National Voluntary Consensus Standards for Ambulatory Care—Measuring Healthcare Disparities
Foreword

All Americans should receive quality healthcare, regardless of their race, ethnicity, gender, insurance status, age, or any other characteristic. Unfortunately, the evidence is clear that many do not, and that vulnerable populations often receive poorer quality care. These disparities in care have been consistently and painstakingly documented, and the U.S. healthcare community has struggled to understand and rectify them, yet still they persist.

NQF has pursued a multistage, multiyear project to seek consensus on standardized measures of outpatient care performance measures, with the expectation that public reporting on these standardized measures will lead to quality improvement. As a distinct portion of this project, NQF has examined certain measures through the prism of disparities, because it is anticipated that uncovering and reporting disparities specifically in the ambulatory setting will drive significant quality improvement and, it is anticipated, close the disparities gap.

These measures have been carefully reviewed and endorsed by a diverse group of stakeholders pursuant to NQF’s formal Consensus Development Process, giving them the special legal status of voluntary consensus standards.

We thank the Robert Wood Johnson Foundation for its support of this project and for its recognition of the degree to which disparities plague the U.S. healthcare system. We also thank the multiple Steering Committees and their Technical Advisory Panels for their stewardship of this project, particularly the panel that advised NQF with relation to disparities, and NQF Members for their determination to tackle this most vexing of healthcare quality issues.

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President and Chief Executive Officer
National Voluntary Consensus Standards for Ambulatory Care—Measuring Healthcare Disparities

Table of Contents

Executive Summary ........................................................................................................ ii
Introduction .................................................................................................................... 1
Addressing Healthcare Disparities .............................................................................. 2
  Purpose ....................................................................................................................... 3
  Scope .......................................................................................................................... 3
  Defining Disparities Populations .............................................................................. 3
  Guiding Principles for Candidate Disparities-Sensitive Consensus Standards ......... 3

The NQF-Endorsed National Voluntary Consensus Standards for Ambulatory Care: Measuring Healthcare Disparities ......................................................... 4
  National Approach .................................................................................................. 5
  Local Approach ........................................................................................................ 6

Data Collection Burden and Unintended Consequences ............................................ 7
Recommendations ......................................................................................................... 8
Research Recommendations ....................................................................................... 15

Table 1. National Voluntary Consensus Standards for Ambulatory Care: Measuring Healthcare Disparities (National Approach) ......................................................... 17

Table 2. National Voluntary Consensus Standards for Ambulatory Care: Measuring Healthcare Disparities (Local Approach) .................................................................. 19
(continued)

Appendix A – Specifications of the National Voluntary Consensus Standards for Ambulatory Care: Measuring Healthcare Disparities (Local Approach) .... A-1
Appendix B – Members ................................................................................................................ B-1
Appendix C – Steering Committee, Technical Advisory Panel, and Project Staff ............ C-1
Appendix D – Commentary: Measuring Healthcare Disparities ............................................. D-1
Appendix E – Selected References .......................................................................................... E-1
Appendix F – Consensus Development Process: Summary .................................................... F-1
Executive Summary

All Americans should receive quality healthcare, regardless of race, ethnicity, age, socioeconomic status (SES), insurance status, or gender. Unfortunately, significant healthcare disparities based on these characteristics persist and in some cases are getting worse. Addressing issues of quality within vulnerable patient populations is the overarching and highest priority within each of the 23 National Quality Forum (NQF)-endorsed™ national priority areas for healthcare quality improvement.

Because patients in the United States receive most of their healthcare in ambulatory (outpatient) settings, with more than a billion visits to physician offices and hospital outpatient and emergency departments each year, uncovering healthcare disparities in ambulatory care settings could drive quality improvement to close the gap. Accordingly, the Robert Wood Johnson Foundation designated disparities as one of two additional priority areas for NQF’s “Ambulatory Care” project and asked NQF to examine the measures considered in that project through the lens of healthcare disparities.

The “Ambulatory Care” project is a multistage endeavor that seeks consensus on standardized measures of outpatient care performance measures and reporting. National Voluntary Standards for Ambulatory Care—Part 1 presented 101 consensus standards in the following 10 priority areas: asthma/respiratory illness; bone and joint conditions; diabetes; heart disease; hypertension; medication management; mental health and substance use disorders; obesity; prenatal care; and prevention, immunization, and screening. Part 1 also presented research recommendations for each of these areas as well as a definition and framework for measuring care coordination. The second volume
presents additional work addressing other aspects of ambulatory care, including patient experience with care and special settings of care.

In spring 2006, NQF convened a Technical Advisory Panel to engage in a systematic analysis to identify performance measures that highlight healthcare disparities and to develop a set of measures that is “disparities sensitive” and that is comprehensive and broadly applicable in ambulatory settings. Unlike many of the NQF-endorsed consensus standards that focus on practitioner- and practice-level accountability, the disparities-sensitive consensus standards encompass all levels of measurement, including practitioner practices, large and small groups, and health plans. This project also has included performance measures at the community level for the purposes of quality improvement.

This report does not represent the entire scope of NQF work relevant to the quality of ambulatory care. Regarding healthcare disparities specifically, NQF’s Improving Healthcare Quality for Minority Patients: Workshop Summary explored how measurement and reporting strategies can be used to improve healthcare quality for minority patients. The workgroup for this project—a group of experts from minority, consumer, advocacy, and community-based groups; academic, clinical, and research institutions; and policymaking and government agencies—concluded that better measurement and reporting are essential to improve healthcare quality for minority patients.

The measures and recommendations presented in this report can be applied nationally and locally to identify disparities-sensitive underperformance of the healthcare system so that targeted strategies can be developed to reduce disparities quickly. They represent a step toward integrating the reduction of healthcare disparities into the larger quality measurement and public reporting agenda.

### National Voluntary Consensus Standards for Ambulatory Care: Measuring Healthcare Disparities (National Approach)

<table>
<thead>
<tr>
<th>PRIORITY AREA</th>
<th>MEASURE TITLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asthma</td>
<td>Use of appropriate medications for people with asthma</td>
</tr>
<tr>
<td>Asthma</td>
<td>Asthma: pharmacologic therapy</td>
</tr>
<tr>
<td>Diabetes</td>
<td>HbA1c test for pediatric patients</td>
</tr>
<tr>
<td>Diabetes</td>
<td>Percentage of patients with at least one LDL-C test</td>
</tr>
<tr>
<td>Diabetes</td>
<td>Percentage of patients who received a dilated eye exam or seven standard field stereoscopic photos with interpretation by an ophthalmologist or optometrist or imaging validated to match diagnosis from these photos during the reporting year, or during the prior year, if patient is at low risk for retinopathy</td>
</tr>
<tr>
<td>Diabetes</td>
<td>Percentage of eligible patients receiving at least one foot exam</td>
</tr>
<tr>
<td>Diabetes</td>
<td>Percentage of patients with one or more A1c test(s)</td>
</tr>
<tr>
<td>Diabetes</td>
<td>Percentage of patients with most recent A1c level &gt;9.0% (poor control)</td>
</tr>
<tr>
<td>Diabetes</td>
<td>Percentage of patients with most recent blood pressure &lt;140/80 mm Hg</td>
</tr>
</tbody>
</table>

(more)
## National Voluntary Consensus Standards for Ambulatory Care: Measuring Healthcare Disparities (National Approach) (continued)

<table>
<thead>
<tr>
<th>PRIORITY AREA</th>
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</tr>
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<tr>
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<td>Percentage of patients with at least one test for microalbumin during the measurement year; or who had evidence of medical attention for existing nephropathy (diagnosis of nephropathy or documentation of microalbuminuria or albuminuria)</td>
</tr>
<tr>
<td>Heart disease</td>
<td>Coronary artery disease (CAD): angiotensin-converting enzyme inhibitor (ACE inhibitor)/angiotensin receptor blocker (ARB) therapy</td>
</tr>
<tr>
<td>Heart disease</td>
<td>CAD: beta blocker therapy—prior myocardial infarction</td>
</tr>
<tr>
<td>Heart disease</td>
<td>CAD: beta blocker treatment after a heart attack</td>
</tr>
<tr>
<td>Ischemic vascular disease (IVD): complete lipid profile and LDL control &lt;100</td>
<td>IVD: patients with a full lipid profile completed during the 12-month measurement period with date of each component of the profile documented; LDL-C &lt; 100</td>
</tr>
<tr>
<td>Heart disease</td>
<td>Heart failure–left ventricular function (LVF) assessment</td>
</tr>
<tr>
<td>Heart disease</td>
<td>Heart failure: ACE inhibitor/ARB therapy</td>
</tr>
<tr>
<td>Hypertension</td>
<td>Controlling high blood pressure</td>
</tr>
<tr>
<td>Medication management</td>
<td>Drugs to be avoided in the elderly</td>
</tr>
<tr>
<td>Mental health and substance use</td>
<td>Antidepressant medication management</td>
</tr>
<tr>
<td>Mental health and substance use</td>
<td>Initiation and engagement of alcohol and other drug dependence treatment</td>
</tr>
<tr>
<td>Prenatal care</td>
<td>Prenatal screening for HIV</td>
</tr>
<tr>
<td>Prenatal care</td>
<td>Prenatal anti-D immune globulin</td>
</tr>
<tr>
<td>Prenatal care</td>
<td>Prenatal blood group and type</td>
</tr>
<tr>
<td>Prenatal care</td>
<td>Prenatal D antibody testing</td>
</tr>
<tr>
<td>Immunization</td>
<td>Childhood immunization status</td>
</tr>
<tr>
<td>Immunization</td>
<td>Flu shots for adults ages 50 to 64</td>
</tr>
<tr>
<td>Immunization</td>
<td>Flu shot for older adults</td>
</tr>
<tr>
<td>Immunization</td>
<td>Pneumonia vaccination status for older adults</td>
</tr>
<tr>
<td>Screening</td>
<td>Breast cancer screening</td>
</tr>
<tr>
<td>Screening</td>
<td>Cervical cancer screening</td>
</tr>
<tr>
<td>Screening</td>
<td>Colorectal cancer screening</td>
</tr>
<tr>
<td>Prevention</td>
<td>Smoking cessation–medical assistance</td>
</tr>
<tr>
<td>Prevention</td>
<td>a. Advising smokers to quit</td>
</tr>
<tr>
<td>Prevention</td>
<td>b. Discussing smoking cessation medications</td>
</tr>
<tr>
<td>Prevention</td>
<td>c. Discussing smoking cessation strategies</td>
</tr>
<tr>
<td>Prevention</td>
<td>Measure pair</td>
</tr>
<tr>
<td>Prevention</td>
<td>a. Tobacco use assessment</td>
</tr>
<tr>
<td>Prevention</td>
<td>b. Tobacco cessation intervention</td>
</tr>
<tr>
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<td>Measure pair</td>
</tr>
<tr>
<td>Prevention</td>
<td>a. Tobacco use prevention for infants, children, and adolescents</td>
</tr>
<tr>
<td>Prevention</td>
<td>b. Tobacco use cessation for infants, children, and adolescents</td>
</tr>
<tr>
<td>Patient experience with care</td>
<td>Ambulatory Consumer Assessment of Healthcare Providers and Systems (ACAHP$^{\circ}$)</td>
</tr>
</tbody>
</table>
### National Voluntary Consensus Standards for Ambulatory Care: Measuring Healthcare Disparities (Local Approach)

<table>
<thead>
<tr>
<th>PQI</th>
<th>Condition</th>
</tr>
</thead>
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<tr>
<td>PQI 1</td>
<td>Diabetes, short-term complications</td>
</tr>
<tr>
<td>PQI 2</td>
<td>Perforated appendicitis</td>
</tr>
<tr>
<td>PQI 3</td>
<td>Diabetes, long-term complications</td>
</tr>
<tr>
<td>PQI 5</td>
<td>Chronic obstructive pulmonary disease</td>
</tr>
<tr>
<td>PQI 7</td>
<td>Hypertension</td>
</tr>
<tr>
<td>PQI 8</td>
<td>Congestive heart failure</td>
</tr>
<tr>
<td>PQI 9</td>
<td>Low birth weight</td>
</tr>
<tr>
<td>PQI 10</td>
<td>Dehydration</td>
</tr>
<tr>
<td>PQI 11</td>
<td>Bacterial pneumonia</td>
</tr>
<tr>
<td>PQI 12</td>
<td>Urinary infections</td>
</tr>
<tr>
<td>PQI 13</td>
<td>Angina without procedure</td>
</tr>
<tr>
<td>PQI 14</td>
<td>Uncontrolled diabetes</td>
</tr>
<tr>
<td>PQI 15</td>
<td>Adult asthma</td>
</tr>
<tr>
<td>PQI 16</td>
<td>Lower extremity amputations among patients with diabetes</td>
</tr>
</tbody>
</table>
National Voluntary Consensus Standards for Ambulatory Care—Measuring Healthcare Disparities

Introduction

All Americans should receive quality healthcare, regardless of their race, ethnicity, age, socioeconomic status (SES), insurance status, or gender. Unfortunately, significant disparities based on these characteristics persist, and in some cases they are getting worse.\(^1\) The 2001 Institute of Medicine (IOM) report, *Crossing the Quality Chasm,*\(^2\) identified eliminating disparities as one of the six overarching goals to improve the quality of the American healthcare system. In 2003, IOM published *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care.*\(^3\) This report assessed the extent to which racial and ethnic healthcare disparities in the United States can be directly attributed to race and ethnicity and not other known factors, such as access to care, insurance status, or ability to pay for care, and provided recommendations regarding the elimination of these disparities. In 2003, the Agency for Healthcare Research and Quality (AHRQ) published the first national comprehensive report that measured differences in access to and use of healthcare services by various populations in the United States. The results painted a stark picture of the disparate care delivered by the U.S. healthcare system. The 2006 *National Healthcare

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\(^1\) Disparity can be defined as “the condition or fact of being unequal, as in age, rank, or degree.”


Disparities Report found that for most core quality measures, blacks (73 percent), Hispanics (77 percent), and poor people (71 percent) received worse quality care than their reference groups. Additionally, for most measures increased disparities were seen in poor people (67 percent). Even more alarming, disparities were increasing and more prevalent in the area of chronic disease management.

Addressing issues of quality within vulnerable patient populations is the overarching highest priority within each of the 23 National Quality Forum (NQF)-endorsed™ national priority areas for healthcare quality improvement, and the Robert Wood Johnson Foundation (RWJF) has designated disparities as one of its two additional priority areas for the “Ambulatory Care” project.

In spring 2006, NQF convened an 18-member Technical Advisory Panel (TAP) to identify measures that highlight healthcare disparities and to develop a set of performance measures that is “disparities sensitive” and that is comprehensive and broadly applicable in ambulatory settings. The TAP formulated a series of recommendations and guiding principles for selecting measures to stratify by race, ethnicity, SES, primary language, and insurance status, and for data collection. It also formulated other recommendations for integrating the amelioration of healthcare disparities into the larger national quality agenda.

Addressing Healthcare Disparities

An NQF Steering Committee and the Healthcare Disparities TAP established the approach to evaluating potential consensus standards as “disparities sensitive.” This approach included defining a purpose, scope, guiding principles, and selection criteria for the performance measures and recommendations.

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Purpose
The purpose of this set of consensus standards is to outline a strategy that includes performance measures and recommendations that can be applied nationally and locally to identify disparities-sensitive underperformance of the healthcare system so that targeted strategies can be developed to reduce disparities quickly.

Scope
Unlike many of the NQF-endorsed consensus standards that focus on practitioner- and practice-level accountability, the disparities-sensitive consensus standards encompass all levels of measurement, including practitioner practices, large and small physician groups, and health plans. This project has also included performance measures at the community level for the purposes of quality improvement.

Defining Disparities Populations
The populations that are addressed by these consensus standards are as follows:
1) gender,
2) race/ethnicity,
3) SES,
4) primary language barriers, and
5) health insurance status.

Additional work will need to address other populations that experience healthcare disparities. These populations, which are just as important as the initial populations, include the elderly, people with cognitive or physical disabilities, people with chronic or multiple conditions, people who live in rural areas, children, and gay, lesbian, bisexual, and transgender persons.

Guiding Principles for Candidate Disparities-Sensitive Consensus Standards
The guiding principles that formed the basis of the evaluation for disparities-sensitive consensus standards include the following:

a. Prevalence
How prevalent is this disease or condition (targeted by the quality measures) in the disparity population?

b. Impact of the Condition
What is the impact of the condition (targeted by the quality measures) on the health of the disparity population—for example, mortality, quality of life, years of life lost, disability, stigma—relative to other conditions? Quality-adjusted life years is a useful metric (when available) for comparing the impact of different conditions. In addition, the strength of the evidence supporting the measure should be considered (whether it is based on the results of several randomized controlled trials, observational data, or expert opinion). Measures backed by stronger evidence merit greater priority. Another consideration is whether the number needed to treat (NNT) for the intervention is associated with the target condition and, if so, the timeframe needed to treat. The NNT, or the inverse of absolute risk reduction, is a convenient way of comparing the overall impact of different interventions. Ideally, these data should be derived from studies involving members of the disparity population, but it is recognized that providers must rely on studies from the overall population.
c. Impact of the Quality Process
How strong is the evidence linking improvement in the measure to improved outcomes (e.g., mortality, quality of life, years of life lost, and disability stigma) for any group, but particularly for members of disparity populations, when data are available? If the quality process is improved, what is the likely, relative impact on the healthcare outcomes for members of disparity populations? In other words, if the disparity gap was closed or quality reached a specified benchmark, how might the different measures compare in terms of impact on members of different disparity populations?

d. Quality Gap
How large is the gap in quality between the disparity population and the group with the highest quality for that measure? How large is the gap in quality between the disparity population and the benchmark? This is a key criterion because it provides the justification for stratification of quality measures for that disparity population. Measures associated with larger gaps merit greater priority.

e. Ease and Feasibility of Improving the Quality Process
The NQF measure evaluation process considers whether a measure is actionable. When there is evidence that a quality process can be improved for a healthcare disparity population, at a reasonable cost, this should be taken into consideration. The evidence addresses whether a process is not being performed as frequently as necessary to improve healthcare outcomes or whether an outcome can be affected positively by known processes (e.g., that all providers are not all performing in the 96 to 100 percent range and that an intervention exists to address the topic effectively).

The NQF-Endorsed National Voluntary Consensus Standards for Ambulatory Care: Measuring Healthcare Disparities

All measures evaluated during NQF’s “Ambulatory Care” project in 2006-2007 that were considered to be technically sound were reconsidered as potential disparities-sensitive performance measures. A review of the literature found that most of the topic areas addressed by the NQF-endorsed ambulatory care consensus standards have evidence of disparities for the process or outcome of care. For the remaining topic areas, the lack of evidence should not necessarily be construed as evidence that disparities do not exist. Because almost all of the NQF-endorsed ambulatory measures could be potentially appropriate as disparities-sensitive measures, it is important to establish a starter set of measures to encourage providers to begin stratifying measures by gender, race, ethnicity, SES, primary language, and insurance status. The starter set can serve as a catalyst to encourage providers to stratify the measures and take a closer look at the disparate care that may be prevalent in their community. The guiding principles can be used to determine a reasonable set of disparities-sensitive measures for a given population at the national or local level.
National Approach

For the nation to measure and monitor the performance of the healthcare system in reducing disparities, a national set of NQF-endorsed consensus standards that are disparities sensitive was identified using the guiding principles for disparities-sensitive consensus standards, as well as the following prioritization criteria:

1) the guiding principles were applied to the measure as an initial screening tool;
2) the consensus standard falls within an NQF-endorsed national priority area; and
3) there is evidence of a quality gap for disparity populations, based on data from the AHRQ 2006 National Healthcare Disparities Report and the published literature.

The national set of disparities-sensitive consensus standards for ambulatory care consists of 35 practitioner- and group-level performance measures in 8 priority areas (asthma, diabetes, heart disease, hypertension, medication management, mental health and substance use, prenatal care, and prevention, immunization, and screening) and 1 additional measure in the area of patient experience with care (see below). Using the national data reported in the National Healthcare Disparities Report helps to ensure that a disparity exists at the national level and thus that addressing it could contribute to affect widespread quality improvement.

Although there is evidence of disparities in all of the measure areas, this evidence was not present for every stratification variable (i.e., gender, race, ethnicity, SES, primary language, or insurance status). Providers implementing the starter set are encouraged to look at the national data and determine which of the data stratification variables are appropriate for collection. Providers are encouraged to stratify measures that are applicable to the populations they serve. Although these 35 measures are offered as a set, if additional performance measures outside of the set are applicable, providers are encouraged to stratify those measures.

Also, because of the importance of collecting and stratifying information about the patient’s experience with care, the
Ambulatory Consumer Assessment of Healthcare Providers and Systems (ACAHPS®) was added to the set. Vulnerable populations are disproportionately affected by problems in receiving patient-centered, culturally competent care. Using existing patient experience with care instruments (e.g., the NQF-endorsed ACAHPS measure) and analyzing the data stratified by gender, race, ethnicity, SES, primary language, and insurance status could provide a way to assess disparities involving patients’ perspectives on the care they receive. Additionally, this information could be used to formulate interventions to reduce such disparities.

These measures are intended for practitioner practice-level accountability, including public reporting. Table 1 presents brief descriptions of each measure; the specifications are available on the NQF web site and from the measure developer.

**Local Approach**

Different regions of the country serve patient populations that differ markedly by race, ethnicity, SES, insurance status, and primary language. Regions also differ in terms of the resources needed to address the needs of diverse populations. Disparities in healthcare quality also vary regionally. Thus, healthcare organizations and practitioners should not rely solely on the 35 core measures, but should adapt a subset of NQF-endorsed ambulatory care consensus standards that are relevant to the needs of their patient population. This subset should be determined by the provider, the populations served, and the health indicators of the communities they serve.

Fourteen AHRQ Prevention Quality Indicators (PQIs) were initially not included in the “Ambulatory Care” project, because they are community-level measures and not suitable for public reporting and accountability at the provider level. The AHRQ PQIs measure potentially avoidable hospitalizations for ambulatory care-sensitive conditions. The indicators rely on hospital discharge data and are intended to reflect issues of access to high-quality ambulatory care in a system of care. Because the indicators are meant to reflect access to high-quality ambulatory care, stratifying the data would allow providers to see the disparities in the care their collective
health systems are providing to the community and identify unmet needs. In particular, patients who are uninsured may not have ready access to care, and this may not be identified through performance measures based on health plan data. Thus, community-level measures will facilitate the inclusion of measures of uninsured patients’ access to primary care.

The disparities-sensitive consensus standards also include 14 AHRQ PQIs that measure potentially avoidable hospitalizations for ambulatory care-sensitive conditions. The indicators rely on hospital discharge data and are intended to reflect issues regarding access to high-quality ambulatory care in a system of care. As indicators of healthcare delivery in a community, the PQIs encourage healthcare providers to use community-level measures to assess the health of the areas in which they practice and obtain regional health information from where their patients reside. This information should be used to help determine which performance measures should be stratified by gender, race, ethnicity, SES, primary language, and insurance status. Healthcare providers can access state and national data for the AHRQ PQIs on the AHRQ web site, free of charge.7

Unfortunately, only one of the PQIs is applicable to pediatric populations (Low Birth Weight, 0 to 28 Days). However, five area-level AHRQ Pediatric Indicators can be considered for endorsement in the future:8

- Asthma admission rate (PDI 14)
- Diabetes short-term complication rate (PDI 15)
- Gastroenteritis admission rate (PDI 16)
- Perforated appendix admission rate (PDI 17)
- Urinary tract infection admission rate (PDI 18)

Data Collection Burden and Unintended Consequences

Collecting sensitive information such as gender, race, ethnicity, SES, primary language, and insurance status can lead to unintended or adverse consequences and can increase the data collection burden for providers. Some measures may penalize

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8 AHRQ, Pediatric Quality Indicators Overview. AHRQ Quality Indicators; February 2006.
safety net providers based on factors that are beyond their control or because the measures may be confounded by patient characteristics. The use of such measures could cause providers to select patients based on improving performance on quality measures. Steps should be taken to monitor changes in enrollment and disenrollment in health plans and health systems by members of healthcare disparity populations.

There are clear statistical and methodological limitations to assessing individual physician or practice performance. In some cases, even physician offices that use electronic health records may not have the data variables available to them that are needed to collect this information. These limitations are magnified when small samples are stratified by membership in a healthcare disparity population. The use of disparity measures at the physician or practice level should be encouraged for the purposes of internal quality improvement, and when appropriate, public reporting. Additionally, there will be more data collection burden at intake to collect the information needed to stratify the data. Although some of the data will need to be collected only once (e.g., race/ethnicity, gender), some of the information will need to be collected annually (e.g., SES, health literacy, insurance status).

**Recommendations**

The recommendations presented below have been formulated to assist users with implementing the national disparities-sensitive measure set or a local disparities-sensitive measure set.

**Recommendation 1:**

*Ambulatory healthcare providers should stratify the national set and a locally determined subset of NQF-endorsed ambulatory care consensus standards, including patient experience with care instruments, by gender, race, ethnicity, SES, primary language, and insurance status.*

Collecting these data is imperative to improving quality. Quality improvement efforts at all levels of the healthcare system have been implemented for years, resulting in a dramatic increase in the quality of care in the United States. Major accrediting bodies, public and private purchasers, and health plans are implementing quality improvement and public reporting programs to improve quality. Although most of these programs address three of the six aims outlined in IOM's *Crossing the Quality Chasm* report (safety, effectiveness, timeliness), very few address efficiency, equity, and patient-centeredness.  

Stratifying measures by gender, race, ethnicity, SES, primary language, and insurance status would go a long way toward addressing the aims of equity and patient-centeredness and further drive the quality agenda. Box A, on best practices for the stratification and implementation of consensus standards, provides additional

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information on what variables should be collected and how to collect the information.

The data collection for and stratification of these measures are valuable both at the practice and provider levels. The data collected can be aggregated up and results reported at the local, state, and national levels for comparison and public reporting. If small numbers limit the use of the data at the individual provider level for comparison and public reporting, the data are still valuable for a provider to respond to any disparities within the practice. Information at the provider and practice levels will encourage providers to initiate quality improvement interventions to reduce those disparities.

### Box A – Best Practices for Stratification and Implementation of Consensus Standards

**Stratifying measures by gender, race, ethnicity, SES, primary language, and insurance status requires additional data collection variables and methodologies that are reliable, valid, and patient centered and that ensure the privacy and confidentiality of the patient.**

While a large body of evidence has accumulated that documents the finding that disparities persist in the services delivered to racial and ethnic minority patients throughout the healthcare system, there is no consensus around a methodology that should be used to collect the data necessary to stratify by gender, race, ethnicity, SES, primary language, and insurance status. Although collecting any personal health information is sensitive, unique challenges exist when that information is linked with extensive demographic information.

**Best Practices for Preparing the Patients for the Questions**

- Collect primary data to stratify consensus standards by gender, race, ethnicity, SES, primary language, and insurance status. When primary data are not available, indirect collection through geocoding, surname analysis, and Bayesian estimation can be used for many of these measures. The indirect methodology is best applied to population-based assessments of quality of care and should not be used to target interventions for individual patients.10

- Provide adequate training for all staff involved in the collection of demographic data to ensure that the collection is respectful, patient centered, and culturally competent.

- Provide assurances to patients about the use and release of their demographic information. The provider must take the appropriate precautions to balance the ease of access to and interoperability of the data across quality reporting entities while ensuring patient confidentiality through de-identification of the data and reporting. Providers also must fully inform patients that their demographic information will be released only on a “need-to-know” basis, and that the information will be used at the organizational level to ensure that high-quality care is provided for all patients. Individual providers, provider groups, hospitals, and health plans may transfer the de-identified data to accomplish this goal.

- Before a patient is asked to provide his or her racial and/or ethnic background, provide a rationale for why gender, race, ethnicity, SES, primary language,

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The HRET Disparities Initiative conducted focus groups to determine the best way to explain to patients why the data were being collected. It was found that explaining the rationale to the patients before asking them to provide information about their racial and ethnic background proved to be most effective: “We want to make sure that all our patients get the best care possible, regardless of their race or ethnic background. We would like you to tell us your race or ethnic background so that we can review the treatment that all patients receive and make sure that everyone gets the highest quality of care.”


Collecting and reporting race, ethnicity, and primary language data are legal and permitted under Title VI of the Civil Rights Act of 1964.


The HRET Disparities Initiative conducted multiple studies to determine the best way to explain the collection of these data from patients. It found the categories listed to be the most reliable and valid.

Best Practices for Asking a Patient About His or Her SES

Examples of collecting SES data can be found at the California Health Interview Survey (CHIS),\textsuperscript{18} the Current Population Survey (CPS),\textsuperscript{19} or the National Health and Nutrition Examination Survey (NHANES).\textsuperscript{20} At a minimum, the following questions should be asked:

- What is your best estimate of your household’s total annual income from all sources before taxes last year?
- Including yourself, how many people living in your household are supported by your total household income?
- How many of these people are children under the age of 18?

Health literacy is difficult to assess outside of administering a Test of Functional Health Literacy in Adults (TOFHLA) or Rapid Estimate of Adult Literacy in Medicine (REALM). Similar tools are available in Spanish (e.g., TOFHLA-S and SAHLSA). The TOFHLA assesses not only reading comprehension, but also how well patients comprehend real healthcare situations presented to them as examples. However, although health literacy consists of more than education level, assessing the highest level of school completed in addition to other SES and language assessments can prove to be an adequate proxy. Assessing patients with REALM or the shortened version of TOFHLA may be preferable. The TOFHLA-S takes approximately seven minutes to administer.\textsuperscript{21,22} However, if implementing the TOFHLA or REALM is not possible, providers should collect from patients, at a minimum, the highest level of school completed as a proxy for health literacy. Direct measurement of literacy is the gold standard, but in the absence of direct measurement, educational level provides a crude estimate of both general and health literacy, particularly when used in the aggregate. However, educational level is much less useful at the individual patient level.

Primary language should be collected by using this series of questions:\textsuperscript{23}

- What language would you feel most comfortable speaking with your doctor or nurse (Patient’s Primary Language)?
- How would you rate your ability to speak and understand English?
- In which language would you feel most comfortable reading medical or healthcare instructions?
- How satisfied are you with your ability to read English?
- Would you like to have a professional interpreter present for your doctor’s visit?

\textsuperscript{18}UCLA Center for Health Policy Research, California Health Interview Survey. Available at www.chis.ucla.edu/. Last accessed December 2007.
\textsuperscript{20}Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Health and Nutrition Examination Survey Questionnaire (or Examination Protocol, or Laboratory Protocol), Hyattsville, MD: CDC. Available at www.cdc.gov/nchs/data/nhanes/nhanes_05_06/fi_inq_d.pdf. Last accessed May 2007.
\textsuperscript{22}Chew LD, Bradley KA, Boyko EJ, Brief questions to identify patients with inadequate health literacy, Fam Med, 2004;36:588-594.
Box A – Best Practices for Stratification and Implementation of Consensus Standards (continued)

Best Practices for Asking a Patient About His or Her Insurance Status

Insurance status is optimally assessed by using a series of questions asking about a patient’s health insurance coverage over the past calendar year, the type of insurance, and the amount of coverage. An example of how this is being collected currently is the Annual Social and Economic Supplement (ASEC) to the U.S. Census Bureau Current Population Survey. The following questions should be used when assessing a patient’s insurance status:

- At any time in <year> (were you/was anyone in this household) covered by a health insurance plan provided through (your/his-her) current or former employer or union?
- Who in this household were policyholders?
- Did (your/names) former or current employer or union pay for all, part, or none of the health insurance premium?
- At anytime during <year> (were you/was anyone in this household) covered by a health insurance plan that (you/he-she) purchased directly from an insurance company, that is, not related to current or past employment?
- At any time in <year> (were you/was anyone in this household) covered by the health plan of someone who does not live in this household?
- At any time in <year> (were you/was anyone in this household) covered by Medicare?
- At any time in <year> (were you/was anyone in this household) covered by Medicaid/(enter state name)?
- If applicable, how many months during <year> (were/was) (you/name) covered by Medicaid (enter local name)?
- In (state), the (enter state CHIP program name) program (also) helps families get health insurance for children. (Just to be sure) Were any of the children in this household covered by that program?
- I have recorded that (you/name) (were/was) (person 1) not covered by a health plan at any time during (person 2) <year>. Is that correct?

Given the significant differences across Medicaid and state health insurance programs, providers will need to adapt these questions to be relevant to their states’ coverage.

25 The questions listed reflect the entire section on health insurance. Survey skip patterns can be found embedded in the tool.
Recommendation 2:
In order to drive improvement, addressing healthcare disparities must be fully integrated into the overarching national quality agenda. National and local healthcare quality efforts and activities should adopt a specific goal of eliminating disparities in healthcare quality. Measure developers, NQF, government agencies, health plans, and healthcare providers all play important roles in reducing healthcare disparities.

As the focus on performance measurement and quality improvement builds momentum, the elimination of healthcare quality disparities must move in concert with all national quality activities or risk becoming marginalized. Efforts to improve healthcare quality must be aimed at not only reducing medical errors and improving patient safety and overall performance, but also at ensuring equitable treatment for all. Thus, healthcare quality measurement and reporting strategies that do not address the health needs of disparate patient populations neglect a significant and growing portion of the U.S. population, and ignore one of the main domains of quality outlined by IOM.

The many stakeholders who are striving to improve healthcare quality all have roles to play:

Healthcare providers and practitioners. Providers and practitioners should become aware of the national and local issues regarding the various disparity populations they serve. Providers and practitioners should stratify appropriate consensus standards by gender, race, ethnicity, SES, primary language, and insurance status. This information can be used for internal quality improvement and to implement targeted interventions to close any gaps in their practices.

Health plans and health systems. Health plans and health systems can provide incentives for practitioners and providers within their organizations to identify and target performance for disparities populations without penalizing safety net providers. Health plans and systems should collect data on gender, race, ethnicity, SES, primary language, and insurance status to better understand the populations they serve and assess whether their members are being treated equitably.

26 This recommendation is from NQF’s Improving Healthcare Quality for Minority Patients, 2002.
Federal government agencies. Agencies such as the Centers for Medicare & Medicaid Services (CMS), AHRQ, and the Health Resources and Services Administration (HRSA) should continue to fund new research and measure development focusing on how to close the healthcare disparities gap and provide leadership in reporting national performance through the lens of addressing disparities.

Measure developers. Although these measures and recommendations are an important initial step, they alone will not eliminate healthcare quality disparities. New measures should be developed for the express purpose of identifying and reducing healthcare quality disparities, and the data should be stratified to collect and track this information. By and large, these measures also would be applicable to all patients and could therefore be integrated into the broader measure sets that are applied to the general population. In fact, isolating new, disparities-specific measures from the mainstream measure sets would make successful implementation of any new measures unlikely and also would undermine efforts to unify the general and healthcare disparities quality movements.

Additionally, measure developers should stratify the measures they develop during the testing phase by gender, race, ethnicity, SES, primary language, and insurance status. The results should be analyzed so it can be determined if the measure captures disparate care at a leverage point. The stratification should be part of the routine process of measure development.

Health information technology community. In its Crossing the Quality Chasm report, IOM noted that there is a fundamental need for automated information management in order to achieve a healthcare system that focuses on the patient. Likewise, the healthcare quality community has long recognized that such electronic information systems are a critical factor in providing data for measures of healthcare quality. Additionally, the systems should be designed to capture specific demographic data that also can be linked to the clinical data. The following recommendations regarding integrating demographic information into electronic information systems should be pursued:

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28 This recommendation is from NQF’s 2002 publication Improving Healthcare Quality for Minority Patients.
Engage the health information technology community and encourage collaboration with those conducting research on how to collect electronic data on gender, race, ethnicity, SES, primary language, and insurance status.

Mandate incorporating the collection of these data into electronic health record vendor certification in order to ensure that these data can be collected when systems are implemented.

Ensure that clinical data and related performance measures can be linked to the demographic information and reported out stratified by those variables.

Employ innovative strategies to support healthcare providers that serve large numbers of members of healthcare disparity populations in acquiring health information technology that supports quality improvement. A notable example is the decision by New York City to assist community providers and Medicaid managed care companies in acquiring electronic medical record systems to share patient health information to improve the quality of care.\(^2^9\)

**NQF** NQF can better integrate the reduction of healthcare disparities into its priority areas by taking the following steps:

**Disparities-sensitive criteria** - At the onset of future NQF projects in which quality measures are reviewed, the disparities-sensitive criteria should be considered and applied when reviewing all candidate consensus standards.

**NQF measure submission** - Measure developers should provide the following information when submitting their measures to NQF:

- whether the measure can be used to detect disparities;
- whether the measure has not been used to detect disparities to date; and
- any current research that indicates that a healthcare disparity is present in that measurement domain, disease, or condition.

Measure developers also should report the measure and any findings stratified by gender, race, ethnicity, SES, primary language, and insurance status.

**Research Recommendations**

Additional research is needed in many areas to fully utilize performance measurement to reduce inequities in the healthcare system for disparities populations.

**Research Recommendation 1:**

Researchers and measure developers should place a priority on developing process measures that are specifically aimed at reducing disparities in care. Although the national disparities-sensitive set and local disparities-sensitive sets will capture disparate care, stratifying alone will not close the gap. Targeted processes of care need to be researched and developed to help providers intervene when healthcare disparities are found. Additionally, priority must be placed on developing outcome measures that address the reduction of healthcare disparities.

Research Recommendation 2:
Further research and consensus are needed on the best and most efficient way to collect demographic data for disparities-sensitive measures. Urgently needed is an emphasis on collecting measures of Latino ethnicity combined with best methods for racial identification among Latino respondents. Race and ethnicity data should be collected at the most granular level possible, based on an assessment of the local population served by healthcare providers. Those granular categories should be designed to allow for aggregation to the broader OMB categories, which facilitates national comparisons. Additional research also is needed to find the most efficient and valid way to collect data for assessing insurance coverage.

Research Recommendation 3:
Additional research and analysis is needed to better understand the degree to which performance measurement may lead to unintended or adverse consequences, such as penalizing safety net and other providers and practitioners who care for significant disparities populations. The use of such measures could promote provider selection and/or deselection of patients. Organizations that implement performance measures should look specifically for potential unintended consequences pertaining to healthcare disparity populations. Research also should identify best practices for pay-for-performance and measurement efforts that are most likely to reduce disparities.

Research Recommendation 4:
Researchers and those who implement measurement programs should investigate what additional resources are needed for practices or systems that have greater needs because they provide care for disparity populations. Examples include the urgent need for adequate health information technology systems, the need for reimbursement schemes that account for the increased time that is spent serving many members of these populations, and the need for language translation and outreach services.
Table 1 – National Voluntary Consensus Standards for Ambulatory Care: Measuring Healthcare Disparities (National Approach)

<table>
<thead>
<tr>
<th>PRIORITY AREA</th>
<th>MEASURE TITLE</th>
<th>IP OWNER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asthma</td>
<td>Use of appropriate medications for people with asthma</td>
<td>NCQA</td>
</tr>
<tr>
<td>Asthma</td>
<td>Asthma: pharmacologic therapy</td>
<td>AMA PCPI</td>
</tr>
<tr>
<td>Diabetes</td>
<td>HbA1c test for pediatric patients</td>
<td>NCQA</td>
</tr>
<tr>
<td>Diabetes</td>
<td>Percentage of patients with at least one LDL-C test</td>
<td>Alliance/NCQA</td>
</tr>
<tr>
<td>Diabetes</td>
<td>Percentage of patients who received a dilated eye exam or seven standard field stereoscopic photos with interpretation by an ophthalmologist or optometrist or imaging validated to match diagnosis from these photos during the reporting year, or during the prior year, if patient is at low risk for retinopathy</td>
<td>Alliance/NCQA</td>
</tr>
<tr>
<td>Diabetes</td>
<td>Percentage of eligible patients receiving at least one foot exam</td>
<td>Alliance/NCQA</td>
</tr>
<tr>
<td>Diabetes</td>
<td>Percentage of patients with one or more A1c test(s)</td>
<td>AMA PCPI</td>
</tr>
<tr>
<td>Diabetes</td>
<td>Percentage of patients with most recent A1c level &gt;9.0% (poor control)</td>
<td>Alliance/NCQA</td>
</tr>
<tr>
<td>Diabetes</td>
<td>Percentage of patients with most recent blood pressure &lt;140/80 mm Hg</td>
<td>Alliance/NCQA</td>
</tr>
<tr>
<td>Diabetes</td>
<td>Percentage of patients with at least one test for microalbumin during the measurement year; or who had evidence of medical attention for existing nephropathy (diagnosis of nephropathy or documentation of microalbuminuria or albuminuria)</td>
<td>Alliance/NCQA</td>
</tr>
<tr>
<td>Heart disease</td>
<td>Coronary artery disease (CAD): angiotensin-converting enzyme inhibitor (ACE inhibitor)/angiotensin receptor blocker (ARB) therapy</td>
<td>Alliance/NCQA</td>
</tr>
<tr>
<td>Heart disease</td>
<td>CAD: beta blocker therapy—prior myocardial infarction</td>
<td>AMA PCPI and ACC/AHA</td>
</tr>
<tr>
<td>Heart disease</td>
<td>CAD: beta blocker treatment after a heart attack</td>
<td>NCQA</td>
</tr>
<tr>
<td>Ischemic vascular disease (IVD): complete lipid profile and LDL control &lt;100</td>
<td>IVD: patients with a full lipid profile completed during the 12-month measurement period with date of each component of the profile documented; LDL-C &lt;100</td>
<td>NCQA</td>
</tr>
<tr>
<td>Heart disease</td>
<td>Heart failure—left ventricular function (LVF) assessment</td>
<td>AMA PCPI and ACC/AHA</td>
</tr>
<tr>
<td>Heart disease</td>
<td>Heart failure: ACE inhibitor/ARB therapy</td>
<td>AMA PCPI and ACC/AHA</td>
</tr>
<tr>
<td>Hypertension</td>
<td>Controlling high blood pressure</td>
<td>CMS/NCQA</td>
</tr>
</tbody>
</table>

Additional information, including the specifications, for each of these measures can be found in National Voluntary Consensus Standards for Ambulatory Care – Part 1: A Consensus Report.

1 IP owner - Intellectual Property owner. For the most current specifications and supporting information, please refer to the IP owner:

- ACC/AHA - American College of Cardiology/American Heart Association
- AHRQ - Agency for Healthcare Research and Quality (www.cahps.ahrq.gov)
- Alliance - National Diabetes Quality Improvement Alliance (www.nationaldiabetesalliance.org)
- AMA PCPI - American Medical Association Physician Consortium for Performance Improvement (www.physicianconsortium.org)
- CMS - Centers for Medicare & Medicaid Services (www.cms.gov)
- ICSI - Institute for Clinical Systems Improvement (www.icsi.org)
- NCQA - National Committee for Quality Assurance (www.ncqa.org)
- NCQA/WC - National Committee for Quality Assurance and Washington Circle (www.washingtoncircle.org)
### Table 1 – National Voluntary Consensus Standards for Ambulatory Care: Measuring Healthcare Disparities (National Approach) (continued)

<table>
<thead>
<tr>
<th>PRIORITY AREA</th>
<th>MEASURE TITLE</th>
<th>IP OWNER</th>
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</thead>
<tbody>
<tr>
<td>Medication management</td>
<td>Drugs to be avoided in the elderly</td>
<td>NCQA</td>
</tr>
<tr>
<td></td>
<td>a. Patients who receive at least one drug to be avoided</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. Patients who receive at least two different drugs to be avoided</td>
<td></td>
</tr>
<tr>
<td>Mental health and substance use</td>
<td>Antidepressant medication management</td>
<td>NCQA</td>
</tr>
<tr>
<td>Mental health and substance use</td>
<td>Initiation and engagement of alcohol and other drug dependence treatment</td>
<td>NCQA/WC</td>
</tr>
<tr>
<td>Prenatal care</td>
<td>Prenatal screening for HIV</td>
<td>AMA PCPI</td>
</tr>
<tr>
<td>Prenatal care</td>
<td>Prenatal anti-D immune globulin</td>
<td>AMA PCPI</td>
</tr>
<tr>
<td>Prenatal care</td>
<td>Prenatal blood group and type</td>
<td>AMA PCPI</td>
</tr>
<tr>
<td>Prenatal care</td>
<td>Prenatal D antibody testing</td>
<td>AMA PCPI</td>
</tr>
<tr>
<td>Immunization</td>
<td>Childhood immunization status</td>
<td>NCQA</td>
</tr>
<tr>
<td>Immunization</td>
<td>Flu shots for adults ages 50 to 64</td>
<td>NCQA</td>
</tr>
<tr>
<td>Immunization</td>
<td>Flu shot for older adults</td>
<td>CMS/NCQA</td>
</tr>
<tr>
<td>Immunization</td>
<td>Pneumonia vaccination status for older adults</td>
<td>NCQA</td>
</tr>
<tr>
<td>Screening</td>
<td>Breast cancer screening</td>
<td>CMS/NCQA</td>
</tr>
<tr>
<td>Screening</td>
<td>Cervical cancer screening</td>
<td>NCQA</td>
</tr>
<tr>
<td>Screening</td>
<td>Colorectal cancer screening</td>
<td>NCQA</td>
</tr>
<tr>
<td>Prevention</td>
<td>Smoking cessation—medical assistance</td>
<td>NCQA</td>
</tr>
<tr>
<td>Prevention</td>
<td>a. Advising smokers to quit</td>
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</tr>
<tr>
<td>Prevention</td>
<td>b. Discussing smoking cessation medications</td>
<td></td>
</tr>
<tr>
<td>Prevention</td>
<td>c. Discussing smoking cessation strategies</td>
<td></td>
</tr>
<tr>
<td>Prevention</td>
<td>Measure pair</td>
<td>AMA PCPI</td>
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<td>Prevention</td>
<td>a. Tobacco use assessment</td>
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<tr>
<td>Prevention</td>
<td>b. Tobacco cessation intervention</td>
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<tr>
<td>Prevention</td>
<td>Measure pair</td>
<td>ICSI</td>
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<tr>
<td>Prevention</td>
<td>a. Tobacco use prevention for infants, children, and adolescents</td>
<td></td>
</tr>
<tr>
<td>Prevention</td>
<td>b. Tobacco use cessation for infants, children, and adolescents</td>
<td></td>
</tr>
<tr>
<td>Patient experience with care</td>
<td>Ambulatory Consumer Assessment of Healthcare Providers and Systems (ACAHPS®)</td>
<td>AHRQ</td>
</tr>
</tbody>
</table>
Table 2 – National Voluntary Consensus Standards for Ambulatory Care: Measuring Healthcare Disparities (Local Approach)

<table>
<thead>
<tr>
<th>MEASURE TITLE</th>
<th>AHRQ PREVENTION QUALITY INDICATORS¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>PQI 1 Diabetes, short-term complications. This measure is used to assess the number of admissions for diabetes short-term complications per 100,000 population.</td>
<td></td>
</tr>
<tr>
<td>PQI 2 Perforated appendicitis. This measure is used to assess the number of admissions for perforated appendix per 100 admissions for appendicitis within Metro Area or county.</td>
<td></td>
</tr>
<tr>
<td>PQI 3 Diabetes, long-term complications. This measure is used to assess the number of admissions for long-term diabetes complications per 100,000 population.</td>
<td></td>
</tr>
<tr>
<td>PQI 5 Chronic obstructive pulmonary disease (COPD). This measure is used to assess the number of admissions for COPD per 100,000 population.</td>
<td></td>
</tr>
<tr>
<td>PQI 7 Hypertension. This measure is used to assess the number of admissions for hypertension per 100,000 population.</td>
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</tr>
<tr>
<td>PQI 8 Congestive heart failure (CHF). This measure is used to assess the number of admissions for CHF per 100,000 population.</td>
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</tr>
<tr>
<td>PQI 9 Low birth weight. This measure is used to assess the number of low birth weight infants per 100 births.</td>
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<tr>
<td>PQI 10 Dehydration. This measure is used to assess the number of admissions for dehydration per 100,000 population.</td>
<td></td>
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<tr>
<td>PQI 11 Bacterial pneumonia. This measure is used to assess the number of admissions for bacterial pneumonia per 100,000 population.</td>
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<tr>
<td>PQI 12 Urinary infections. This measure is used to assess the number of admissions for urinary tract infection per 100,000 population.</td>
<td></td>
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<tr>
<td>PQI 13 Angina without procedure. This measure is used to assess the number of admissions for angina (without procedures) per 100,000 population.</td>
<td></td>
</tr>
<tr>
<td>PQI 14 Uncontrolled diabetes. This measure is used to assess the number of admissions for uncontrolled diabetes per 100,000 population.</td>
<td></td>
</tr>
<tr>
<td>PQI 15 Adult asthma. This measure is used to assess the number of admissions for asthma in adults per 100,000 population.</td>
<td></td>
</tr>
<tr>
<td>PQI 16 Lower extremity amputations among patients with diabetes. This measure is used to assess the number of admissions for lower-extremity amputation among patients with diabetes per 100,000 population.</td>
<td></td>
</tr>
</tbody>
</table>

¹ AHRQ, Prevention Quality Indicators Overview. AHRQ Quality Indicators; July 2004.
Appendix A

Specifications of the National Voluntary Consensus Standards for Ambulatory Care: Measuring Healthcare Disparities (Local Approach)

The disparities-sensitive consensus standards include 14 Agency for Healthcare Research and Quality Prevention Quality Indicators (PQIs). The detailed specifications for the PQIs are presented in this appendix.
### Appendix A – Specifications of the National Voluntary Consensus Standards for Ambulatory Care: Measuring Healthcare Disparities (Local Approach)

<table>
<thead>
<tr>
<th>Measure</th>
<th>Measure Use</th>
<th>IP Owner</th>
<th>Numerator</th>
<th>Denominator</th>
<th>Exclusions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DIABETES, SHORT-TERM COMPLICATIONS (PQI 1)</strong></td>
<td>This measure is used to assess the number of admissions for diabetes short-term complications per 100,000 population.</td>
<td>AHRQ¹</td>
<td>All non-maternal/ non-neonatal discharges age 18 years and older with ICD-9-CM Principal Diagnosis Code for short-term complications (ketoacidosis, hyperosmolarity, coma).</td>
<td>Population in Metro Area or county, age 18 years and older.</td>
<td>Exclude cases:</td>
</tr>
<tr>
<td></td>
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<td></td>
<td></td>
<td>- transferring from another institution (SID ASOURCE=2)</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- MDC 14 (pregnancy, childbirth, and puerperium)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- MDC 15 (newborn and other neonates).</td>
</tr>
<tr>
<td><strong>PERFORATED APPENDICITIS (PQI 2)</strong></td>
<td>This measure is used to assess the number of admissions for perforated appendix per 100 admissions for appendicitis within Metro Area or county.</td>
<td>AHRQ¹</td>
<td>Discharges with ICD-9-CM Diagnosis Code for perforations or abscesses of appendix in any field.</td>
<td>Number of discharges with diagnosis code for appendicitis in any field in MSA or county.</td>
<td>Exclude cases:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- transferring from another institution (SID ASOURCE=2)</td>
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<td></td>
<td>- MDC 14 (pregnancy, childbirth, and puerperium)</td>
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<td></td>
<td></td>
<td></td>
<td>- MDC 15 (newborn and other neonates).</td>
</tr>
<tr>
<td><strong>DIABETES, LONG-TERM COMPLICATIONS (PQI 3)</strong></td>
<td>This measure is used to assess the number of admissions for long-term diabetes complications per 100,000 population.</td>
<td>AHRQ¹</td>
<td>Discharges age 18 years and older with ICD-9-CM Principal Diagnosis Code for long-term complications (renal, eye, neurological, circulatory, or complications not otherwise specified) (see below).</td>
<td>Population in Metro Area or county, age 18 years and older.</td>
<td>Exclude cases:</td>
</tr>
<tr>
<td></td>
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<td>- transferring from another institution (SID ASOURCE=2)</td>
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<td>- MDC 14 (pregnancy, childbirth, and puerperium)</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>- MDC 15 (newborn and other neonates).</td>
</tr>
<tr>
<td><strong>CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD) (PQI 5)</strong></td>
<td>This measure is used to assess the number of admissions for COPD per 100,000 population.</td>
<td>AHRQ¹</td>
<td>All non-maternal discharges of age 18 years and older with ICD-9-CM Principal Diagnosis Code for COPD.</td>
<td>Population in Metro Area or county, age 18 years and older.</td>
<td>Exclude cases:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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<td>- MDC 14 (pregnancy, childbirth, and puerperium)</td>
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<td></td>
<td>- MDC 15 (newborn and other neonates).</td>
</tr>
</tbody>
</table>

¹These measures are in the public domain and maintained by the Agency for Healthcare Research and Quality. They can be found at www.qualityindicators.ahrq.gov. Specifications as of November 2007.
### Appendix A – Specifications of the National Voluntary Consensus Standards for Ambulatory Care: Measuring Healthcare Disparities (Local Approach) (continued)

<table>
<thead>
<tr>
<th>Measure</th>
<th>Measure Use</th>
<th>IP Owner</th>
<th>Numerator</th>
<th>Denominator</th>
<th>Exclusions</th>
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</thead>
</table>
| **HYPERTENSION (PQI 7)** | This measure is used to assess the number of admissions for hypertension per 100,000 population. | AHRQ¹ | All non-maternal discharges of age 18 years and older with ICD-9-CM Principal Diagnosis Code for hypertension. | Population in Metro Area or county, age 18 years and older. | Exclude cases:  
- transferring from another institution (SID ASOURCE=2)  
- MDC 14 (pregnancy, childbirth, and puerperium)  
- MDC 15 (newborn and other neonates) with cardiac procedure codes in any field. |
| **CONGESTIVE HEART FAILURE (CHF) (PQI 8)** | This measure is used to assess the number of admissions for CHF per 100,000 population. | AHRQ¹ | All non-maternal/nonneonatal discharges of age 18 years and older with ICD-9-CM Principal Diagnosis Code for CHF. | Population in Metro Area or county, age 18 years and older. | Exclude cases:  
- transferring from another institution (SID ASOURCE=2)  
- MDC 14 (pregnancy, childbirth, and puerperium)  
- MDC 15 (newborn and other neonates)  
- with cardiac procedure codes in any field. |
| **LOW BIRTH WEIGHT (PQI 9)** | This measure is used to assess the number of low birth weight infants per 100 births. | AHRQ¹ | Number of births with ICD-9-CM Diagnosis Codes for birth weights less than 2500 grams in any field.  
**Exclusions:** Transfer from other institution. | All births (discharges in MDC 15, newborns and other neonates) in Metro Area or county. | Adjustment: risk-adjusted by multivariate regression for patient sex. |
| **DEHYDRATION (PQI 10)** | This measure is used to assess the number of admissions for dehydration per 100,000 population. | AHRQ¹ | All non-maternal discharges of age 18 years and older with ICD-9-CM Principal Diagnosis Code for hypovolemia. | Population in Metro Area or county, age 18 years and older. | Exclude cases:  
- transferring from another institution (SID ASOURCE=2)  
- MDC 14 (pregnancy, childbirth, and puerperium)  
- MDC 15 (newborn and other neonates). |
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<th>Measure</th>
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<th>Denominator</th>
<th>Exclusions</th>
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<tr>
<td><strong>BACTERIAL PNEUMONIA (PQI 11)</strong></td>
<td>This measure is used to assess the number of admissions for bacterial pneumonia per 100,000 population.</td>
<td>AHRQ¹</td>
<td>All non-maternal discharges of age 18 years and older with ICD-9-CM Principal Diagnosis Code for bacterial pneumonia.</td>
<td>Population in Metro Area or county, age 18 years and older.</td>
<td>Exclude cases:</td>
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<td></td>
<td>■ MDC 15 (newborn and other neonates)</td>
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<td>■ with diagnosis code for sickle cell anemia or HB-5 disease.</td>
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<tr>
<td><strong>URINARY INFECTIONS (PQI 12)</strong></td>
<td>This measure is used to assess the number of admissions for urinary tract infection per 100,000 population.</td>
<td>AHRQ¹</td>
<td>All non-maternal discharges of age 18 years and older with ICD-9-CM Principal Diagnosis Code of urinary tract infection.</td>
<td>Population in Metro Area or county, age 18 years and older.</td>
<td>Exclude cases:</td>
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<td>■ MDC 14 (pregnancy, childbirth, and puerperium)</td>
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<td>■ MDC 15 (newborn and other neonates)</td>
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<td>■ with diagnosis code of kidney/urinary tract disorder</td>
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<td>■ with diagnosis code of immunocompromised state</td>
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<td>■ with immunocompromised state procedure code.</td>
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<tr>
<td><strong>ANGINA WITHOUT PROCEDURE (PQI 13)</strong></td>
<td>This measure is used to assess the number of admissions for angina (without procedures) per 100,000 population.</td>
<td>AHRQ¹</td>
<td>All non-maternal discharges of age 18 years and older with ICD-9-CM Principal Diagnosis Code for angina.</td>
<td>Population in Metro Area or county, age 18 years and older.</td>
<td>Exclude cases:</td>
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<td>■ MDC 15 (newborn and other neonates)</td>
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<td>■ with a code for cardiac procedure in any field.</td>
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</tbody>
</table>

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A-4
**Appendix A – Specifications of the National Voluntary Consensus Standards for Ambulatory Care: Measuring Healthcare Disparities (Local Approach) (continued)**

<table>
<thead>
<tr>
<th>Measure</th>
<th>Measure Use</th>
<th>IP Owner</th>
<th>Numerator</th>
<th>Denominator</th>
<th>Exclusions</th>
</tr>
</thead>
</table>
| **UNCONTROLLED DIABETES ADMISSION RATE (PQI 14)** | This measure is used to assess the number of admissions for uncontrolled diabetes among patients with diabetes per 100,000 population. | AHRQ¹ | All non-maternal discharges of age 18 years and older with ICD-9-CM principal diagnosis code for uncontrolled diabetes, without mention of a short-term or long-term complication. | Population in Metro Area or county, age 18 years and older. | Exclude cases:  
- transferring from another institution (SID ASOURCE=2)  
- MDC 14 (pregnancy, childbirth, and puerperium)  
- MDC 15 (newborn and other neonates). |
| **ADULT ASTHMA (PQI 15)** | This measure is used to assess the number of admissions for asthma in adults per 100,000 population. | AHRQ¹ | All non-maternal discharges of age 18 years and older with ICD-9-CM Principal Diagnosis Code of asthma. | Population in Metro Area or county, age 18 years and older. | Exclude cases:  
- transferring from another institution (SID ASOURCE=2)  
- MDC 14 (pregnancy, childbirth, and puerperium)  
- MDC 15 (newborn and other neonates)  
- with any diagnosis code of cystic fibrosis and anomalies of the respiratory system. |
| **LOWER EXTREMITY AMPUTATIONS AMONG PATIENTS WITH DIABETES (PQI 16)** | This measure is used to assess the number of admissions for lower-extremity amputation among patients with diabetes per 100,000 population. | AHRQ¹ | All non-maternal discharges of age 18 years and older with ICD-9-CM Procedure Code for lower-extremity amputation in any field and diagnosis code of diabetes in any field. | Population in Metro Area or county, age 18 years and older. | Exclude cases:  
- transferring from another institution (SID ASOURCE=2)  
- MDC 14 (pregnancy, childbirth, and puerperium)  
- MDC 15 (newborn and other neonates)  
- with trauma diagnosis code in any field. |
Appendix B

Members

CONSUMER COUNCIL
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Healthcare
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Coordinating Center
Health Care for All
International Association of Machinists
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National Coalition for Cancer Survivorship
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American College of Obstetricians and Gynecologists
American College of Physicians
American College of Radiology
American College of Rheumatology
American College of Surgeons
American Geriatrics Society
American Heart Association
American Hospital Association
American Medical Association
American Medical Group Association
American Nurses Association
American Optometric Association
American Organization of Nurse Executives
American Osteopathic Association
American Society for Gastrointestinal Endoscopy
American Society for Therapeutic Radiology and Oncology
American Society of Anesthesiologists
American Society of Breast Surgeons
American Society of Clinical Oncology
American Society of Colon and Rectal Surgeons
American Society of Health-System Pharmacists
American Society of Hematology
American Society of Interventional Pain Physicians
American Society of Plastic Surgeons
American Thoracic Society
America's Health Insurance Plans
AmSurg Corporation
Aramark Healthcare
Ascension Health
Association for Behavioral Health and Wellness
Atlantic Health
Aurora Health Care
Baptist Memorial Health Care Corporation
Bayhealth Medical Center
Baylor Health Care System
BJC HealthCare
Blue Cross Blue Shield Association
Boca Raton Community Hospital
Bon Secours Health System
Bronson Healthcare Group
Calgary Health Region - Quality Improvement and Health Information
Carolinas Medical Center
Catholic Health Association of the United States
Catholic Health Initiatives
Catholic Healthcare Partners
Cedars-Sinai Medical Center
Central Baptist Hospital
Chesapeake Bay ENT
Child Health Corporation of America
Children's Hospitals and Clinics of Minnesota
CHRISTUS Health
CIGNA Healthcare
Clark Consulting
College of American Pathologists
Community Health Accreditation Program
Community Health Plan of Washington
Condell Health Network
Connecticut Hospital Association
Council of Medical Specialty Societies
DaVita
Detroit Medical Center
Duke University Health System
Emergency Department Practice Management Association
Evanston Northwestern Healthcare
Exeter Health Resources
Federation of American Hospitals
Florida Hospital Medical Center
Gentiva Health Services
Good Samaritan Hospital
Greater New York Hospital Association
Hackensack University Medical Center
HCA, Inc.
Health Management Associates
Healthcare Leadership Council
HealthHelp
HealthPartners
HealthSouth Corporation
Henry Ford Health System
Highmark, Inc.
HIP Health Plans
Hoag Hospital
Horizon Blue Cross Blue Shield of New Jersey
Hospice and Palliative Nurses Association
Hospital for Special Surgery
HRDIA
Hudson Health Plan
Illinois Hospital Association
Infusion Nurses Society
INTEGRIS Health
Intermountain Healthcare
John Muir Health
Johns Hopkins Health System
Kaiser Permanente
KU Med at the University of Kansas Medical Center
Lake Forest Hospital
Los Angeles County - Department of Health Services
Mayo Foundation
MedQuest Associates
MedStar Health
Memorial Health University Medical Center
Memorial Hermann Healthcare System
Memorial-Sloan Kettering Cancer Center
Mercy Medical Center
Meridian Health System
Milliman Care Guidelines
Munson Medical Center
National Association for Home Care and Hospice
National Association of Chain Drug Stores
National Association of Children's Hospitals and Related Institutions
National Association of Public Hospitals and Health Systems
National Consensus Project for Quality Palliative Care
National Consortium of Breast Centers
National Hospice and Palliative Care Organization
National Rural Health Association
Nebraska Heart Hospital
Nemours Foundation
New York-Presbyterian Hospital and Health System
North Carolina Baptist Hospital
North Mississippi Medical Center
North Shore - Long Island Jewish Health System
North Texas Specialty Physicians
Northwestern Memorial Healthcare
Norton Healthcare, Inc.
Oakwood Healthcare System
Palmetto Health Alliance
Park Nicollet Health Services
Partners HealthCare System, Inc.
Pharmacy Quality Alliance
Planetree
Premier, Inc.
Presbyterian Healthcare Services
Providence Health System
Robert Wood Johnson Health Network
Robert Wood Johnson Hospital - Hamilton
Robert Wood Johnson University Hospital - New Brunswick
Rockford Health System
Sentara Norfolk General Hospital
Sisters of Mercy Health System
Society of Critical Care Medicine
Society of Thoracic Surgeons
Sodexo Healthcare Services
St. Mary's Hospital
Stamford Health System
State Associations of Addiction Services
State University of New York - College of Optometry
Sutter Health
Tampa General Hospital
Tenet Healthcare
Texas Health Resources
The Methodist Hospital
Thomas Jefferson University Hospital
Triad Hospitals
Trinity Health
UAB Health Systems
UnitedHealth Group
University Health Systems of Eastern Carolina
University Hospitals of Cleveland
University of California-Davis Medical Group
University of Michigan Hospitals and Health Centers
University of Pennsylvania Health System
University of Texas-MD Anderson Cancer Center
US Department of Defense - Health Affairs
UW Health
Vail Valley Medical Center
Vanguard Health Management
Veterans Health Administration
VHA, Inc.
Virtua Health
Washington State Hospital Association
Waukesha Elmbrook Health Care
WellPoint
WellStar Health System
Yale New Haven Health System

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Buyers Health Care Action Group
Centers for Medicare & Medicaid Services
District of Columbia Department of Health
Employer Health Care Alliance Cooperative
Employers’ Coalition on Health
Florida Health Care Coalition
General Motors
Greater Detroit Area Health Council
HealthCare 21
KPMG LLP
Leapfrog Group
Lehigh Valley Business Conference on Health
Maine Health Management Coalition
National Association of Health Data Organizations
National Association of State Medicaid Directors
National Business Coalition on Health
National Business Group on Health
New Jersey Health Care Quality Institute
Pacific Business Group on Health
Schaller Anderson
St. Louis Business Health Coalition
Washington State Health Care Authority

RESEARCH AND QUALITY IMPROVEMENT COUNCIL
Abbott Laboratories
ABIM Foundation
Abiomed
ACC/AHA Task Force on Performance Measures
Accreditation Association for Ambulatory Health Care - Institute for Quality Improvement
ACS/MIDAS+
Advanced Medical Technology Association
AGA Institute
Agency for Healthcare Research and Quality
American Academy of Nursing
American Association of Colleges of Nursing
American Board of Medical Specialties
American College of Emergency Physicians
American College of Medical Quality
American Data Network
American Health Quality Association
American Medical Association - Physician
Consortium for Performance Improvement
American Medical Informatics Association
American Pharmacists Association Foundation
American Psychiatric Association for Research and Education
American Society for Quality - Health Care Division
Amgen, Inc.
Association for the Advancement of Wound Care
Association for Professionals in Infection Control and Epidemiology
Association of American Medical Colleges
AstraZeneca
AYR Consulting Group
Battelle Memorial Institute
Baxter
Bristol-Myers Squibb Company
C.R. Bard
California HealthCare Foundation
Cancer Care Ontario
Cardinal Health, Inc.
CareScience
Center to Advance Palliative Care
Centers for Disease Control and Prevention
Cerner Corporation
City of New York Department of Health and Hygiene
Cleveland Clinic Foundation
CNA Corporation
Cook Group Incorporated
Coral Initiative, LLC
CRG Medical
Delmarva Foundation
Dialog Medical
Disease Management Association of America
ECRI Institute
eHealth Initiative
Eli Lilly and Company
excelRx
Florida Initiative for Children’s Healthcare Quality
Forum of End Stage Renal Disease Networks
GlaxoSmithKline
Health Alliance of Mid-America
Health Care Compliance Strategies
Health Grades
Health Resources and Services Administration
Health Services Advisory Group
Healthcare Association of New York State
Hospira
Illinois Department of Public Health
Infectious Diseases Society of America
Institute for Clinical Systems Improvement
Institute for Safe Medication Practices
Integrated Healthcare Association
Integrated Resources for the Middlesex Area
Iowa Foundation for Medical Care
Iowa Healthcare Collaborative
IPRO
Jefferson Health System, Office of Health Policy and Clinical Outcomes
Johnson & Johnson Health Care Systems
Kidney Care Partners
Long Term Care Institute
Loyola University Health System - Center for Clinical Effectiveness
Lumetra
Maine Quality Forum
McKesson Corporation
MedAssets
MedMined
MEDRAD, Inc.
MHA Keystone Center for Patient Safety and Quality
Minnesota Community Measurement
National Academy for State Health Policy
National Association for Healthcare Quality
National Committee for Quality Assurance
National Institutes of Health
National Minority Quality Forum
National Patient Safety Foundation
National Research Corporation
Neocure
New Jersey Hospital Association
New York University College of Nursing
North Carolina Center for Hospital Quality and Patient Safety
Northeast Health Care Quality Foundation
Ohio KePRO
Online Users for Computer-assisted Healthcare
Onmicare, Inc.
Partnership for Prevention
Pennsylvania Health Care Cost Containment Council
Pennsylvania Patient Safety Authority
Pfizer
PhRMA
Press, Ganey Associates
Professional Research Consultants, Inc.
Renal Physicians Association
Research!America
Rhode Island Department of Health
Roswell Park Cancer Institute
sanofi-aventis
Schering-Plough
Society for Healthcare Epidemiology of America
Society of Hospital Medicine
Solucient
State of New Jersey Department of Health and Senior Services
Substance Abuse and Mental Health Services Administration
Texas Medical Institute of Technology
The Joint Commission
The Lewin Group
Thomson Healthcare
Uniform Data System for Medical Rehabilitation
United Hospital Fund
United Surgical Partners International
University of North Carolina - Program on Health Outcomes
URAC
US Pharmacopeia
Virginia Cardiac Surgeon Quality Initiative
Vitas Healthcare Corporation
West Virginia Medical Institute
Wisconsin Collaborative for Healthcare Quality
Appendix C

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1Through December 2006  
2Since January 2007
Appendix D
Commentary
Measuring Healthcare Disparities

Introduction

Addressing issues of quality within vulnerable patient populations is the overarching and highest priority within each of the 23 National Quality Forum (NQF)-endorsed™ national priority areas for healthcare quality improvement. Accordingly, the Robert Wood Johnson Foundation (RWJF) designated disparities as one of its two additional priority areas for the “Ambulatory Care” project, asking NQF to examine measures considered during Phases 2 and 3 through the lens of care disparities. In the spring of 2006, NQF convened an 18-member Technical Advisory Panel (TAP) to engage in a systematic analysis to identify measures that highlight healthcare disparities and to endorse a set of performance measures that is “disparities sensitive” and that is comprehensive and broadly applicable in ambulatory settings. The TAP formulated a series of recommendations and guiding principles to be used in selecting measures to stratify by race, ethnicity, socioeconomic status (SES), primary language, and insurance status and in data collection, and other recommendations involving integrating the amelioration of healthcare disparities into the larger, national quality agenda.

2 To date, more than 100 ambulatory care consensus standards have been endorsed.
Identifying the Set

The Healthcare Disparities TAP reviewed 149 measures that had been deemed technically sound by the other “Ambulatory Care” project TAPs by applying the criteria described below. The measures reviewed by the TAP included not only those currently endorsed by NQF, but also some that were deemed technically sound by other TAPs but that were not included because the “Ambulatory Care” project Steering Committee determined that the primary focus of ambulatory care quality and performance in this project would be at the physician practice level. Accordingly, the consensus standards endorsed to date do not include measures that are exclusively used at the plan level or the community level or population based.

After applying these criteria, the TAP identified 108 measures representing all of the ambulatory care priority areas. NQF staff recommended further refinement of the set to include no more than 30 to 40 measures based on the criteria of type of measure (process, outcome, survey) and prevalence. The TAP believed that it was preferable to pursue stratification of every measure, where appropriate. However, after the Steering Committee considered the TAP’s recommendations, a starter set was reconsidered and approved by the Steering Committee. The Steering Committee believed strongly that in order to implement a disparities-sensitive measure set, the initial measures needed to be limited to high-priority, high-impact areas.

Scope

The TAP did not re-evaluate technical specifications that already were deemed sound by another ambulatory care TAP. The Healthcare Disparities TAP conducted a full measure evaluation only on measures that had not been evaluated by a TAP. The Healthcare Disparities TAP did, however, discuss and comment on additional data elements that will be needed for implementation to collect the appropriate data for each measure.

The Ambulatory Care Steering Committee decided in February 2006 that the Healthcare Disparities TAP should not limit its review to measures that are suitable for physician practice-level accountability, but rather that the disparities-sensitive ambulatory set should encompass other levels of measurement (e.g., health plan). Because of this exception, the TAP re-examined measures that were previously excluded because of level of analysis to determine if they met the TAP’s measure selection criteria. Those measures that met the selection criteria went through the standardized NQF measure evaluation process, unless the measure already had been evaluated by a TAP and been judged technically unsound.

Defining the Populations Addressed by the TAP

The TAP recognized that this project could not cover all of the possible populations that experience healthcare disparities. The populations that the TAP focused on were described as follows:
For the purposes of the Healthcare Disparities TAP, as part of the “Ambulatory Care” project, the populations that will be addressed are healthcare disparities within: 1) gender, 2) race/ethnicity, 3) SES, 4) primary language barriers, and 5) health insurance status.

Numerous populations are affected by healthcare disparities. This does not mean to imply that it is more important to address one population over another. However, to complete the work that was tasked, it was necessary to limit the project’s scope, and it was recognized that NQF should establish another project to address other populations that experience healthcare disparities. Some of these populations are rural populations, people with cognitive disabilities, people with physical disabilities, people with chronic or multiple conditions, and children, gay, lesbian, bisexual, and transgender persons.

The TAP discussed using the term “healthcare disparity populations” instead of “vulnerable populations.” After a robust dialogue, the TAP decided on “healthcare disparity populations,” believing that the word “vulnerable” had negative connotations and that not all populations that experience health disparities can be characterized as vulnerable. The TAP also discussed using the term “healthcare inequity.” However, it was decided that this term was more applicable to issues of social justice than to issues involving healthcare.

Guiding Principles for Reviewing Candidate Consensus Standards

The TAP agreed to take the following criteria into consideration when reviewing the measures for inclusion into a set of disparities-sensitive measures.

1) Primary Criteria for Consideration
   a. Prevalence
      How prevalent is this disease or condition (targeted by the quality measures) in the disparity population?
   b. Impact of the Condition
      What is the impact of the condition (targeted by the quality measures) on the health of the disparity population—for example, mortality, quality of life, years of life lost, disability, stigma—relative to other conditions? Quality-adjusted life years is a useful metric (when available) for comparing the impact of different conditions. In addition, the strength of the evidence supporting the measure should be considered. For example, is it based on findings from several randomized controlled trials, on observational data, or simply on expert opinion? Measures backed by stronger evidence merit greater priority. What is the number needed to treat (NNT) for the intervention associated with the target condition and over what timeframe? The NNT or inverse of absolute risk reduction is a convenient way of comparing the overall impact of different interventions. Ideally, these data should be derived from studies involving members of the disparity population, but the TAP recognized that providers must rely on studies from the overall population.
c. Impact of the Quality Process
How strong is the evidence linking improvement in the measure to improved outcomes (e.g., mortality, quality of life, years of life lost, and disability stigma) for any group, but particularly for members of disparity populations when data are available? If the quality process is improved, what is the likely, relative impact on the healthcare outcomes for members of disparity populations? In other words, if the disparity gap were closed or quality reached a specified benchmark, how might the different measures compare in terms of impact on members of different disparity populations?

d. Quality Gap
How large is the gap in quality between the disparity population and the group with the highest quality for that measure? How large is the gap in quality between the disparity population and the benchmark? This is a key criterion, because it forms the justification for stratification of quality measures. Measures associated with larger gaps merit greater priority.

2) Secondary Criteria for Consideration
a. Ease and Feasibility of Improving the Quality Process
The NQF measure evaluation process considers whether a measure is actionable. When there is evidence that a quality process can be improved for a healthcare disparity population at a reasonable cost, this should be taken into consideration. The evidence addresses whether a process is not being performed as frequently as necessary to improve healthcare outcomes or that an outcome can be affected positively by known processes (e.g., that all providers are not all performing in the 96 to 100 percent range and that an intervention exists to address the topic effectively).

The TAP recognized that research about disparities, and interventions to reduce them, is still in its infancy: Peer-reviewed research articles may not be available to fully address whether a disparity can be reduced at the specific measure’s leverage point. Because the candidate consensus standard already has met the evidence threshold for being actionable, these criteria will merely build on the existing research, and it will be noted if there is any evidence that care can be improved for members of the healthcare disparity populations, whether an intervention exists to reduce a disparity, and whether gaps between different groups can be closed.

Recommendations
The TAP formulated a series of recommendations to advance the field toward reducing and/or eliminating healthcare disparities.

Ambulatory healthcare providers should stratify the national set and a locally determined subset of NQF-endorsed ambulatory care consensus standards, including patient experience with care instruments, by gender, race, ethnicity, SES, primary language, and insurance status.

After applying the above guiding principles, the TAP believed strongly that every NQF-endorsed ambulatory care measure was appropriate for stratification. However, the TAP suggested that until electronic health records and other information technology systems are developed and in place that will allow for this,
providers should apply the same guiding principles listed above (prevalence, impact of the condition, impact of the quality process, quality gap, ease and feasibility of improving the quality process) to their practice setting in order to determine which of these measures would allow them to capture information about disparities. For example, both the prevalence of various conditions and the gap in quality differs regionally and by provider. Thus, selection of appropriate quality measures should be governed in part by local or regional data.

Collecting these data is imperative to improving quality. Quality improvement efforts at all levels of the healthcare system have been implemented for years, resulting in a dramatic increase in the quality of care in the United States. Major accrediting bodies, public and private purchasers, and health plans are all implementing quality improvement and public reporting programs to drive quality. Although most of these programs address three of the six aims outlined in the Institute of Medicine's 2001 report *Crossing the Quality Chasm* (safety, effectiveness, timeliness), very few address efficiency, equity, and patient-centeredness. Stratifying measures by gender, race, ethnicity, SES, primary language, and insurance status would go a long way toward addressing the aims of equity and patient-centeredness and would further drive the quality agenda.

At the June 4, 2007, Steering Committee meeting, the Steering Committee considered the TAP’s recommendations. While some Committee members supported stratifying all process and outcome measures, others believed that it would be valuable to have a list of measures that would give providers a starting point. Concern was expressed that some practices would not be able to collect the information because there is no standard way of doing so. The TAP recommended stratification for all levels of analysis; ideally that data would “roll up” from the practice to higher aggregated levels of analysis.

The Committee reviewed the TAP’s finding again during a conference call. NQF staff prepared a draft report of the disparities deliberations and recommendations based on the TAP and Committee discussions for the Committee’s review. Additionally, the Committee was advised that the project funder, RWJF, was concerned with the lack of a smaller set of measures for focusing on disparities and that the creation of such a set had been its expectation for the project. As a result, it was determined that a two-pronged approach would be used—a national set of 32 measures and a local approach that involves identifying the disparities particular to the location of a provider.

Committee members noted that using these two approaches would involve the global approach of using principles to guide measurement to identify disparities, as well as the practical guidance of identifying the place to start through the use of a “starter set.” Committee members noted that cholesterol management is an area in which disparities have been identified for both gender and race/ethnicity and should be included in the starter set. The Committee also agreed that the recently endorsed Clinician & Group CAHPS® patient experience with care instrument should be added to the starter set.

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NQF should endorse the Agency for Healthcare Research and Quality (AHRQ) Prevention Quality Indicators (PQIs). The indicators should be stratified by gender, race, ethnicity, SES, primary language, and insurance status in order to obtain an accurate snapshot of the health status of a community. The AHRQ PQIs should be used by healthcare providers to determine the health of the communities they serve and should be used to assist with determining what ambulatory care measures should be stratified by gender, race, ethnicity, SES, primary language, and insurance status to determine healthcare disparities in their practices.

The 14 AHRQ PQIs were initially determined to be unsuitable for the “Ambulatory Care” project because they are community-level measures and not designed for public reporting and accountability at the provider level. However, the AHRQ PQIs measure potentially avoidable hospitalizations for ambulatory care-sensitive conditions. The indicators rely on hospital discharge data and are intended to reflect issues of access to high-quality ambulatory care in a system of care. Because the indicators are meant to reflect access to high-quality ambulatory care, stratifying the data would allow providers to see disparities in the care their collective health systems are providing to the community and identify unmet needs. In particular, patients who are uninsured may not readily access care or be identified through performance measures based on health plan data. Thus, community-level measures will facilitate the inclusion of measures of uninsured patients’ access to primary care.

The TAP believed that PQIs would create a needed link between healthcare providers and overall community health. Providers could use community-level measures to assess the health of the areas in which they practice and obtain regional health information from the areas in which their patients reside. This information should be used to help determine which performance measures should be stratified by gender, race, ethnicity, SES, primary language, and insurance status.

The TAP believed strongly that NQF should pursue endorsement around community-level measures aimed at the pediatric population. Unfortunately, only one of the AHRQ Pediatric Indicators (PDIs) is applicable to pediatric populations (Low Birth Weight, 0 to 28 days). However, there are five area-level AHRQ PDIs that the TAP believed should be considered for endorsement by NQF in a future consensus project:

- Asthma admission rate (PDI 14)
- Diabetes short-term complication rate (PDI 15)
- Gastroenteritis admission rate (PDI 16)
- Perforated appendix admission rate (PDI 17)
- Urinary tract infection admission rate (PDI 18)

During the Steering Committee deliberations, members noted that these community-level measures had not been previously endorsed. Additionally, the Committee suggested that the recommendation be amended to state that all clinicians should be aware of the performance on these measures in their community and use the information to evaluate their own practices. The Committee questioned why these measures do not include children or adolescents and suggested going back to AHRQ to ask for comparable pediatrics measures.

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4 Agency for Healthcare Research and Quality (AHRQ), Prevention Quality Indicators Overview: AHRQ Quality Indicators; July 2004.
5 Ibid.
Ambulatory healthcare providers should stratify NQF-endorsed patient experience with care surveys by gender, race, ethnicity, SES, primary language, and insurance status.

The TAP agreed with the current literature that indicates that both the concepts of healthcare disparities and patient experience and satisfaction with care contribute to the domain of patient-centered care. The degree to which these areas overlap is still debated, but it is clear that vulnerable populations are disproportionately affected by problems in receiving patient-centered, culturally competent care. Using existing patient experience with care instruments (e.g., the NQF-endorsed HCAHPS measure) and either enhancing them with specific questions and/or analyzing the data by special population could provide a way to assess patients’ perspectives on what constitutes culturally competent care.

Alternatively (or additionally), separate standardized patient (and organizational) instruments may be needed. Patient experience with care surveys are important tools for quality improvement for healthcare organizations because they can identify relative strengths and weaknesses in a provider’s performance from the patient’s perspective to determine where improvement is needed. If this information is stratified by race, ethnicity, SES, primary language, and health literacy, it could provide a way to assess how patients’ perspectives differ about the same provider based on their gender, race, ethnicity, SES, primary language, and insurance status. It would allow providers to implement targeted interventions to improve performance. The TAP noted that currently, not all of the surveys contain questions to capture the needed information. Although the provider can collect this information on his or her own and link it to the survey data, the questions need to be incorporated into the existing surveys for easier implementation. The section that follows on best practices for the stratification and implementation of consensus standards provides additional information on what variables should be collected and how to collect the information.

The Steering Committee agreed that patient experience with care is an important area in which to measure disparities. The Committee noted that many surveys do not include the needed questions for capturing the information and that providers will have to collect that information at intake and link it to the survey.

To drive improvement, addressing healthcare disparities must be fully integrated into the overarching national quality agenda. National and local healthcare quality efforts and activities should adopt the specific goal of eliminating disparities in healthcare quality. Measure developers, NQF, government agencies, health plans, and healthcare providers all play important roles in reducing healthcare disparities. Although the need for quality improvement and performance measurement is no longer questioned, the TAP believed strongly that the elimination of healthcare quality disparities must move in concert with the national quality movement or risk becoming marginalized. Efforts to improve healthcare quality must be aimed at not only reducing medical errors and improving patient safety, but also at ensuring equitable treatment for all. Thus, healthcare quality measurement and reporting strategies that do not address the health needs of vulnerable populations should be reassessed.

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6 Ngo-Metzger Q, Telfair J, Sorkin DH, et al., Cultural Competency and Quality of Care: Obtaining the Patient’s Perspective, The Commonwealth Fund; October 2006.

7 This recommendation is from NQF’s 2002 publication Improving Healthcare Quality for Minority Patients.
disparate patient populations neglect a significant and growing portion of the U.S. population and ignore one of the main domains of quality outlined by IOM.\textsuperscript{8}

The TAP discussed the potential roles many participants striving to improve healthcare quality could play:

**Healthcare providers and practitioners.** Providers and practitioners should become aware of the national and local issues regarding the various disparity populations they serve. Providers and practitioners should stratify appropriate consensus standards by gender, race, ethnicity, SES, primary language, and insurance status. This information can be used for internal quality improvement and to implement targeted interventions to close any gaps in their practices.

**Health plans and health systems.** Health plans and health systems can provide incentives for practitioners and providers within their organizations to identify and target performance for disparities populations without penalizing safety net providers. Health plans and systems should gather data on gender, race, ethnicity, SES, primary language, and insurance status to better understand the populations they serve and assess whether their members are being treated equitably.

**Federal government agencies.** Agencies such as the Centers for Medicare & Medicaid Services (CMS), AHRQ, and the Health Resources and Services Administration (HRSA), should continue to fund new research and measure development focusing on ways to close the healthcare disparities gap and provide leadership in reporting national performance through the lens of addressing disparities.

**Measure developers.**\textsuperscript{9} Although these measures and recommendations are important as an initial step, alone they will not eliminate healthcare quality disparities. New measures should be developed for the express purpose of identifying and reducing healthcare quality disparities, and the data should be stratified to collect and track this information. By and large, these measures also would be applicable to all patients and could therefore be integrated into the broader measure sets that are applied to the general population. In fact, isolating new, disparities-specific measures from the mainstream measure sets would make successful implementation of any new measures unlikely and also would undermine efforts to unify the general and healthcare disparities quality movements.

Additionally, measure developers should stratify the measures they develop during the testing phase by gender, race, ethnicity, SES, primary language, and insurance status. The results should be analyzed so that it can be determined if a measure captures disparate care at a leverage point. Stratification should be part of the routine process of measure development.

**Health information technology community.** In *Crossing the Quality Chasm*, IOM linked automated information management as a fundamental need for achieving a healthcare system that is recentered to focus on the patient. Likewise, the healthcare quality community has long recognized that such electronic information systems are a critical factor in providing data for measures of healthcare quality. Additionally, the systems should be designed to capture specific demographic data that can be linked to the clinical data. The following recommendations regarding integrating demographic

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\textsuperscript{9}This recommendation is from NQF’s *Improving Healthcare Quality for Minority Patients*. 
information into electronic information systems should be pursued:

- Engage the health information technology community and encourage collaboration with those conducting research on how to collect data on gender, race, ethnicity, SES, primary language, and insurance status electronically.

- Mandate that the collection of these data be incorporated into electronic health record vendor certification to ensure they can be collected when systems are implemented.

- Ensure that clinical data and related performance measures can be linked to the demographic information and reported as stratified by those variables.

- Employ innovative strategies to support healthcare providers who serve large numbers of members of healthcare disparity populations in acquiring health information technology that supports quality improvement. A notable example is the decision by New York City to assist community providers and Medicaid managed care companies in better sharing patient health information to improve the quality of care.\(^{10}\)

**The National Quality Forum** – NQF can better integrate the reduction of healthcare disparities into its priority areas by taking the following steps:

*Disparities-sensitive criteria* - At the onset of future NQF projects in which quality measures are reviewed, the disparities-sensitive criteria should be considered and applied when reviewing all candidate consensus standards.


**NQF measure submission** - Measure developers should provide the following information when submitting their measures to NQF:

- whether the measure can be used to detect disparities;

- whether the measure has not been used to detect disparities to date; and

- any current research that indicates that a healthcare disparity is present in that measurement domain, disease/condition.

Measure developers also should report findings, when available, stratified by gender, race, ethnicity, SES, primary language, and insurance status.

**Stratifying measures by gender, race, ethnicity, SES, primary language, and insurance status requires additional data collection variables and methodologies that are reliable, valid, and patient centered and that ensures the privacy and confidentiality of the patient.**

IOM’s report *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care* found that racial and ethnic minorities often receive lower quality of care than their white counterparts, even after controlling for factors such as insurance, SES, comorbidities, and stage of presentation.\(^ {11}\) The TAP was presented with a large body of evidence that documents the finding that disparities persist in the services delivered to racial and ethnic minority patients throughout the healthcare system. TAP members discussed the fact that there is no consensus around a methodology to collect the data necessary to stratify by gender, race, ethnicity, SES, primary language, and insurance status. Although collecting any personal health information is sensitive,
unique challenges exist when that information is linked with extensive demographic information.

**The following are practices that should be used when collecting this information:**

**Potential Best Practices for Preparing the Patients for the Questions**

- After hearing presentations by various experts in the field, the TAP concluded that when collecting data to stratify consensus standards by gender, race, ethnicity, SES, primary language, and insurance status, primary data collection is the preferred method. When this method is not available, indirect collection through geocoding, surname analysis, and Bayesian estimation can be used for many of these measures. The indirect methodology is best applied to population-based assessments of quality of care and should not be used to target interventions for individual patients.  

- Provide adequate training for all staff involved in the collection of demographic data to ensure that the collection process is respectful, patient centered, and culturally competent.

- Provide assurances to the patients about the use and release of their demographic information. The provider must take the appropriate precautions between balancing the ease of access to and interoperability of the data across quality reporting entities with the need to ensure patient confidentiality throughout the process of the de-identification of the data and reporting. Providers also must fully inform the patients that their demographic information will be released only on a “need-to-know” basis, and that the information will be used at the organizational level to ensure high-quality care for all patients. Individual providers, provider groups, hospitals, and health plans may transfer the de-identified data to accomplish this goal.

- Provide a rationale at the time of collection (before asking a patient to provide his or her racial and ethnic background) that explains why gender, race, ethnicity, SES, primary language, and insurance status information are being collected and that emphasizes that data are being collected to monitor the quality of care that everyone receives.

**Potential Best Practices for Asking a Patient About His or Her Race and Ethnicity**

Consensus still needs to be developed around precisely how best to collect data on gender, race, ethnicity, SES, primary

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13The HRET Disparities Initiative conducted focus groups to determine the best way to explain to patients why the data were being collected. They found that explaining the rationale to patients before asking them to provide information about their racial and ethnic backgrounds proved to be the most effective method. The HRET project found the following phrasing to be most effective: “We want to make sure that all our patients get the best care possible, regardless of their race or ethnic background. We would like you to tell us your race or ethnic background so that we can review the treatment that all patients receive and make sure that everyone gets the highest quality of care.”


16Collecting and reporting race, ethnicity, and primary language data are legal and permitted under Title VI of the Civil Rights Act of 1964.
language, and insurance status. The TAP recommended more research and the development of consensus regarding the best methods for collecting these measures, with particular emphasis on measures of Latino ethnicity combined with methods for racial identification among Latino respondents. There is a large body of research available to draw upon to inform the consensus process, but until consensus is reached the following preferred practices should be endorsed by NQF as preferred practices:17,18

- Data on race and ethnicity should be collected at the most granular level possible, based on an assessment of the local population served by healthcare providers. Those granular categories should be designed to allow for aggregation to the broader Office of Management and Budget (OMB) categories, which facilitates national comparisons of performance and promotes adherence to several reporting requirements.

- Data on race and ethnicity should be collected using two questions, adhering to OMB standards—one for ethnicity and another for race—with as many response categories as dictated by local circumstances, while allowing for aggregation to the OMB categories.19

The minimum OMB categories for race are American Indian or Alaska Native; African American/Black; Asian; Caucasian/White; Hispanic/Latino/White; Hispanic/Latino/Black; Hispanic/Latino/Declined; Native American; Native Hawaiian/Pacific Islander; Multiracial; and Declined or Unavailable/Unknown.

Potential Best Practices for Asking a Patient About His or Her SES

SES is a good predictor of access to healthcare and should be assessed by providers. Some examples of how this currently is being collected can be found by looking at the California Health Interview Survey (CHIS),20 the Current Population Survey (CPS),21 or the National Health and

18The HRET Disparities Initiative conducted multiple studies to determine the best way to explain the collection of these data from patients. They found the categories listed to be the most reliable and valid.
Nutrition Examination Survey (NHANES). At a minimum, the following questions should be asked:

- What is your best estimate of your household’s total annual income from all sources before taxes last year?
- Including yourself, how many people living in your household are supported by your total household income?
- How many of these people are children under the age of 18?

Health literacy is difficult to assess without administering a Test of Functional Health Literacy in Adults (TOFHLA) or a Rapid Estimate of Adult Literacy (REALM). The TOFHLA assesses not only reading comprehension, but also how well patients comprehend real healthcare situations presented to them as examples. In its original form, it has 50 items; a shortened version contains 17 items. However, even the shortened version could prove to be too time consuming. It is not practical to administer the TOFHLA at intake; it should be administered at other points during care. However, although health literacy is more than education level, assessing the highest level of school completed in addition to other SES and language assessments can prove to be an adequate proxy. Therefore, if implementing the TOFHLA is not possible, at a minimum, providers should collect the highest level of school completed from patients as a proxy for health literacy.

Primary language should be collected by using the following series of questions:

- What language would you feel most comfortable speaking with your doctor or nurse (Patient’s Primary Language)?
- How would you rate your ability to speak and understand English?
- In which language would you feel most comfortable reading medical or healthcare instruction?
- How satisfied are you with your ability to read English?
- Would you like to have a professional interpreter present for your doctor’s visit?

Potential Best Practices for Asking a Patient About His or Her Insurance Status

Insurance status should be collected by using a series of questions asking about the patient’s health insurance coverage in the past calendar year, the type of insurance, and the amount of coverage. An example of how this information currently is being collected is found in the Annual Social and Economic Supplement (ASEC) to the U.S. Census Bureau Current Population Survey. The following questions should be used when assessing a patient’s insurance status:

- At any time in <year>, (were you/was anyone in this household) covered by a health insurance plan provided through (your/their) current or former employer or union?
- Who in this household were policy-holders?
Did (your/names) former or current employer or union pay for all, part, or none of the health insurance premium?

At anytime during <year>, (were you/was anyone in this household) covered by a health insurance plan that (you/they) purchased directly from an insurance company, that is, not related to current or past employment?

At any time in <year>, (were you/was anyone in this household) covered by the health plan of someone who does not live in this household?

At any time in <year>, (were you/was anyone in this household) covered by Medicare?

If applicable, how many months during <year>, (were/was) (you/name) covered by Medicaid/(enter state name)?

In (state), the (enter state CHIP program name) program (also) helps families get health insurance for children. (Just to be sure) Were any of the children in this household covered by that program?

I have recorded that (you/name) (were/was) | (person 1) not covered by a health plan at any time during | (person 2) <year>. Is that correct?

Additional Implementation Considerations and Unintended or Adverse Consequences

The TAP recognized that collecting sensitive information such as gender, race, ethnicity, SES, primary language, and insurance status can lead to unintended or adverse consequences and increases the data collection burden for providers. Examples include measures that might penalize safety net providers based on factors that are beyond their control or based on measures that are potentially confounded by patient characteristics. The use of such measures could promote the practice of providers selecting and/or deselecting patients to improve performance on quality measures. Steps also should be taken to monitor changes in enrollment/disenrollment for health plans and health systems by members of healthcare disparity populations. Additionally, a risk-adjustment methodology should not be applied to structure and process measures that are entirely within the healthcare provider’s control. However, risk-adjustment may be necessary for outcome measures that are not always within providers’ control, such as re-admission rates and length of stay. Any disparity for outcome measures will become apparent after the measure is stratified.

The TAP also noted the clear statistical and methodological limitations involved in assessing individual physician or practice performance. In some cases, physician offices with electronic health records may not even have the data variables available to them to collect the information. These limitations are magnified when small
samples are stratified by membership in a healthcare disparity population. The use of disparity measures at the physician or practice level should be encouraged for the purposes of internal quality improvement, and when appropriate, public reporting. Additionally, data collection burden will be added at intake to collect the information needed to stratify the data. Although some of the data will need to be collected only once (e.g., race/ethnicity, gender), some of the information will need to be collected every year (e.g., SES, health literacy, insurance status).

The TAP also encouraged the use of pay-for-performance measures that take into account the need for greater resources for practices or healthcare systems that care for members of healthcare disparity populations with greater needs. Examples of these resources include the urgent need for adequate health information technology, the need for reimbursement schemes that account for the increased amount of time needed to serve many members of these populations, and the need for language translation and outreach services.
Appendix E

Selected References

The following list of references summarizes the evidence considered and reviewed during the screening, evaluation, and selection of measures for the National Quality Forum-endorsed voluntary consensus standards. Evidence includes literature that supports a measure's responsiveness to the evaluation criteria (importance, scientific acceptability, usability, and feasibility).


Ngo-Metzger Q, Telfair J, Sorkin DH, et al. *Cultural Competency and Quality of Care: Obtaining the Patient’s Perspective.* The Commonwealth Fund; October 2006.


Appendix F

Consensus Development Process: Summary

The National Quality Forum (NQF), a voluntary consensus standards setting organization, brings together diverse healthcare stakeholders to endorse performance measures and other standards to improve healthcare quality. Because of its broad stakeholder representation and formal Consensus Development Process (CDP), NQF-endorsed™ products have special legal standing as voluntary consensus standards. The primary participants in the NQF CDP are NQF member organizations, which include:

- consumer and patient groups;
- healthcare purchasers;
- healthcare providers, professionals, and health plans; and
- research and quality improvement organizations.

Any organization interested in healthcare quality measurement and improvement may apply to be a member of NQF. Membership information is available on the NQF web site, www.qualityforum.org.

Members of the public with particular expertise in a given topic also may be invited to participate in the early identification of draft consensus standards, either as technical advisors or as Steering Committee members. In addition, the NQF process explicitly recognizes a role for the general public to comment on proposed consensus standards and to appeal healthcare quality consensus standards endorsed by NQF. Information on NQF projects, including information on NQF meetings open to the public, is posted at www.qualityforum.org.

Each project NQF undertakes is guided by a Steering Committee (or Review Committee) composed of individuals from each of the four critical stakeholder perspectives. With the assistance of NQF staff and
technical advisory panels and with the ongoing input of NQF Members, a Steering Committee conducts an overall assessment of the state of the field in the particular topic area and recommends a set of draft measures, indicators, or practices for review, along with the rationale for proposing them. The proposed consensus standards are distributed for review and comment by NQF Members and non-members.

Following the comment period, a revised product is distributed to NQF Members for voting. The vote need not be unanimous, either within or across all Member Councils, for consensus to be achieved. If a majority of Members within each Council do not vote approval, staff attempts to reconcile differences among Members to maximize agreement, and a second round of voting is conducted. Proposed consensus standards that have undergone this process and that have been approved by all four Member Councils on the first ballot or by at least two Member Councils after the second round of voting are forwarded to the Board of Directors for consideration. All products must be endorsed by a vote of the NQF Board of Directors.

Affected parties may appeal voluntary consensus standards endorsed by the NQF Board of Directors. Once a set of voluntary consensus standards has been approved, the federal government may utilize it for standardization purposes in accordance with the provisions of the National Technology Transfer and Advancement Act of 1995 (P.L. 104-113) and the Office of Management and Budget Circular A-119. Consensus standards are updated as warranted.

For this report, the NQF CDP, version 1.7, was in effect. The complete process can be found at www.qualityforum.org.
THE NATIONAL QUALITY FORUM (NQF) is a private, nonprofit, open membership, public benefit corporation whose mission is to improve the American healthcare system so that it can be counted on to provide safe, timely, compassionate, and accountable care using the best current knowledge. Established in 1999, NQF is a unique public-private partnership having broad participation from all parts of the healthcare industry. As a voluntary consensus standards setting organization, NQF seeks to develop a common vision for healthcare quality improvement, create a foundation for standardized healthcare performance data collection and reporting, and identify a national strategy for healthcare quality improvement. NQF provides an equitable mechanism for addressing the disparate priorities of healthcare's many stakeholders.