINC codes*
37 (4c)	*Do the specified exclusions require additional data sources beyond what is required for the other specifications? No* ►*If yes, provide justification:*
38 (4d)	*Identify susceptibility to inaccuracies, errors, or unintended consequences of the measure:* *Generally, the use of claims data has inherent errors and inaccuracies related to incorrect coding, or missing data, which can result in less specificity in the definition of denominator and /or the numerator. To minimize these errors and inaccuracies, we use clinically enriched data (laboratory results, medication lists) to augment the claims data. In addition where possible, to corroborate the claims data, we solicit feedback from both providers via a feedback form and patients from a personal health record or from a disease management program.* *We do not anticipate significant unintended consequences from the implantation of the measure. Our measures are all developed from evidence-based literature or from clinical guidelines and are designed to encourage appropriate care of the patient.* *Describe how could these potential problems be audited: The inclusion of patient-derived data from a*

	personal health record or through a disease management program may be used to confirm the presence or absence of a medication; ultimately the data sources may be tested against a sample of medical charts. *Did you audit for these potential problems during testing?* No *If yes, provide results:*
39 (4e)	*Testing feasibility* *Describe what have you learned/modified as a result of testing and/or operational use of the measure regarding data collection, availability of data/missing data, timing/frequency of data collection, patient confidentiality, time/cost of data collection, other feasibility/ implementation issues:* *Multiple sources of corroborating clinical data are necessary to correctly identify patients in the denominator. Earlier testing efforts using specifications similar to HEDIS were more sensitive yet nonspecific. The additional of supporting information for certain diagnostic conditions (e.g., diabetic medications and supplies in addition to ICD9 codes for diabetes) significantly decreased the number identified in the denominator, yet the analysis led to a much higher compliance rate, likely because of the exclusion of fewer false positives in the denominator.*
	CONTACT INFORMATION
40	*Web Page URL for Measure Information* *Describe where users (implementers) should go for more details on specifications of measures, or assistance in implementing the measure.* *Web page URL:* *www.activehealth.net*
41	**Measure Intellectual Property Agreement Owner Point of Contact** **First Name:** Madhavi **MI:** **Last Name:** Vemireddy **Credentials (MD, MPH, etc.):** MD **Organization:** ActiveHealth Management **Street Address:** 102 Madison Avenue **City:** New York **State:** NY **ZIP:** 10016 **Email:** mvemireddy@activehealth.net **Telephone:** 212-651-8200 ext:
42	**Measure Submission Point of Contact** **If different than IP Owner Contact** **First Name:** **MI:** **Last Name:** **Credentials (MD, MPH, etc.):** **Organization:** **Street Address:** **City:** **State:** **ZIP:** **Email:** **Telephone:** ext:
43	**Measure Developer Point of Contact** **If different than IP Owner Contact** **First Name:** **MI:** **Last Name:** **Credentials (MD, MPH, etc.):** **Organization:** **Street Address:** **City:** **State:** **ZIP:** **Email:** **Telephone:** ext:
44	**Measure Steward Point of Contact** **If different than IP Owner Contact** *Identifies the organization that will take responsibility for updating the measure and assuring it is consistent with the scientific evidence and current coding schema; the steward of the measure may be different than the developer.* **First Name:** **MI:** **Last Name:** **Credentials (MD, MPH, etc.):** **Organization:** **Street Address:** **City:** **State:** **ZIP:** **Email:** **Telephone:** ext
	ADDITIONAL INFORMATION
45	**Workgroup/Expert Panel involved in measure development** No workgroup or panel used ►If workgroup used, describe the members' role in measure development: ►Provide a list of workgroup/panel members' names and organizations:
46	*Measure Developer/Steward Updates and Ongoing Maintenance* *Year the measure was first released:* *2002* *Month and Year of most recent revision:* *12/2007* *What is the frequency for review/update of this measure?* *Biennially* *When is the next scheduled review/update for this measure?* *2009*

47	**Copyright statement/disclaimers:** This information, including any attachments hereto, is the sole, exclusive, proprietary and confidential property of Active Health Management, Inc., and is for the exclusive use of The National Quality Forum. Any use, copying, disclosure, dissemination or distribution by anyone other than the National Quality Forum is strictly prohibited.
48	**Additional Information:**
49	**I have checked that the submission is complete and any blank fields indicate that no information is provided.** ☒
50	**Date of Submission** (*MM/DD/YY*)**:** 02/09/09

PATIENT & FAMILY ENGAGEMENT

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

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

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

POPULATION HEALTH

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

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

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

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

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

SAFETY

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

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

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

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

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

PALLIATIVE CARE

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

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

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

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

CARE COORDINATION

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

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

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

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

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

PATIENT-FOCUSED CARE

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

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

OVERUSE

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

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

PERFORMANCE MEASURE RULE:
Non-Diabetic Nephropathy – Use of ACE Inhibitor or ARB Therapy

DENOMINATOR

All of the Following are correct:

1. Age 18-75 years

2. Presence of At Least 1 URINE PROTEIN VALUE Labs Result Value > 200 In the past 6 Months

DENOMINATOR EXCLUSIONS

One of the following is correct:

1. If ACE Contraindications is confirmed for the member (see below)

2. Presence of At Least 1 DELIVERY (CPT) Procedure In the past 6 Months

3. Presence of At Least 1 TRANSPLANT RENAL (ICD-9) Diagnosis in the past 24 Months

4. Presence of At Least 1 TRANSPLANT RENAL (CPT) Procedure In the past 24 Months

5. Presence of At Least 1 Refill IMMUNOSUPPRESSIVE RX Exists In the past 12 Months

6. If Diabetes Adult Validation is confirmed for the member (see below)

7. All of the following expressions are correct:
    a. Presence of At Least 1 DIABETES MELLITUS Diagnosis in the past 5 Years
    b. One of the following expressions is correct:
        I. Presence of At Least 1 Refill DM MEDS AND SUPPLIES Exists In the past 5 Years
        II. Presence of At Least 1 DM MEDS AND SUPPLIES (HCPCS) Procedure In the past 5 Years

NUMERATOR

All of the Following are correct:

1. Denominator is true
2. One of the Following is correct:
    a. Presence of a current refill for ANTIHYPE/ARB-ACEI
    b. Presence of Patient Data Confirming at least 1 ANTIHYPE/ARB-ACEI Drug in the past 6 months

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Diabetes Adult Validation

All of the following are correct:

1. Patient age >/= 18 years
2. One of the following is correct:
    a. Presence of patient data confirming at least 1 PDD- DIABETES in the past 24 months
    b. Presence of at least 4 claims DIABETES MELLITUS diagnosis in the past 12 months with at least a 3 month separation between claims
    c. All of the following are correct:
        i. Presence of at least 1 DIABETES MELLITUS diagnosis in the past 5 years beginning at least 1 month in the past
        ii. One of the following is correct:
            1. Presence of at least 2 refills DM MEDS AND SUPPLIES exists in the past 12 months
            2. Presence of at least 2 DM MEDS AND SUPPLIES (HCPCS) procedure in the past 12 months
            3. Presence of at least 1 INSULIN THERAPY (HCPCS) procedure in the past 12 months
            4. Presence of at least 1 HBA1C VALUE > 7.5 in the past 12 months

Diabetes Validation Exclusion

One of the following is correct:

1. Presence of 2 STEROID-INDUCED DM diagnosis in the past 12 months
2. All of the following are correct:
   - Presence of at least 2 GESTATIONAL DM/POLYCYSTIC OVARIES diagnosis in the past 12 months
   - Female gender

ACE Contraindications Validation

One of the following is correct:

1. Presence of at least 1 ACEI/CONTRAINDICATIONS diagnosis anytime in the past
2. Presence of at least 1 HYPERPOTASSEMIA diagnosis in the past 6 months
3. Presence of at least 2 HYPERTROPHIC CARDIOMYOPATHY diagnosis in the past 12 months
4. Presence of at least 1 POTASSIUM lab value > 5.5 in the past 6 months
5. Presence of at least 3 AORTIC STENOSIS diagnosis in the past 6 months
6. Presence of at least 2 HYPOTENSION diagnosis in the past 6 months
7. Pregnancy exclusion validation is confirmed for the member (see below).
8. CKD stage 3 validation is confirmed for the member (see below).
9. CKD stage 4 validation is confirmed for the member (see below).
10. Presence of a refill of HYDRALAZINE after a prior ANTIHYPE/ARB-ACEI
11. Presence of at least 2 consecutive CREATININE lab result % change increase > 20 in the past 4 months
12. All of the following are correct:
    a. Presence of at least 2 MULTIPLE MYELOMA diagnosis in the past 12 months

b. Presence of at least 1 refill CHEMOTHERAPY exists in the past 12 months

13. Presence of patient data confirming PDD- PREGNANCY PLANNING in the past 6 months

14. Presence of patient data confirming PDD- SYSTOLIC BP result < 100 in the past 3 months

15. Presence of patient data confirming PDD- DIASTOLIC BP result < 60 in the past 3 months

16. Presence of a current refill for ALISKIREN

17. Presence of patient data confirming ALISKIREN drug in the past 6 months

18. Presence of at least 1 PREGNANCY PROCREATIVE MNG (ICD9) diagnosis in the past 6 months

19. Presence of at least 2 CKD STAGE 5 diagnosis in the past 12 months in the absence of DIALYSIS CHRONIC (CPT) procedure in the past 12 months

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Pregnancy Exclusion Validation

a. One of the following is correct:
    a. Presence of At Least 1 HCG (LOINC) Labs Result Value > 100 in the past 6 months
    b. Presence of Patient Data Confirming At Least 1 PDD- PREGNANCY in the past 6 months
    c. Presence of At Least 1 PREGNANCY Diagnosis in the past 6 months
    d. Presence of At Least 1 PREGNANCY RELATED PROCEDURE in the past 6 months

b. Exclusion - If One of the Following is correct
    a. Presence of At Least 1 DELIVERY AND ABORTION (ICD9) Diagnosis in the past 3 months
    b. Presence of At Least 1 HYSTERECTOMY Procedure in the past 3 months
    c. Presence of At Least 1 DELIVERY AND ABORTION (CPT) Procedure in the past 3 months
    d. Presence of At Least 1 Refill UTEROTONICS Exists in the past 3 months
    e. Presence of At Least 1 NONVIABLE PREGNANCY Diagnosis in the past 3 months

CKD Stage 3 Validation

One of the following is correct:

1. Presence of at least 2 CKD STAGE 3 diagnosis in the past 12 months at least 3 months apart

2. All of the folllowing are correct:

    a. Presence of at least 2 CKD – NOS diagnosis in the past 12 months at least 3 months apart

    b. Presence of at least 1 result for creatinine clearance between 30 and 59 in the past

    c. If patient age >/= 18 years

CKD Stage 3 Validation Exclusion

One of the following is correct:

1. Presence of at least 1 TRANSPLANT RENAL (CPT) procedure in the past 12 months

2. CKD Stage 5 validation is confirmed for the member (see below)

3. Presence of a current refill for CALCIMIMETICS

4. CKD Stage 4 validation is confirmed for the member (see below)

CKD Stage 4 Validation

One of the following is correct:

1. Presence of at least 2 CKD STAGE 4 diagnosis in the past 12 months at least 3 months apart

2. All of the folllowing are correct:

    a. Presence of at least 2 CKD – NOS diagnosis in the past 12 months at least 3 months apart

    b. Presence of at least 1 result for creatinine clearance between 15 and 29 in the past

c. If patient age >/= 18 years

CKD Stage 4 Validation Exclusion

One of the following is correct:

1. Presence of at least 1 TRANSPLANT RENAL (CPT) procedure in the past 12 months

2. CKD Stage 5 validation is confirmed for the member (see below)

3. Presence of a current refill for CALCIMIMETICS

CKD Stage 5 Validation

One of the following is correct:

1. Presence of at least 2 CKD STAGE 5 diagnosis in the past 12 months at least 3 months apart

2. All of the following are correct:

    a. Presence of at least 2 CKD – NOS diagnosis in the past 12 months at least 3 months apart

    b. Presence of at least 1 result for creatinine clearance between 0.1 And 14 in the past

    c. If patient age >/= 18 years

3. Presence of at least 2 DIALYSIS CHRONIC (CPT) procedure in the past 12 months

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

CKD Stage 5 Validation Exclusion

The following is correct:

Presence of at least 1 TRANSPLANT RENAL (CPT) procedure in the past 12 months

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

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

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-251-08 NQF Project: *National Voluntary Consensus Standards for Ambulatory Care Using Clinically Enriched Administrative Data*
	MEASURE SPECIFICATIONS & DESCRIPTIVE INFORMATION
1	*Information current as of (date- MM/DD/YY):* 06/25/09
2	*Title of Measure:* Chronic Kidney Disease - Lipid Profile Monitoring
3	**Brief description of measure [1]:** Percentage of patients with chronic kidney disease that have been screened for dyslipidemia with a lipid profile
4 (2a)	**Numerator Statement:** Patients that have claims for a lipid profile **Time Window:** 12 months **Numerator Details** (Definitions, codes with description): see attached
5 (2a)	**Denominator Statement:** All patients, ages 12 and older, diagnosed with chronic kidney disease **Time Window:** 12 months from claims, or up to anytime in the past for patient-derived information **Denominator Details** (Definitions, codes with description): see attached
6 (2a, 2d)	**Denominator Exclusions:** General exclusions: • Evidence of metastatic disease or active treatment of malignancy (chemotherapy or radiation therapy) in the last 6 months; • Patients who have been in a skilled nursing facility in the last 3 months **Denominator Exclusion Details** (Definitions, codes with description): see attached
7 (2a, 2h)	**Stratification** Do the measure specifications require the results to be stratified? No ► If "other" describe: **Identification of stratification variable(s):** **Stratification Details** (Definitions, codes with description):
8 (2a, 2e)	**Risk Adjustment** Does the measure require risk adjustment to account for differences in patient severity before the onset of care? No ► **If yes,** (select one) ► Is there a separate proprietary owner of the risk model? (select one) **Identify Risk Adjustment Variables:**

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

	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)**:** ICD9, CPT claims **Data dictionary/code table** attached ☒ **OR** Web page URL: **Data Quality** (2a) *Check all that apply* ☒ Data are captured from an authoritative/accurate source (e.g., lab values from laboratory personnel) ☒ Data are coded using recognized data standards ☒ Method of capturing data electronically fits the workflow of the authoritative source ☐ Data are available in EHRs ☐ Data are auditable
11 (2a, 4b)	**Data Source and Data Collection Methods** *Identifies the data source(s) necessary to implement the measure specifications. Check all that apply* ☐ Electronic Health/Medical Record ☐ Electronic Clinical Database, Name: ☐ Electronic Clinical Registry, Name: ☒ Electronic Claims ☐ Electronic Pharmacy data ☐ Electronic Lab data ☐ Electronic source – other, Describe: ☐ Paper Medical Record ☐ Standardized clinical instrument, Name: ☐ Standardized patient survey, Name: ☐ Standardized clinician survey, Name: ☐ Other, Describe: Instrument/survey attached ☐ **OR** Web page URL:
12 (2a)	**Sampling** *If measure is based on a sample, provide instructions and guidance on sample size.* **Minimum sample size:** **Instructions:**
13 (2a)	**Type of Measure:** Process ► If "Other", please describe: ► If part of a composite or paired with another measure, please identify composite or paired measure
14 (2a)	**Unit of Measurement/Analysis** (*Who or what is being measured*) *Check all that apply.* ☒ Can be measured at all levels ☐ Individual clinician (e.g., physician, nurse) ☐ Group of clinicians (e.g., facility department/unit, group practice) ☐ Facility (e.g., hospital, nursing home) ☐ Integrated delivery system ☐ Health plan ☐ Community/Population ☐ Other (*Please describe*):
15 (2a)	**Applicable Care Settings** *Check all that apply* ☐ Can be used in all healthcare settings ☒ Ambulatory Care (office/clinic) ☐ Behavioral Healthcare ☒ Community Healthcare ☒ Dialysis Facility ☐ Emergency Department ☐ EMS emergency medical services ☒ Health Plan ☐ Home Health ☐ Hospice ☐ Hospital ☐ Long term acute care hospital ☒ Nursing home/ Skilled Nursing Facility (SNF) ☐ Prescription Drug Plan ☐ Rehabilitation Facility ☐ Substance Use Treatment Program/Center ☐ Other (*Please describe*):
	IMPORTANCE TO MEASURE AND REPORT
	Note: This is a threshold criterion. If a measure is not judged to be sufficiently important to measure and report, it will not be evaluated against the remaining criteria.

16 (1a)	**Addresses a Specific National Priority Partners Goal** *Enter the numbers of the specific goals related to this measure (see list of goals on last page)*: 2.1,2.2,6.1
17 (1a)	**If not related to NPP goal, identify high impact aspect of healthcare** (select one) **Summary of Evidence:** **Citations[2] for Evidence:**
18 (1b)	**Opportunity for Improvement** *Provide evidence that demonstrates considerable variation, or overall poor performance, across providers.* **Summary of Evidence:** KDOQI Guidelines: The prevalence of dyslipidemias in patients with CKD is high (Tables 14, 15, 16, and 17). Dyslipidemias in hemodialysis patients are most often characterized by normal LDL, low HDL, and high triglycerides. From the published literature, it is difficult to discern the prevalence of dyslipidemia in hemodialysis patients, since most studies are relatively small and use varying definitions for dyslipidemia. Therefore, the Work Group examined the prevalence of dyslipidemia in a large cross-section of 1,047 hemodialysis patients in the Dialysis Morbidity and Mortality Study (Table 16). The definitions of the ATP III Guidelines, as well as those adopted in these guidelines, were used. According to ATP III definitions, only 20.2% of hemodialysis patients had normal lipid levels, ie, LDL <130 mg/dL (<3.36 mmol/L), HDL >40 mg/dL (>1.03 mmol/L), and triglycerides <150 mg/dL (<1.69 mmol/L). Using the definitions of the present guidelines, 61.1% would require treatment of a dyslipidemia; 55.7% would require treatment based on LDL 100 mg/dL (2.59 mmol/L), while another 5.4% with normal LDL would require treatment based on triglycerides 200 mg/dL (2.26 mmol/L) and non-HDL cholesterol 130 mg/dL (3.36 mmol/L) (Table 16). Lisbon Conference: Dyslipidemia should be managed according to existing guidelines for CKD patients (24). **Citations for Evidence:** National Kidney Foundation-K/DOQI Clinical Practice Guidelines for Managing Dyslipidemias in Chronic Kidney Disease. Am J Kidney Dis 2003;41(Suppl 3):S1-S91 A Report of the Lisbon Conference on the Care of the Kidney Transplant Recipient. Transplantation. A Report of the Lisbon Conference on the Care of the Kidney Transplant Recipient. 83(8) Supplement:S1-S22, April 27, 2007
19 (1b)	**Disparities** *Provide evidence that demonstrates disparity in care/outcomes related to the measure focus among populations.* **Summary of Evidence:** Several studies have documented disparities in the care of patients with chronic kidney disease based on race and ethnicity. This issue was recently reviewed in detail by Norris and Nissenson: "ESRD is one of the most dramatic examples of health disparities, with rates for minorities ranging from 1.5 to 4.0 times those of age-adjusted white counterparts, despite similar rates for the early stages of CKD." **Citations for evidence:** Norris K, Nissenson A: Race, gender, and socioeconomic disparities in CKD in the United States. J Am Soc Nephrol 19 : 1261 –1270, 2008
20 (1c)	**If measuring an Outcome** Describe relevance to the national health goal/priority, condition, population, and/or care being addressed: **If not measuring an outcome, provide evidence supporting this measure topic and grade the strength of the evidence** *Summarize the evidence (including citations to source) supporting the focus of the measure as follows:* • Intermediate outcome – evidence that the measured intermediate outcome (e.g., blood pressure, Hba1c) leads to improved health/avoidance of harm or cost/benefit. • Process – evidence that the measured clinical or administrative process leads to improved health/avoidance of harm and if the measure focus is on one step in a multi-step care process, it measures the step that has the

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

	greatest effect on improving the specified desired outcome(s). • Structure – evidence that the measured structure supports the consistent delivery of effective processes or access that lead to improved health/avoidance of harm or cost/benefit. • Patient experience – evidence that an association exists between the measure of patient experience of health care and the outcomes, values and preferences of individuals/ the public. • Access – evidence that an association exists between access to a health service and the outcomes of, or experience with, care. • Efficiency– demonstration of an association between the measured resource use and level of performance with respect to one or more of the other five IOM aims of quality. **Type of Evidence** *Check all that apply* ☒ Evidence-based guideline ☐ Quantitative research studies ☐ Meta-analysis ☐ Qualitative research studies ☐ Systematic synthesis of research ☐ Other (*Please describe*): **Overall Grade for Strength of the Evidence**[3] (*Use the USPSTF system, or if different, also describe how it relates to the USPSTF system)*: (B) It is recommended that clinicians routinely follow the guideline for eligible patients. There is moderate evidence that the practice improves net health outcomes. **Summary of Evidence** (*provide guideline information below*): There are no randomized, controlled, intervention trials testing the hypothesis that dyslipidemias cause ACVD in patients with CKD. However, in an observational study of 3,716 patients initiating treatment for Stage 5 CKD in 1996, the use of statins in 362 (9.7%) was independently associated with lower all-cause mortality and a reduction in CVD deaths during follow-up. Unfortunately, it is likely that the patients using statins had other favorable characteristics that were not accounted for in the adjusted analysis, but may have explained their reduced risk for CVD independent of their use of statins. Therefore, these study results are consistent with, but do not prove, the hypothesis that dyslipidemias contribute to ACVD in patients with CKD. The Evaluation of Dyslipidemias in CKD Measurements of total cholesterol, HDL, and triglycerides are readily available in most major clinical laboratories. The LDL that forms the foundation for treatment decisions in the ATP III Guidelines is generally calculated from total cholesterol, HDL, and triglycerides using the Friedewald formula. The ATP III Guidelines also recommend treatment of some dyslipidemias that may occur with normal or low LDL. These dyslipidemias—often seen in association with the metabolic, or insulin resistance syndrome (the syndrome of obesity, hypertension, insulin resistance, and hyperlipidemia) and characterized by increases in circulating lipoprotein remnants—can be most readily measured as non-HDL cholesterol, ie, total cholesterol minus HDL (Fig 6). All of the major treatment decisions for dyslipidemia in these guidelines, as in the ATP III Guidelines, are based on levels of triglycerides, LDL, and non-HDL cholesterol. **Citations for Evidence:** National Kidney Foundation-K/DOQI Clinical Practice Guidelines for Managing Dyslipidemias in Chronic Kidney Disease. Am J Kidney Dis 2003;41(Suppl 3):S1-S91
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:** National Kidney Foundation-K/DOQI Clinical Practice Guidelines for Managing Dyslipidemias in Chronic Kidney Disease. Am J Kidney Dis 2003;41(Suppl 3):S1-S91

[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.

	Specific guideline recommendation: The Frequency of Dyslipidemia Evaluation in CKD Many factors influence the prevalence of dyslipidemias in CKD. Changes in proteinuria, GFR, and treatment of CKD may alter lipoprotein levels. Therefore, it is prudent to evaluate dyslipidemias more often than is recommended in the general population. Lipoprotein levels may change during the first 3 months of hemodialysis, peritoneal dialysis, and kidney transplantation. On the other hand, waiting 3 months to measure the first lipid profile may needlessly delay effective treatment for patients who present with dyslipidemia. For patients whose lipid profile is normal at presentation, it is reasonable to repeat the lipid profile 3 months later, to confirm that the initial values were not low due to malnutrition or systemic disease. During the course of kidney disease treatment, lipid levels may change. Therefore, the Work Group recommends measuring subsequent levels at least annually. Reasons to repeat lipid measurements after 2–3 months include changes in kidney replacement therapy modality, treatment with diet or lipid-lowering agents, immunosuppressive agents that affect lipids (eg, prednisone, cyclosporine, or sirolimus) or other changes that may affect plasma lipids. **Guideline author's rating of strength of evidence** (*If different from USPSTF, also describe it and how it relates to USPSTF)*: (B) It is recommended that clinicians routinely follow the guideline for eligible patients. There is moderate evidence that the practice improves net health outcomes. **Rationale for using this guideline over others:** Nationally recognized guideline in nephrology
22 (1c)	**Controversy/Contradictory Evidence** *Summarize any areas of controversy, contradictory evidence, or contradictory guidelines and provide citations.* **Summary:** **Citations:**
23 (1)	**Briefly describe how this measure (as specified) will facilitate significant gains in healthcare quality related to the specific priority goals and quality problems identified above:** Patients with chronic kidney disease are at high risk for cardiovascular events. The detection of dyslipidemia allows for early treatment with statins, which may decrease this risk and reduce subsequent complications and costs.
	SCIENTIFIC ACCEPTABILITY OF MEASURE PROPERTIES
	Note: Testing and results should be summarized in this form. However, additional detail and reports may be submitted as supplemental information or provided as a web page URL. If a measure has not been tested, it is only potentially eligible for time-limited endorsement.
24	**Supplemental Testing Information:** attached ☐ **OR** Web page URL:
25 (2b)	**Reliability Testing** **Data/sample:** **Analytic Method:** **Testing Results:**
26 (2c)	**Validity Testing** **Data/sample:** **Analytic Method:** **Testing Results:**
27 (2d)	**Measure Exclusions** *Provide evidence to justify exclusion(s) and analysis of impact on measure results during testing.* **Summary of Evidence supporting exclusion(s):**

	Citations for Evidence: **Data/sample:** **Analytic Method:** **Testing Results:**
28 (2e)	**Risk Adjustment Testing** *Summarize the testing used to determine the need (or no need) for risk adjustment and the statistical performance of the risk adjustment method.* **Data/sample:** **Analytic Method:** **Testing Results:** ►**If outcome or resource use measure not risk adjusted, provide rationale:**
29 (2g)	**Testing comparability of results when more than 1 data method is specified** (*e.g., administrative claims or chart abstraction*) **Data/sample:** **Analytic Method:** **Results:**
30 (2f)	**Provide Measure Results from Testing or Current Use** Results from testing **Data/sample:** We measured a population of 459,196 commercially insured members. **Methods to identify statistically significant and practically/meaningfully differences in performance:** Compliance to the performance measure is measured using an analysis of the claims data; in this case looking for evidence of a lipid panel. In addition, where appropriate we analyze patient data collected either from the patient's PHR or during a disease management program. **Results:** We found that of the 1,956 members who satisfied the denominator, 1,481 were in the numerator, indicating a compliance rate of 76%.
31 (2h)	**Identification of Disparities** ►If measure is stratified by factors related to disparities (i.e. race/ethnicity, primary language, gender, SES, health literacy), **provide stratified results:** ►If disparities have been reported/identified, but measure is not specified to detect disparities, provide rationale:
	USABILITY
32 (3)	*Current Use In use If in use, how widely used Health plan or sytem ► If "other," please describe:* ☐ *Used in a public reporting initiative, name of initiative:* *Sample report attached* ☐ *OR Web page URL:*
33 (3a)	**Testing of Interpretability** (*Testing that demonstrates the results are understood by the potential users for public reporting and quality improvement*) **Data/sample:** Administrative claims database from health plans; lab results data **Methods:** The performance measure is similar in message to a clinical alert that has been operational since 2004. Compliance to the clinical alert is measured using an analysis of subsequent claims, in this case the appearance of claims for a lipid profile. In addition, a feedback tool accompanies every clinical

	alert message, and includes options indicating agreement or disagreement with the message. **Results:** In practice, fewer than 1% of the respondents disagreed with the medical literature, and 20% show objective evidence of compliance.
34 (3b, 3c)	**Relation to other NQF-endorsed™ measures** ►Is this measure similar or related to measure(s) already endorsed by NQF (on the same topic or the same target population)? *Measures can be found at www.qualityforum.org under Core Documents.* *Check all that apply* ☐ Have not looked at other NQF measures ☐ Other measure(s) on same topic ☐ Other measure(s) for same target population ☒ No similar or related measures **Name of similar or related NQF-endorsed™ measure(s):** **Are the measure specifications harmonized with existing NQF-endorsed™ measures?** (select one) ►If not fully harmonized, provide rationale: **Describe the distinctive, improved, or additive value this measure provides to existing NQF-endorsed measures:**
	FEASIBILITY
35 (4a)	*How are the required data elements generated? Check all that apply* ☒ *Data elements are generated concurrent with and as a byproduct of care processes during care delivery (e.g., blood pressure or other assessment recorded by personnel conducting the assessment)* ☐ *Data elements are generated from a patient survey (e.g., CAHPS)* ☒ *Data elements are generated through coding performed by someone other than the person who obtained the original information (e.g., DRG or ICD-9 coding on claims)* ☒ *Other, Please describe: Data obtained through electronic personal health records and telephonic, nurse-driven disease management programs*
36 (4b)	*Electronic Sources All data elements* ►*If all data elements are not in electronic sources, specify the near-term path to electronic collection by most providers:* ►*Specify the data elements for the electronic health record:*
37 (4c)	*Do the specified exclusions require additional data sources beyond what is required for the other specifications? No* ►*If yes, provide justification:*
38 (4d)	*Identify susceptibility to inaccuracies, errors, or unintended consequences of the measure:* *Generally, the use of claims data has inherent errors and inaccuracies related to incorrect coding, or missing data, which can result in less specificity in the definition of denominator and /or the numerator. To minimize these errors and inaccuracies, we use clinically enriched data (laboratory results, medication lists) to augment the claims data. In addition where possible, to corroborate the claims data, we solicit feedback from both providers via a feedback form and patients from a personal health record or from a disease management program.* *We do not anticipate significant unintended consequences from the implementation of the measure. Our measures are all developed from evidence-based literature or from clinical guidelines and are designed to encourage appropriate care of the patient* *Describe how could these potential problems be audited: The inclusion of patient-derived data from a personal health record or through a disease management program may be used to confirm the presence or absence of a medication; ultimately the data sources may be tested against a sample of medical charts.* *Did you audit for these potential problems during testing? No If yes, provide results:*

39 (4e)	*Testing feasibility* *Describe what have you learned/modified as a result of testing and/or operational use of the measure regarding data collection, availability of data/missing data, timing/frequency of data collection, patient confidentiality, time/cost of data collection, other feasibility/ implementation issues:* *Multiple sources of corroborating clinical data are necessary to correctly identify patients in the denominator. Earlier testing efforts using specifications similar to HEDIS were more sensitive yet nonspecific. The additional of supporting information for certain diagnostic conditions (e.g., diabetic medications and supplies in addition to ICD9 codes for diabetes) significantly decreased the number identified in the denominator, yet the analysis led to a much higher compliance rate, likely because of the exclusion of fewer false positives in the denominator.*
	CONTACT INFORMATION
40	*Web Page URL for Measure Information* *Describe where users (implementers) should go for more details on specifications of measures, or assistance in implementing the measure.* *Web page URL: www.activehealth.net*
41	**Measure Intellectual Property Agreement Owner Point of Contact** **First Name:** Madhavi **MI:** **Last Name:** Vemireddy **Credentials (MD, MPH, etc.):** MD **Organization:** ActiveHealth Management **Street Address:** 102 Madison Avenue **City:** New York **State:** NY **ZIP:** 10016 **Email:** mvemireddy@activehealth.net **Telephone:** 212-651-8200 ext:
42	**Measure Submission Point of Contact** **If different than IP Owner Contact** **First Name:** **MI:** **Last Name:** **Credentials (MD, MPH, etc.):** **Organization:** **Street Address:** **City:** **State:** **ZIP:** **Email:** **Telephone:** ext:
43	**Measure Developer Point of Contact** **If different than IP Owner Contact** **First Name:** **MI:** **Last Name:** **Credentials (MD, MPH, etc.):** **Organization:** **Street Address:** **City:** **State:** **ZIP:** **Email:** **Telephone:** ext:
44	**Measure Steward Point of Contact** **If different than IP Owner Contact** *Identifies the organization that will take responsibility for updating the measure and assuring it is consistent with the scientific evidence and current coding schema; the steward of the measure may be different than the developer.* **First Name:** **MI:** **Last Name:** **Credentials (MD, MPH, etc.):** **Organization:** **Street Address:** **City:** **State:** **ZIP:** **Email:** **Telephone:** ext
	ADDITIONAL INFORMATION
45	**Workgroup/Expert Panel involved in measure development** No workgroup or panel used ►If workgroup used, describe the members' role in measure development: ►Provide a list of workgroup/panel members' names and organizations:
46	*Measure Developer/Steward Updates and Ongoing Maintenance* *Year the measure was first released: 2004* *Month and Year of most recent revision: 8/2008* *What is the frequency for review/update of this measure? Biennially* *When is the next scheduled review/update for this measure? 2010*
47	**Copyright statement/disclaimers:** This information, including any attachments hereto, is the sole, exclusive, proprietary and confidential property of Active Health Management, Inc., and is for the exclusive use of The National Quality Forum. Any use, copying, disclosure, dissemination or distribution by anyone other than the National Quality Forum is strictly prohibited.
48	**Additional Information:**

49	**I have checked that the submission is complete and any blank fields indicate that no information is provided.** ☒
50	**Date of Submission** (*MM/DD/YY*)**:** 02/09/09

PATIENT & FAMILY ENGAGEMENT

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

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

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

POPULATION HEALTH

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

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

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

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

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

SAFETY

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

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

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

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

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

PALLIATIVE CARE

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

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

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

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

CARE COORDINATION

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

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

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

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

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

PATIENT-FOCUSED CARE

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

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

OVERUSE

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

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

PERFORMANCE MEASURE RULE:
Chronic Kidney Disease – Lipid Profile Monitoring

DENOMINATOR

All of the Following are correct:

1. If Patient Age >= 12 years

2. One of the Following is correct:

    a. CKD Any Stage Validation is Confirmed for the member (see below)

    b. Presence of at least 1 TRANSPLANT RENAL (CPT) procedure in the past 3 years

NUMERATOR

1. Denominator is true

2. One of the following is true:

    a. Lipid Panel Monitoring 15 Month Validation is confirmed for the member (see below)

    b. Feedback LDL Monitoring Feedback Test Performed 12 months

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CKD Any Stage Validation

One of the Following is correct:

1. Presence of at least 2 CKD - ALL STAGES diagnosis in the past 12 months at least 3 months apart

2. Presence of patient data confirming CHRONIC KIDNEY DISEASE in the past

3. Presence of At Least 2 TRANSPLANT RENAL (ICD-9) Diagnosis in the past

4. Presence of At Least 1 TRANSPLANT RENAL (CPT) Procedure in the past

5. Presence of At Least 2 NEPHROTIC SYNDROME Diagnosis in the past at least 3 months apart

6. Presence of At Least 1 DIALYSIS CHRONIC (CPT) Procedure in the past

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Lipid Panel Monitoring 15 Months

One of the following is correct:

1. All of the following are correct:
    a. Presence of at least 1 TRIGLYCERIDES VALUE lab result in the past 15 months
    b. Presence of at least 1 HDL MONITORING lab result in the past 15 months
    c. Presence of at least 1 CHOLESTEROL TOTAL MONITORING labs result in the past 15 months
2. Presence of at least 1 LIPID PANEL (CPT) Procedure In the past 15 months
3. Presence of At Least 1 LIPID PANEL (LOINC) lab result in the past 15 months
4. Presence of At Least 1 LDL MONITORING lab result in the past 15 months
5. Presence of patient data confirming LDL 12 MOS OBS in the past 12 months
6. Presence of at least 1 HYPERLIPIDEMIA diagnosis in the past 15 months
7. Presence of patient data confirming PDD- LDL VALUE in the past 12 months
8. All of the following are correct:
    a. Presence of patient data confirming PDD- TOTAL CHOLESTEROL VALUE in the past 12 months
    b. Presence of patient data confirming PDD- HDL VALUE in the past 12 months
    c. Presence of patient data confirming PDD- TRIGLYCERIDE VALUE in the past 12 months

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

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

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-252-08* NQF Project: *National Voluntary Consensus Standards for Ambulatory Care Using Clinically Enriched Administrative Data*
	MEASURE SPECIFICATIONS & DESCRIPTIVE INFORMATION
1	*Information current as of (date- MM/DD/YY): 06/15/09*
2	*Title of Measure: Chronic Kidney Disease with LDL Greater than or equal to 130 – Use of Lipid Lowering Agent*
3	**Brief description of measure [1]:** Percentage of patients with chronic kidney disease and an LDL greater than or equal to 130mg/dl that have a current refill for a lipid lowering agent
4 (2a)	**Numerator Statement:** Patients with a current refill for a lipid lowering agent **Time Window:** A drug day-supply that extends within 30 days of the measurement date **Numerator Details** (Definitions, codes with description): see attached
5 (2a)	**Denominator Statement:** All patients, ages 18 and older, diagnosed with chronic kidney disease as defined by CKD stage 5, dialysis or kidney transplant claims, and an LDL level above 130 mg/dL. **Time Window:** 12 months from claims, or up to anytime in the past for patient-derived information **Denominator Details** (Definitions, codes with description): see attached
6 (2a, 2d)	**Denominator Exclusions:** SGOT or SGPT > 150; CPK > 500 General exclusions: • Evidence of metastatic disease or active treatment of malignancy (chemotherapy or radiation therapy) in the last 6 months; • Patients who have been in a skilled nursing facility in the last 3 months • Patient or provider feedback indicating allergy or intolerance to the drug in the past • Patient or provider feedback indicating that there is a contraindication to adding the drug **Denominator Exclusion Details** (Definitions, codes with description): see attached
7 (2a, 2h)	**Stratification** Do the measure specifications require the results to be stratified? No ► If "other" describe: **Identification of stratification variable(s):** **Stratification Details** (Definitions, codes with description):
8	**Risk Adjustment** Does the measure require risk adjustment to account for differences in patient

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

(2a, 2e)	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)**:** ICD9, CPT, pharmacy claims, lab values **Data dictionary/code table** attached ☒ **OR** Web page URL: **Data Quality** (2a) *Check all that apply* ☒ Data are captured from an authoritative/accurate source (e.g., lab values from laboratory personnel) ☒ Data are coded using recognized data standards ☒ Method of capturing data electronically fits the workflow of the authoritative source ☐ Data are available in EHRs ☐ Data are auditable
11 (2a, 4b)	**Data Source and Data Collection Methods** *Identifies the data source(s) necessary to implement the measure specifications. Check all that apply* ☐ Electronic Health/Medical Record ☐ Electronic Clinical Database, Name: ☐ Electronic Clinical Registry, Name: ☒ Electronic Claims ☒ Electronic Pharmacy data ☒ Electronic Lab data ☐ Electronic source – other, Describe: ☐ Paper Medical Record ☐ Standardized clinical instrument, Name: ☐ Standardized patient survey, Name: ☐ Standardized clinician survey, Name: ☐ Other, Describe: Instrument/survey attached ☐ **OR** Web page URL:
12 (2a)	**Sampling** *If measure is based on a sample, provide instructions and guidance on sample size.* **Minimum sample size:** **Instructions:**
13 (2a)	**Type of Measure:** Process ► If "Other", please describe: ► If part of a composite or paired with another measure, please identify composite or paired measure
14 (2a)	**Unit of Measurement/Analysis** (*Who or what is being measured*) *Check all that apply.* ☒ Can be measured at all levels ☐ Individual clinician (e.g., physician, nurse) ☐ Group of clinicians (e.g., facility department/unit, group practice) ☐ Facility (e.g., hospital, nursing home) ☐ Integrated delivery system ☐ Health plan ☐ Community/Population ☐ Other (*Please describe*):
15 (2a)	**Applicable Care Settings** *Check all that apply* ☐ Can be used in all healthcare settings ☒ Ambulatory Care (office/clinic) ☐ Behavioral Healthcare ☒ Community Healthcare ☒ Dialysis Facility ☐ Emergency Department ☐ EMS emergency medical services ☒ Health Plan ☐ Home Health ☐ Hospice ☐ Hospital ☐ Long term acute care hospital ☒ Nursing home/ Skilled Nursing Facility (SNF) ☐ Prescription Drug Plan ☐ Rehabilitation Facility ☐ Substance Use Treatment Program/Center ☐ Other (*Please describe*):

	IMPORTANCE TO MEASURE AND REPORT
	Note: This is a threshold criterion. If a measure is not judged to be sufficiently important to measure and report, it will not be evaluated against the remaining criteria.
16 (1a)	**Addresses a Specific National Priority Partners Goal** *Enter the numbers of the specific goals related to this measure (see list of goals on last page)*: 2.1,2.2,6.1
17 (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:** KDOQI Guidelines: The prevalence of dyslipidemias in patients with CKD is high (Tables 14, 15, 16, and 17). Dyslipidemias in hemodialysis patients are most often characterized by normal LDL, low HDL, and high triglycerides. From the published literature, it is difficult to discern the prevalence of dyslipidemia in hemodialysis patients, since most studies are relatively small and use varying definitions for dyslipidemia. Therefore, the Work Group examined the prevalence of dyslipidemia in a large cross-section of 1,047 hemodialysis patients in the Dialysis Morbidity and Mortality Study (Table 16). The definitions of the ATP III Guidelines, as well as those adopted in these guidelines, were used. According to ATP III definitions, only 20.2% of hemodialysis patients had normal lipid levels, ie, LDL <130 mg/dL (<3.36 mmol/L), HDL >40 mg/dL (>1.03 mmol/L), and triglycerides <150 mg/dL (<1.69 mmol/L). Using the definitions of the present guidelines, 61.1% would require treatment of a dyslipidemia; 55.7% would require treatment based on LDL 100 mg/dL (2.59 mmol/L), while another 5.4% with normal LDL would require treatment based on triglycerides 200 mg/dL (2.26 mmol/L) and non-HDL cholesterol 130 mg/dL (3.36 mmol/L) (Table 16). Lisbon Conference: Dyslipidemia should be managed according to existing guidelines for CKD patients (24). **Citations for Evidence:** National Kidney Foundation-K/DOQI Clinical Practice Guidelines for Managing Dyslipidemias in Chronic Kidney Disease. Am J Kidney Dis 2003;41(Suppl 3):S1-S91 A Report of the Lisbon Conference on the Care of the Kidney Transplant Recipient. Transplantation. A Report of the Lisbon Conference on the Care of the Kidney Transplant Recipient. 83(8) Supplement:S1-S22, April 27, 2007
19 (1b)	**Disparities** *Provide evidence that demonstrates disparity in care/outcomes related to the measure focus among populations.* **Summary of Evidence:** Several studies have documented disparities in the care of patients with chronic kidney disease based on race and ethnicity. This issue was recently reviewed in detail by Norris and Nissenson: "ESRD is one of the most dramatic examples of health disparities, with rates for minorities ranging from 1.5 to 4.0 times those of age-adjusted white counterparts, despite similar rates for the early stages of CKD." **Citations for evidence:** Norris K, Nissenson A: Race, gender, and socioeconomic disparities in CKD in the United States. J Am Soc Nephrol 19 : 1261 –1270, 2008
20 (1c)	**If measuring an Outcome** Describe relevance to the national health goal/priority, condition, population, and/or care being addressed: **If not measuring an outcome, provide evidence supporting this measure topic and grade the strength of the evidence** *Summarize the evidence (including citations to source) supporting the focus of the measure as follows:* • Intermediate outcome – evidence that the measured intermediate outcome (e.g., blood pressure,

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

	Hba1c) leads to improved health/avoidance of harm or cost/benefit. • Process – evidence that the measured clinical or administrative process leads to improved health/avoidance of harm and if the measure focus is on one step in a multi-step care process, it measures the step that has the greatest effect on improving the specified desired outcome(s). • Structure – evidence that the measured structure supports the consistent delivery of effective processes or access that lead to improved health/avoidance of harm or cost/benefit. • Patient experience – evidence that an association exists between the measure of patient experience of health care and the outcomes, values and preferences of individuals/ the public. • Access – evidence that an association exists between access to a health service and the outcomes of, or experience with, care. • Efficiency– demonstration of an association between the measured resource use and level of performance with respect to one or more of the other five IOM aims of quality. **Type of Evidence** *Check all that apply* ☒ Evidence-based guideline ☐ Quantitative research studies ☐ Meta-analysis ☐ Qualitative research studies ☐ Systematic synthesis of research ☐ Other (*Please describe*): **Overall Grade for Strength of the Evidence**[3] (*Use the USPSTF system, or if different, also describe how it relates to the USPSTF system)*: (B) It is recommended that clinicians routinely follow the guideline for eligible patients. There is moderate evidence that the practice improves net health outcomes. **Summary of Evidence** (*provide guideline information below*)**:** There is strong evidence from studies in the general population that statins reduce CHD events and all-cause mortality. The reduction in mortality and in CHD events is proportional to the reduction in LDL. The literature search identified only 2 small, controlled trials of simvastatin in hemodialysis patients (Table 27), and only 2 randomized trials demonstrating the efficacy of statins in peritoneal dialysis patients (Table 28). There is substantial evidence that statins are safe and effective in reducing LDL in kidney transplant recipients (Table 29). In the absence of strong evidence to the contrary, it is reasonable to assume that statins will reduce LDL and thereby ACVD in most patients with CKD. Statins are clearly the most effective class of anti-lipemic agents for reducing LDL. **Citations for Evidence:** National Kidney Foundation-K/DOQI Clinical Practice Guidelines for Managing Dyslipidemias in Chronic Kidney Disease. Am J Kidney Dis 2003;41(Suppl 3):S1-S91
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:** National Kidney Foundation-K/DOQI Clinical Practice Guidelines for Managing Dyslipidemias in Chronic Kidney Disease. Am J Kidney Dis 2003;41(Suppl 3):S1-S91 **Specific guideline recommendation:** The reduction in LDL that can be achieved with TLC is generally modest. Therefore, TLC alone is usually insufficient to reduce the LDL to the goal of <100 mg/dL (<2.59 mmol/L). In patients who cannot reduce LDL to <100 mg/dL (<2.59 mmol/L) by diet, a statin (3-hydroxy-3-methylglutaryl co-enzyme A reductase inhibitor) should be added, provided that there is no evidence of acute or chronic liver disease. Diet should be continued as an adjunct to the statin. The dose of statin needed to reach the goal of LDL <100 mg/dL (<2.59 mmol/L) varies from patient to patient. Therefore, starting at a low dose and titrating the dose upwards is the best strategy for finding the lowest dose that

[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.

	achieves the goal. This approach will also minimize the frequency and severity of adverse effects. Statins reduced LDL by 18% to 55% in studies in the general population (Fig 9). Statins that are currently approved for use in the United States include atorvastatin, fluvastatin, lovastatin, pravastatin, and simvastatin. **Guideline author's rating of strength of evidence** (*If different from USPSTF, also describe it and how it relates to USPSTF)*: (B) It is recommended that clinicians routinely follow the guideline for eligible patients. There is moderate evidence that the practice improves net health outcomes. **Rationale for using this guideline over others:** Nationally recognized guideline in nephrology
22 (1c)	**Controversy/Contradictory Evidence** *Summarize any areas of controversy, contradictory evidence, or contradictory guidelines and provide citations.* **Summary:** The results of recent randomized trials in hemodialysis patients with diabetes (4D, 2005) and without (AURORA, 2009) did not show a statistically significant benefit of statins in reducing cardiovascular outcomes, although in the 4D trial there was a positive trend. The reasons for this negative finding despite the wealth of prior, positive data remain unclear. It has been hypothesized that the patients enrolled may have been too advanced in their disease, or that the studies have been inadequately powered. There are ongoing trials to clarify this issue. **Citations:** Fellstrom, B, Jardine, A, Schmieder, R, et al. Rosuvastatin and Cardiovascular Events in Patients Undergoing Hemodialysis. N Engl J Med 2009 360: 1395-1407 Wanner C, Krane V, März W, et al. Atorvastatin in patients with type 2 diabetes mellitus undergoing hemodialysis. N Engl J Med 2005;353:238-248 Nogueira, J., Weir, M. (2007). The Unique Character of Cardiovascular Disease in Chronic Kidney Disease and Its Implications for Treatment with Lipid-Lowering Drugs. CJASN 2: 766-785
23 (1)	**Briefly describe how this measure (as specified) will facilitate significant gains in healthcare quality related to the specific priority goals and quality problems identified above:** Patients with chronic kidney disease are at high risk for cardiovascular events. The increased use of statins in these patients with hyperlipidemia may decrease this risk and reduce subsequent complications and costs.
	SCIENTIFIC ACCEPTABILITY OF MEASURE PROPERTIES
	Note: Testing and results should be summarized in this form. However, additional detail and reports may be submitted as supplemental information or provided as a web page URL. If a measure has not been tested, it is only potentially eligible for time-limited endorsement.
24	**Supplemental Testing Information:** attached ☐ **OR** Web page URL:
25 (2b)	**Reliability Testing** **Data/sample:** **Analytic Method:** **Testing Results:**
26 (2c)	**Validity Testing** **Data/sample:** **Analytic Method:** **Testing Results:**
27 (2d)	**Measure Exclusions** *Provide evidence to justify exclusion(s) and analysis of impact on measure results during testing.* **Summary of Evidence supporting exclusion(s):** **Citations for Evidence:**

	Data/sample: **Analytic Method:** **Testing Results:**
28 (2e)	**Risk Adjustment Testing** *Summarize the testing used to determine the need (or no need) for risk adjustment and the statistical performance of the risk adjustment method.* **Data/sample:** **Analytic Method:** **Testing Results:** ►**If outcome or resource use measure not risk adjusted, provide rationale:**
29 (2g)	**Testing comparability of results when more than 1 data method is specified** (*e.g., administrative claims or chart abstraction*) **Data/sample:** **Analytic Method:** **Results:**
30 (2f)	**Provide Measure Results from Testing or Current Use** Results from testing **Data/sample:** We measured a population of 459,196 commercially insured members. **Methods to identify statistically significant and practically/meaningfully differences in performance:** Compliance to the performance measure is measured using an analysis of the claims data; in this case looking for evidence of a lipid lowering agent. In addition, where appropriate we analyze patient data collected either from the patient's PHR or during a disease management program. **Results:** A similar measure for atherosclerotic disease found that of the 35 members who satisfied the denominator, 26 were in the numerator, indicating a compliance rate of 74%.
31 (2h)	**Identification of Disparities** ►If measure is stratified by factors related to disparities (i.e. race/ethnicity, primary language, gender, SES, health literacy), **provide stratified results:** ►If disparities have been reported/identified, but measure is not specified to detect disparities, provide rationale:
	USABILITY
32 (3)	*Current Use In use* *If in use, how widely used Health plan or sytem* ► *If "other," please describe:* ☐ *Used in a public reporting initiative, name of initiative:* *Sample report attached* ☐ *OR Web page URL:*
33 (3a)	**Testing of Interpretability** (*Testing that demonstrates the results are understood by the potential users for public reporting and quality improvement*) **Data/sample:** Administrative claims database from health plans; lab results data; patient derived data. **Methods:** The performance measure is similar in message to a clinical alert that has been operational since 2004. Compliance to the clinical alert is measured using an analysis of subsequent claims, in this case the appearance of pharmacy claims for a statin. In addition, a feedback tool accompanies every clinical alert message, and includes options indicating agreement or disagreement with the message.

	Results: In practice, fewer than 1% of the respondents disagreed with the medical literature, and more than (use the percentage form the CAR success) 31% show objective evidence of compliance with the clinical alert.
34 (3b, 3c)	**Relation to other NQF-endorsed™ measures** ►Is this measure similar or related to measure(s) already endorsed by NQF (on the same topic or the same target population)? *Measures can be found at www.qualityforum.org under Core Documents.* *Check all that apply* ☐ Have not looked at other NQF measures ☐ Other measure(s) on same topic ☐ Other measure(s) for same target population ☒ No similar or related measures **Name of similar or related NQF-endorsed™ measure(s):** **Are the measure specifications harmonized with existing NQF-endorsed™ measures?** (select one) ►If not fully harmonized, provide rationale: **Describe the distinctive, improved, or additive value this measure provides to existing NQF-endorsed measures:**
	FEASIBILITY
35 (4a)	*How are the required data elements generated? Check all that apply* ☒ *Data elements are generated concurrent with and as a byproduct of care processes during care delivery (e.g., blood pressure or other assessment recorded by personnel conducting the assessment)* ☐ *Data elements are generated from a patient survey (e.g., CAHPS)* ☒ *Data elements are generated through coding performed by someone other than the person who obtained the original information (e.g., DRG or ICD-9 coding on claims)* ☒ *Other, Please describe: Data obtained through electronic personal health records and telephonic, nurse-driven disease management programs*
36 (4b)	*Electronic Sources All data elements* ►*If all data elements are not in electronic sources, specify the near-term path to electronic collection by most providers:* ►*Specify the data elements for the electronic health record:*
37 (4c)	*Do the specified exclusions require additional data sources beyond what is required for the other specifications? No* ►*If yes, provide justification:*
38 (4d)	*Identify susceptibility to inaccuracies, errors, or unintended consequences of the measure:* *Generally, the use of claims data has inherent errors and inaccuracies related to incorrect coding, or missing data, which can result in less specificity in the definition of denominator and /or the numerator. To minimize these errors and inaccuracies, we use clinically enriched data (laboratory results, medication lists) to augment the claims data. In addition where possible, to corroborate the claims data, we solicit feedback from both providers via a feedback form and patients from a personal health record or from a disease management program.* *We do not anticipate significant unintended consequences from the implementation of the measure. Our measures are all developed from evidence-based literature or from clinical guidelines and are designed to encourage appropriate care of the patient.* *Describe how could these potential problems be audited: The inclusion of patient-derived data from a personal health record or through a disease management program may be used to confirm the presence or absence of a medication; ultimately the data sources may be tested against a sample of medical charts.* *Did you audit for these potential problems during testing? No If yes, provide results:*

39 (4e)	*Testing feasibility* *Describe what have you learned/modified as a result of testing and/or operational use of the measure regarding data collection, availability of data/missing data, timing/frequency of data collection, patient confidentiality, time/cost of data collection, other feasibility/ implementation issues:* *Multiple sources of corroborating clinical data are necessary to correctly identify patients in the denominator. Earlier testing efforts using specifications similar to HEDIS were more sensitive yet nonspecific. The additional of supporting information for certain diagnostic conditions (e.g., diabetic medications and supplies in addition to ICD9 codes for diabetes) significantly decreased the number identified in the denominator, yet the analysis led to a much higher compliance rate, likely because of the exclusion of fewer false positives in the denominator.*
	CONTACT INFORMATION
40	*Web Page URL for Measure Information* *Describe where users (implementers) should go for more details on specifications of measures, or assistance in implementing the measure.* *Web page URL: www.activehealth.net*
41	**Measure Intellectual Property Agreement Owner Point of Contact** **First Name:** Madhavi **MI:** **Last Name:** Vemireddy **Credentials (MD, MPH, etc.):** MD **Organization:** ActiveHealth Management **Street Address:** 102 Madison Avenue **City:** New York **State:** NY **ZIP:** 10016 **Email:** mvemireddy@activehealth.net **Telephone:** 212-651-8200 ext:
42	**Measure Submission Point of Contact** **If different than IP Owner Contact** **First Name:** **MI:** **Last Name:** **Credentials (MD, MPH, etc.):** **Organization:** **Street Address:** **City:** **State:** **ZIP:** **Email:** **Telephone:** ext:
43	**Measure Developer Point of Contact** **If different than IP Owner Contact** **First Name:** **MI:** **Last Name:** **Credentials (MD, MPH, etc.):** **Organization:** **Street Address:** **City:** **State:** **ZIP:** **Email:** **Telephone:** ext:
44	**Measure Steward Point of Contact** **If different than IP Owner Contact** *Identifies the organization that will take responsibility for updating the measure and assuring it is consistent with the scientific evidence and current coding schema; the steward of the measure may be different than the developer.* **First Name:** **MI:** **Last Name:** **Credentials (MD, MPH, etc.):** **Organization:** **Street Address:** **City:** **State:** **ZIP:** **Email:** **Telephone:** ext
	ADDITIONAL INFORMATION
45	**Workgroup/Expert Panel involved in measure development** No workgroup or panel used ►If workgroup used, describe the members' role in measure development: ►Provide a list of workgroup/panel members' names and organizations:
46	*Measure Developer/Steward Updates and Ongoing Maintenance* *Year the measure was first released: 5/2004* *Month and Year of most recent revision: 6/2008* *What is the frequency for review/update of this measure? Biennially* *When is the next scheduled review/update for this measure? 2010*
47	**Copyright statement/disclaimers:** This information, including any attachments hereto, is the sole, exclusive, proprietary and confidential property of Active Health Management, Inc., and is for the exclusive use of The National Quality Forum. Any use, copying, disclosure, dissemination or distribution by anyone other than the National Quality Forum is strictly prohibited.
48	**Additional Information:**

49	**I have checked that the submission is complete and any blank fields indicate that no information is provided.** ☒
50	**Date of Submission** (*MM/DD/YY*)**:** 02/09/09

PATIENT & FAMILY ENGAGEMENT

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

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

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

POPULATION HEALTH

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

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

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

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

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

SAFETY

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

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

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

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

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

PALLIATIVE CARE

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

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

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

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

CARE COORDINATION

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

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

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

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

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

PATIENT-FOCUSED CARE

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

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

OVERUSE

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

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

PERFORMANCE MEASURE RULE:
Chronic Kidney Disease with LDL Greater than or equal to 130 – Use of Lipid Lowering Agent

DENOMINATOR

All of the following are correct:

1. If patient age >= 18 years
2. Presence of at least 1 LDL VALUE >= 130 in the past 6 months
3. One of the Following is correct:
    a. CKD Stage 5 Validation is confirmed for the member (see below)
    b. Presence of At Least 1 TRANSPLANT RENAL (CPT) Procedure in the past 3 Years

DENOMINATOR EXCLUSIONS

One of the following is correct:

1. Presence of at least 1 CPK > 500 in the past 6 months
2. Presence of at least 1 SGOT (AST) > 150 in the past 6 months
3. Presence of at least 1 SGPT (ALT) > 150 in the past 6 months

NUMERATOR

1. Denominator is true
2. One of the following is correct:
    a. Presence of a current refill for LIPID LOWERING AGENTS
    b. Presence of patient data confirming at least 1 PDD- LIPID TREATMENT CHANGE in the past 6 months
    c. Feedback LLA Feedback Already Implemented

CKD Stage 5 Validation

One of the following is correct:

1. Presence of at least 2 CKD STAGE 5 diagnosis in the past 12 months at least 3 months apart

2. All of the following are correct:

    a. If patient age >/= 18 years

    b. Presence of at least 2 CKD – NOS diagnosis in the past 12 months at least 3 months apart

    c. Presence of at least 1 result for creatinine clearance between 0.1 And 14 in the past

3. Presence of at least 2 DIALYSIS CHRONIC (CPT) procedure in the past 12 months

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

CKD Stage 5 Validation Exclusion

The following is correct:

1. Presence of at least 1 TRANSPLANT RENAL (CPT) procedure in the past 12 months

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

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