CoP Training Call

Understanding Health Disparities
Using Data, Research, and Evaluation

Presenters:
Lenny Lopez, MD, MPH
Jennifer Thomas, PharmD, MT

March 12, 2013
Call Norms:

- All lines will be muted during the call.
- We will begin Q & A after the training portion of today’s call.
- Please submit questions via the WebEx chat box or press 14 and the monitor will call on you.
- We are recording this call, and will post slides, recording, and transcript on www.healthcarecommunities.org.
- Evaluation: Please fill out our evaluation at the end of today’s call. Questions will also be sent via listserve.
Agenda

Training

• Module 3: Understanding Health Disparities Using Data, Research, and Evaluation

DNCC Update

• Status of Environmental Scan
• Disparity Report for 7.3 ADE
• Watch for April’s National Minority Health Month events!
Module 3: Understanding Health Disparities Using Data, Research, and Evaluation

Lenny Lopez, MD, MPH
Disparities Solutions Center

Jennifer Thomas, PharmD, MT
Delmarva Foundation for Medical Care
Five Training Sessions:
2nd Tuesday of Each Month

Module 1: Awareness
  Goal: Increase awareness of the significance of health disparities, their impact on the nation, and the actions necessary to improve health outcomes for racial, ethnic, and underserved populations

Module 2: Leadership
  Goal: Strengthen and broaden leadership for addressing health disparities at all levels

Module 3: Data, Research, and Evaluation
  Goal: Improve data availability, coordination, utilization, and diffusion of research and evaluation outcomes

Module 4: Health System and Life Experience
  Goal: Improve health and healthcare outcomes for racial, ethnic, and underserved populations

Module 5: Cultural and Linguistic Competency
  Goal: Improve cultural and linguistic competency and the diversity of the health related workforce
Module 3 “Data” will cover how to:

1. Understand the main reasons for the use of race/ethnicity/linguistic analysis of data for eliminating disparities
2. Understand the selection of performance measures for disparity measurement
3. Understand important statistical caveats when analyzing performance measures
4. Ensure that data, information, and knowledge on health and health disparities are readily available to communities, organizations, and beneficiaries
Module 3: Data
Improve data availability, coordination, utilization, and diffusion of research and evaluation outcomes
Today’s Guest Speaker

Lenny Lopez, MD, MPH
Senior Faculty, Disparities Solutions Center
Assistant Faculty, Mongan Institute for Health Policy
Assistant Professor, Harvard Medical School
Healthcare Disparities Measurement

Understanding Health Disparities Using Data, Research, and Evaluation

Lenny López, MD, MPH
Disparities Solutions Center
Massachusetts General Hospital
Harvard Medical School
Objectives

• Understand the main reasons for the use of race/ethnicity/linguistic analysis of data for eliminating disparities

• Understand the selection of performance measures for disparity measurement

• Understand important statistical caveats when analyzing performance measures
Outline

1. Background
2. Disparities Measures and Indicators
3. Methodological Approaches
4. Quality Improvement and Public Reporting
Linking Disparities to Cost, Quality and Safety

- **Safe**
  - Minorities have more medical errors with greater clinical consequences

- **Effective**
  - Minorities received less evidence-based care (diabetes)

- **Patient-centered**
  - Minorities less likely to provide truly informed consent; some have lower satisfaction

Crossing the Quality Chasm: A New Health System for the 21st Century

Linking Disparities to Cost, Quality and Safety

• Timely
  – Minorities more likely to wait for same procedure (transplant)

• Efficient
  – Minorities experience more test ordering in ED due to poor communication

• Equitable
  – No variation in outcomes

• Also
  – Minorities have more CHF readmissions, ACS admissions, and longer LOS
Few Disparities in Quality of Care are Getting Smaller

Figure H.5. Number and proportion of all quality measures for which disparities related to age, race, ethnicity, and income are improving, not changing, or worsening

Key: AI/AN = American Indian or Alaska Native; NHW = non-Hispanic White; n = number of measures.
Improving = Disparity is getting smaller at a rate greater than 1% per year.
No Change = Disparity is not changing or is changing at a rate less than 1% per year.
Worsening = Disparity is getting larger at a rate greater than 1% per year.
Some Disparities Merit Urgent Attention

- Diabetes Care
- Adverse Events
- Cancer screening

AHRQ 2011 National Healthcare Disparities Report
http://www.ahrq.gov/research/findings/nhqrdr/
The purpose of this report is to:

1. Provide guidance to the NQF Steering Committee charged with the selection and evaluation of disparities-sensitive quality measures

2. Describe methodological approaches to disparities measurement

Commissioned Paper: Healthcare Disparities Measurement
Section 2: Disparities Measures and Indicators: What to Measure?

- Endorse guiding principles from NQF, 2008*
  1. Prevalence
  2. Impact of the Condition
  3. Impact of the Quality Process
  4. Quality Gap
  5. Ease and Feasibility of Improvement of Quality Process

National Voluntary Consensus Standards For Ambulatory Care— Measuring Healthcare Disparities, NQF 2008
http://www.qualityforum.org/Publications/2008/03/National_Voluntary_Consensus_Standards_for_Ambulatory_Care%E2%80%94Measuring_Healthcare_Disparities.aspx
Section 2: Disparities Measures and Indicators

Recommendations:

• All NQF measures (approximately 700 measures of quality of care for both ambulatory and institution-based settings, including disease specific measures and cross-cutting measures that apply across disease areas) should be cross-walked with literature on known areas of disparities
Section 2: Disparities Measures and Indicators

• All NQF measures that can be matched to known disparities should be considered disparities sensitive measures

• Integrate with National Priorities Partnership (NPP) and the NQF Measures Application Partnership (MAP)
Section 2: Disparities Measures and Indicators

• How to decide? 3 data situations:

• Data demonstrating known disparities with an existing performance measure

• Data showing no disparities or there is no data currently available with an existing performance measure

• Data demonstrating known disparities with NO existing performance measure
Section 2: Disparities Measures and Indicators

• First Data Situation

• Known disparities exist either currently or in the past for a specific (or similar) measure

• Select as disparities measure
Section 2: Disparities Measures and Indicators: What to Measure?

• Second Data Situation

• Data showing no disparities or there is no data currently available with an existing performance measure

• Use criteria for sensitivity:
  – Care with a high degree of discretion (i.e., referral to specialists)
  – Communication-sensitive services (tobacco cessation in CHF)
Section 2: Disparities Measures and Indicators: What to Measure?

• Second Data Situation:

  – *Lifestyle changes (diabetes self-management)*

  – *Outcomes rather than process measures (receipt of flu shot)*

  – *Consider measures along clinical pathway (renal transplant)*
Section 2: Disparities Measures and Indicators: What to Measure?

- Third Data Situation
- Known disparities exist but no quality measure to date
- *Create Sentinel Measure*
Section 2: Disparities Measures and Indicators: What to Measure?

- **Disparities Sentinel Measures**
  - Develop based on review of literature, and absence of NQF measure to date
  - Example: Pain management for long bone fracture in Emergency Department
Section 2: Disparities Measures and Indicators

Categories of disparities sensitive measures

- Practitioner Performance
- Consumer Surveys of Patient Experience
- Healthcare Facility Performance
- Ambulatory Care Sensitive Conditions
- Cultural Competency
- Patient Centeredness
Section 3: Disparities Measures and Indicators

Characteristics of disparities sensitive measures

– Cross-cutting vs. condition specific
– Root cause is provider based, patient based, system or health insurance
– Structure, Process, Outcome
### TABLE 3: Characteristics of disparities sensitive measures

<table>
<thead>
<tr>
<th>NQF Number</th>
<th>Name</th>
<th>Type of Measure Condition Specific (CS) or Cross-cutting (CC)</th>
<th>Root of Potential Disparity Provider (PB), Patient (PtB), Systemic or Health Insurance</th>
<th>Structural, Process, Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Asthma Assessment</td>
<td>CS</td>
<td>PB</td>
<td>PM</td>
</tr>
<tr>
<td>2</td>
<td>Appropriate testing for Children with Pharyngitis</td>
<td>CS</td>
<td>PB</td>
<td>PM</td>
</tr>
<tr>
<td>3</td>
<td>Bipolar Dis: DM Assessment</td>
<td>CS</td>
<td>PB or PtB</td>
<td>PM</td>
</tr>
<tr>
<td>4</td>
<td>Alcohol, Drug treatment (Initiation, Engagement)</td>
<td>CS</td>
<td>PB or PtB</td>
<td>PM</td>
</tr>
<tr>
<td>12</td>
<td>HIV prenatal screening</td>
<td>CS</td>
<td>PB or PtB or Systemic</td>
<td>O</td>
</tr>
<tr>
<td>61</td>
<td>BP measurement</td>
<td>CS</td>
<td>PB or PtB or Systemic or Insurance</td>
<td>O</td>
</tr>
</tbody>
</table>

Other examples of this type of measure are: #14 – 112, #568, 569, #579-587, #593 – 637, #650 – 659.
Section 3: Methodological Approaches to Disparities Measurement: How to Measure and Monitor

- Reference Points
- Absolute vs. Relative Disparities
- Paired vs. Summary Statistics
- Interaction Effects
- Sample Size Considerations
- Risk Adjustment and Stratification
Section 3: Methodological Approaches to Disparities Measurement

Reference Points

Recommendation

• Choice of the reference group should be the historically advantaged group

• Why not the largest group or the best performing group?
Section 3: Methodological Approaches to Disparities Measurement

Absolute vs. Relative Disparities

- Absolute and relative changes in disparities can yield different conclusions on whether or not gaps are closing
  - Similar issue with favorable vs. adverse events

Recommendation

- Both types of statistics should be calculated, and if they lead to conflicting conclusions, both should be presented, allowing readers to make their own interpretation
Did Black-White Disparity Get Better or Worse Between 2000-2010?

Change in Disparities Over Time

% Failing to Receive Test

- Black
- White

Weissman JS 2009
Did Black-White Disparity Get Better or Worse Between 2000-2010? Answer: Both!

Change in Disparities Over Time

Disparity Calculations:
2000
Diff: 40-25 = 15
Ratio: 40/25 = 1.6
2010
Diff: 20-10 = 10
Ratio: 20/10 = 2.0

Change
The B/W difference got **better** over time (from 15 → 10)
The B/W ratio got **worse** over time (from 1.6 → 2.0);
Section 3: Methodological Approaches to Disparities Measurement

Paired vs. Summary Statistics

• Pairwise comparisons among multiple groups can be complex and not “report-friendly”.
• Summary statistics can address these issues but obscure important information, e.g., directionality.

Recommendation

• Pairwise comparisons using the historically advantaged group as the reference point should be checked to see if the summary statistic reflects superior care received by the disadvantaged group.
• If so, the context of the report and relevant policy goals need to be explicitly considered.
Section 4: Methodological Approaches to Disparities Measurement

Interaction Effects

- Reporting of “main effects” of R/E/L categories may obscure important behaviors, e.g., by race/gender

Recommendation

- When clear differences in quality exist by racial/ethnic sub-strata, further stratification of results will serve to highlight areas of the greatest potential for intervention.
Section 3: Methodological Approaches to Disparities Measurement

Sample Size Considerations

- The smaller the numbers, the more likely disparities will reflect chance rather than true differences

Recommendation

- Rolling up
- Summary statistics
- Composites
- Combine data from 2 or more years
Section 3: Methodological Approaches to Disparities Measurement

Risk Adjustment and Stratification

• Case mix adjustment and stratification are ways to avoid punitive effects of pay-for-performance affecting providers with disproportionately large poor and vulnerable populations.

Recommendation

• Stratification by race/ethnicity and primary language should be performed when there is sufficient data to do so. Risk adjustment may be appropriate when performance is highly dependent on community factors beyond a provider’s control.
Section 4: Priorities and Options for Quality Improvement & Public Reporting of Disparities

• **What to Achieve**
  – Monitor progress towards disparities reduction
  – Inform consumers and purchasers
  – Stimulate competition among providers
  – Stimulate innovation in methods
  – Promote the “values” of the health system

• **What to Avoid**
  – “Cherry-picking” of patients
  – “Rich get Richer” phenomenon for hospitals
  – “Teaching to the Test”/ Shifting resources
  – “Gaming the system”
  – Ability of minorities to benefit from color blind QI
  – Recognition of between/within phenomenon
Section 4: Priorities and Options for Quality Improvement & Public Reporting of Disparities

- **Policy and Dissemination Considerations**
  - Standardized measures that are easily understandable and actionable are essential
  - Capitalize on available measures used for quality reporting
  - OMB Categories should be used and adapted over time
  - Consider following issues for public reporting
    - How should it be used? Payment reimbursement or consumer choice? Provider incentives?
  - How should it be packaged?
    - Careful explanation of disparities and root causes and linking it to QI
Questions and Discussion
Adverse Drug Events and Disparities

Jennifer Thomas, PharmD, MT
Project Manager
Pharmacy/ADE Reduction Project
Delmarva Foundation for Medical Care
Perspective or point of view: Medication Safety Officer and/or Pharmacist

- Current adverse event reporting systems
  - Internal variance and/or error reports
    - Adverse Drug Events
    - Medication variance or errors
  - State reporting (mandatory in some states)
- Quality Assurance Performance Improvement (QAPI)
- Compliance
  - Joint Commission MM 07.01.03, w/CMS “monitor and analyze”
  - CMS coding (POA, ICD-9, ICD-10)
Office of Inspector General report on hospital adverse events (30% are medication events) Part 1 and 2
https://oig.hhs.gov/oei/reports/oei-06-09-00090.pdf and
https://oig.hhs.gov/oei/reports/oei-06-09-00091.pdf

Prior Office of Inspector General report on limitations billing/claims data set for adverse event reporting (including HAI, HAC, ADE)
https://oig.hhs.gov/oei/reports/oei-06-08-00221.pdf

NQF Commissioned Paper: Healthcare Disparities Measurement October 4, 2011 (Massachusetts General Hospital/Harvard Medical School)
New Safety Initiatives

Making Health Care Safer II
An Updated Critical Analysis of the Evidence for Patient Safety Practices


- An international panel of patient safety experts identified 22 strategies that are ready for adoption
  - 10 are "strongly encouraged" for adoption (do not use abbreviations, prophylaxis of TE)
  - 12 patient safety strategies that are "encouraged" (ADE reduction, medication reconciliation)
NQF Measure 0709: Proportion of patients with a chronic condition that have a potentially avoidable complication during a calendar year

- 6 chronic diseases
  - DM, CHF, CAD, HTN
  - COPD, Asthma
- Potentially avoidable complication (PAC) – 3 categories: anchor condition, co-morbidities, patient safety failures
  - Related hospitalizations, other services/procedures, adverse events (infections, TE, ADEs, etc.)
  - Other during the calendar year – ER visits, other services/procedures, adverse events (infections, TE, ADEs, etc.)
Each QIO will receive State specific ADE report packet

- ADE reports
  - State aggregate and ADE category list,
  - ADE by race/ethnicity with rate,
  - ADE by age and gender,
  - Facility level aggregate data
Review State level data
- ICD-9 categories
- Drill down

Review race/ethnicity & rates, age, gender data

Review facility level data – share with:
- Each respective facility
- Hospital coalition
- Hospital Association
- State Department of Health – minorities/disparities
Medication Safety Focus

Correlation with medication reconciliation, transitions of care & readmissions findings?

- Observations of most frequent (3 to 5) categories of ADEs
  - Most frequently coded events vs.
  - Most frequently reported ADEs in their internal reporting program.
- Is there any current review of ADEs by disparity?
  - observed anecdotally and have been further reviewed,
- Is there any current review and follow up of internal reporting events for documentation into the medical record?
  - Closed loop (PDSA) with documentation in the medical record?
  - Consideration of transition from ICD9 coding to ICD10 coding?
### Aggregate ADEs by ICD-9 Category

<table>
<thead>
<tr>
<th>Type and Class of Adverse Drug Events (ADEs)†</th>
<th>Total Admissions with at Least One ADE</th>
<th>Total ADEs</th>
</tr>
</thead>
<tbody>
<tr>
<td>All ADEs</td>
<td>1,527</td>
<td>1,690</td>
</tr>
<tr>
<td>Adverse effects of agents primarily affecting blood constituents</td>
<td>218</td>
<td>232</td>
</tr>
<tr>
<td>Adverse effects of primarily systemic agents</td>
<td>200</td>
<td>214</td>
</tr>
<tr>
<td>Adverse effects of other agents</td>
<td>189</td>
<td>212</td>
</tr>
<tr>
<td>Adverse effects of hormones and synthetic substitutes</td>
<td>199</td>
<td>208</td>
</tr>
<tr>
<td>Adverse effects of antibiotics and other anti-infectives</td>
<td>116</td>
<td>154</td>
</tr>
<tr>
<td>Adverse effects of analgesics, antipyretics, antirheumatics</td>
<td>110</td>
<td>126</td>
</tr>
<tr>
<td>Adverse effects of agents primarily affecting the cardiovascular system</td>
<td>119</td>
<td>124</td>
</tr>
<tr>
<td>Clinical side effects: Drug psychoses</td>
<td>71</td>
<td>71</td>
</tr>
</tbody>
</table>
## Data Example: ADEs by Gender and Age

<table>
<thead>
<tr>
<th>Beneficiary Gender</th>
<th>Total Admissions</th>
<th>Total Adverse Drug Events (ADEs)†</th>
<th>ADEs per 1,000 Admissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Beneficiaries</td>
<td>36,760</td>
<td>1,690</td>
<td>46.0</td>
</tr>
<tr>
<td>Female</td>
<td>20,333</td>
<td>992</td>
<td>48.8</td>
</tr>
<tr>
<td>Male</td>
<td>16,427</td>
<td>698</td>
<td>42.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Total Admissions</th>
<th>Total Adverse Drug Events (ADEs)†</th>
<th>ADEs per 1,000 Admissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Ages</td>
<td>36,760</td>
<td>1,690</td>
<td>46.0</td>
</tr>
<tr>
<td>(1) &lt;65 Yrs</td>
<td>9,369</td>
<td>384</td>
<td>41.0</td>
</tr>
<tr>
<td>(2) 65 - 69</td>
<td>6,142</td>
<td>243</td>
<td>39.6</td>
</tr>
<tr>
<td>(3) 70 - 74</td>
<td>5,669</td>
<td>261</td>
<td>46.0</td>
</tr>
<tr>
<td>(4) 75 - 79</td>
<td>5,192</td>
<td>245</td>
<td>47.2</td>
</tr>
<tr>
<td>(5) 80 - 84</td>
<td>4,569</td>
<td>237</td>
<td>51.9</td>
</tr>
<tr>
<td>(6) 85+</td>
<td>5,819</td>
<td>320</td>
<td>55.0</td>
</tr>
</tbody>
</table>
### Data Example: ADE by Race/Ethnicity

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Total Admissions</th>
<th>Total Adverse Drug Events (ADEs)†</th>
<th>ADEs per 1,000 Admissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Race/Ethnicities</td>
<td>36,760</td>
<td>1,690</td>
<td>46.0</td>
</tr>
<tr>
<td>Black</td>
<td>24,400</td>
<td>960</td>
<td>39.3</td>
</tr>
<tr>
<td>White</td>
<td>10,967</td>
<td>668</td>
<td>60.9</td>
</tr>
<tr>
<td>Unknown or Other Race/Ethnicity</td>
<td>574</td>
<td>28</td>
<td>48.8</td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>453</td>
<td>23</td>
<td>50.8</td>
</tr>
<tr>
<td>Asian or Pacific Islander</td>
<td>332</td>
<td>11</td>
<td>33.1</td>
</tr>
<tr>
<td>American Indian/Alaska Native</td>
<td>34</td>
<td>0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

† Adverse Drug Events (ADEs)
Table 2x1: Admissions w/ Adverse Drug Events by Race/ Ethnicity & ADE Category

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Table of HouglandKane by bene_raceth</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Black</td>
</tr>
<tr>
<td>Row Pct</td>
<td>152</td>
</tr>
<tr>
<td></td>
<td>69.72</td>
</tr>
<tr>
<td></td>
<td>17.04</td>
</tr>
<tr>
<td>Col Pct</td>
<td>87</td>
</tr>
<tr>
<td></td>
<td>43.5</td>
</tr>
<tr>
<td></td>
<td>9.75</td>
</tr>
<tr>
<td></td>
<td>133</td>
</tr>
<tr>
<td></td>
<td>66.83</td>
</tr>
<tr>
<td></td>
<td>14.91</td>
</tr>
<tr>
<td></td>
<td>107</td>
</tr>
<tr>
<td></td>
<td>56.61</td>
</tr>
<tr>
<td></td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>82</td>
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<tr>
<td></td>
<td>68.91</td>
</tr>
<tr>
<td></td>
<td>9.19</td>
</tr>
</tbody>
</table>

Adverse effects of agents primarily affecting blood constituents

Adverse effects of primarily systemic agents

Adverse effects of hormones and synthetic substitutes

Adverse effects of other agents

Adverse effects of agents primarily affecting the cardiovascular system
ADEs of Drugs by ICD-9

Agents primarily affecting blood constituents causing adverse effects in therapeutic use E934

- **E934** Agents primarily affecting blood constituents causing adverse effects in therapeutic use
- **E934.0** Iron and its compounds causing adverse effects in therapeutic use
- **E934.1** Liver preparations and other antianemic agents causing adverse effects in therapeutic use
- **E934.2** Anticoagulants causing adverse effects in therapeutic use
- **E934.3** Vitamin K [phytonadione] causing adverse effects in therapeutic use
- **E934.4** Fibrinolysis-affecting drugs causing adverse effects in therapeutic use
- **E934.5** Anticoagulant antagonists and other coagulants causing adverse effects in therapeutic use
- **E934.6** Gamma globulin causing adverse effects in therapeutic use
- **E934.7** Natural blood and blood products causing adverse effects in therapeutic use
- **E934.8** Other agents affecting blood constituents causing adverse effects in therapeutic use
- **E934.9** Unspecified agent affecting blood constituents causing adverse effects in therapeutic use
Review Process by QIO Questions?

From the data you have received/reviewed, do you observe any differences or interesting findings by groups? (ICD-9 category, race/ethnicity, age, gender)

- ICD-9 list
- Race/ethnicity
- Age
- Gender
- Facility

DNCC may assist in further review or analysis
Q & A

Press 14 to enter the queue to ask a question.
Update from the DNCC
DNCC Assessment and Environmental Scan

- Will be used to help shape future trainings and materials provided by DNCC
- Please complete and return to DNCC@sdps.org
Data Dissemination Plan

- Claims-based data on Adverse Drug Events will be made available to QIOs in March
- Healthcare Associated Infections (CLABSI, CAUTI, CDI) data will be released in May
April is National Minority Health Month!

- Special webinar with guest speakers
- Weekly activities and events
- Special editions of eNews and the WORD
- Additional resources on cultural and linguistic competency
Q & A

Press 14 to enter the queue to ask a question.
Post-Training Review/Office Hours

- March 20th, 2:00 ET
- This is an opportunity for further discussion of disparities issues with fellow QIOs
- Prior to the call, please think about:
  - Race, ethnicity, and language data collection and analysis
  - Challenges and lessons learned
Next Steps

Evaluation

• Evaluation: Please fill out our evaluation at the end of today’s call. Questions will also be sent via listserve.

Post-Training Review/Office Hours

• March 20th, 2:00 ET

Slides, recording, and transcript will be posted online.

• www.healthcarecommunities.org

Assessment and Environmental Scan

• Please complete and send to DNCC@sdps.org
Join the DNCC Community

To Join the DNCC Listserve:
- Log onto the SDPS system.
- Open Internet Explorer. Your default homepage should be qionet.sdps.org.
- At the top of the page, you should see a tab labeled “Listserve.” Click “Listserve.”
- Enter your user information at the top of the page and scroll down to “Disparities”. Join “Discussion” and “Notify”.
- Click “Subscribe”.

To Join DNCC Healthcare Communities:
- Log onto www.healthcarecommunities.org
- Sign in, or create an account.
- Scroll over the “Communities” tab, scroll down to “Available Communities” and select “QIO 10TH SOW”.
- Scroll down to DNCC and select “Join DNCC”.

Quality Improvement Organizations
Sharing Knowledge. Improving Health Care. CENTERS FOR MEDICARE & MEDICAID SERVICES

DNCC
Disparities National Coordinating Center
References


Weissman, J., Vogeli, C., Kang, R. (2009). Examining the Quality of Hospital Care and Simulating the Impact of Several Pay-For-Performance Scoring Methods on Hospital Rankings. [Presentation]

Thank you for participating in today’s webinar.

At the close of the presentation, you will automatically be directed to an evaluation screen.