Accelerating the Integration of Equity and Quality into Medical Education

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Senior Director, Health Equity Research and Policy

June 7th, 2013
Disclosures/Funding

No relevant financial interests or relationships to disclose
Learning objectives

1. Discuss the link between equity and quality improvement.

2. Examine successful strategies for integrating equity and quality.

3. Identify at least one concrete way to enhance equity or reduce disparities in your institution.
AAMC Health Equity Research & Policy Goals

1. Assure that academic medical centers and teaching hospitals are at the forefront of creating the evidence-base for solutions to health and healthcare inequities.

2. Help make the case for policies and practices that will explicitly incentivize health equity as a valued outcome for research, quality improvement, and health outcome-related initiatives.
Integration

- Quality Improvement
- Clinical Effectiveness and Implementation Research (ROCC)
- Biomedical Research and Physician Workforce Diversity
- Advocacy
- Metrics for Medical Research Outcomes
- Medical Education and MD Competencies

Health and Health Care Equity
NATIONAL HEALTHCARE DISPARITIES REPORT 2012

U.S. Department of Health and Human Services
Agency for Healthcare Research and Quality
540 Gaither Road
Rockville, MD 20850

AHRQ Publication No. 13-0003
May 2013
www.ahrq.gov/research/findings/nhsrdrindex.html

A reformatted, typeset version of this report will replace the current version.
Value Based Healthcare → Patient Outcomes

New Payment Models → “Bundled” money extends into the community; ACOs and PCMHs have “population health” focus

Patient Centered Outcomes Research → What works best for whom and why?

Health Disparities focus

Community Health Needs Assessments → How do needs and assets of populations served interact with care quality?
How do we get there?
A Roadmap for Organizations to Reduce Racial and Ethnic Disparities in Health Care

Marshall H. Chin, MD, MPH
Richard Parrillo Family Professor
Director, RWJF Finding Answers
University of Chicago
Disclosures / Funding

- AHRQ T32 HS00084
- The Commonwealth Fund
- HRSA
- John A. Hartford Foundation
- Merck Foundation
- NIDDK K24 DK071933
- NIDDK R18 DK083946-01A1
- NIDDK P30 DK092949
- NIH CTSA 2UL1TR000430
- Robert Wood Johnson Foundation
Learning Objectives

- Define a roadmap for reducing disparities in health care
- Review the evidence for what interventions can reduce disparities in health care
Finding Answers

- A national program supported by the Robert Wood Johnson Foundation with direction provided by the University of Chicago.
Finding Answers: Disparities Research for Change

www.SolvingDisparities.org

Finding Answers: Disparities Research for Change, a National Program of the Robert Wood Johnson Foundation at the University of Chicago, awards and manages research grants totaling $8 million to healthcare organizations implementing interventions aimed at reducing disparities. The funds are used to evaluate the interventions and their potential for real-world implementation. This initiative encourages health plans, hospitals, and community clinics to focus on racial and ethnic disparities as a priority in their quality improvement agendas.

Recent Updates:
Finding Answers addresses challenges confronting the nation’s health care delivery system at AcademyHealth’s 2007 Annual Research Meeting.
6-9-07
Date: June 6, 2007... View Webcast

New! Join Our E-Mail List!
Join our e-mail list to receive Finding Answers program updates, call for proposals (CFP), research highlights, success stories, and practical tools to improve racial and ethnic health disparities interventions.

A National Program of the Robert Wood Johnson Foundation at the University of Chicago
Goals of Finding Answers

- Grant funds to evaluate solutions to reduce racial and ethnic health care disparities.
- Conduct systematic reviews of disparities interventions.
- Disseminate results and provide technical assistance to address disparities in care.
Dissemination & Translation

- Provide information about what works—and what doesn’t
- Create resources and toolkits

Now that we’ve revealed racial disparities in health care, we can work to eliminate them.

Those who research racial disparities in health care understand how big the problem is. Please join us in working to find real solutions.

Visit www.SolvingDisparities.org for information on racial disparities in health care and how you can receive funding to help improve health care for all.

Finding Answers: Disparities Research for Change
A National Program of the Robert Wood Johnson Foundation at the University of Chicago
Finding Answers: Disparities Research for Change

Roadmap for Reducing Racial and Ethnic Disparities in Care

1) Recognize disparities and commit
2) Implement QI infrastructure and process
3) Make equity an integral part of quality
4) Design intervention(s)
5) Implement, evaluate, and adjust intervention(s)
6) Sustain intervention(s)

Chin MH et al.  JGIM 2012; 27:992-1000
Roadmap Step 1

- Recognize disparities and commit to reducing them
  
a) Examine your performance data stratified by race/ethnicity, language, socioeconomic status, and insurance status.
  
b) Get training for your staff to work effectively with diverse populations.

Roadmap Step 2

- Implement basic quality improvement structure and process
  - Quality culture
  - Quality improvement team
  - Goal setting and measuring
  - Local champion
  - Leadership support
Roadmap Step 3

- Make equity an integral component of quality improvement efforts
## IOM Model of Quality

<table>
<thead>
<tr>
<th>Crosscutting Dimensions</th>
<th>Components of Quality Care</th>
<th>Type of Care</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>Preventive Care</td>
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<tr>
<td>EQUITY</td>
<td>Effective</td>
<td></td>
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<tr>
<td></td>
<td>Safety</td>
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<tr>
<td></td>
<td>Timeliness</td>
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<tr>
<td></td>
<td>Patient/family-centeredness</td>
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<tr>
<td></td>
<td>Access</td>
<td></td>
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<tr>
<td></td>
<td>Efficiency</td>
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</table>
Roadmap Step 4

- Design intervention(s)
  - Determine root causes
  - Consider 6 levels of influence
  - Review literature
  - Learn from peers
  - Consider specific interventions
Conceptual Model

Financing / Regulation / Accreditation

Community → Person

Health Care Organization → Patient

Access

Process

Outcomes

Chin MH & Goldmann D. JAMA 2011
Roadmap Step 4 (Cont.)

- Evidence-based strategies
  - Multifactorial attacking different levers
  - Culturally tailored QI
  - Team-based care
  - Families and non-health partners
  - Patient navigators
  - Interactive skills-based training
Roadmap Step 5

- Implement, evaluate, and adjust intervention(s)
Consolidated Framework for Implementation Research

- Intervention (relative advantage)
- Outer (external incentives)
- Inner (culture)
- Individuals (beliefs)
- Process (plan, execute, evaluate)

Roadmap Step 6

- Sustain intervention(s)
  - Institutionalization
    - Culture, incentives, integrate into daily operations
  - Societal Business Case
  - Business Case – Align policy incentives
    - Global payments – Accountable care organizations (ACOs), bundled payments
    - Pay-for-performance - disparities
    - Link community & health care system - CDC, HHS
Strategies for Integrating Equity and Quality

Tom Sequist, MD, MPH

*Cultural Competency Training and Performance Feedback*

Lisa Vinci, MD, MS

*Integrating Equity into Quality Improvement Education*

Monica Peek, MD, MPH, FACP

*Equity in Community Partnerships: Improving Diabetes Outcomes*
Racial Disparities in Diabetes Care: Cultural Competency Training and Performance Feedback

Thomas D. Sequist, MD MPH

Brigham and Women’s Hospital
Harvard Vanguard Medical Associates and Atrius Health
Harvard Medical School
Disclosures/Funding

- Member of the Aetna Racial and Ethnic Equality External Advisory Committee
- Funded by Finding Answers
• Multi-specialty group practice

• 14 ambulatory health centers

• 300,000 adult patients
  - 15,000 diabetic patients

• 130 primary care physicians
Intervention Design

• Improve collection of race data

• Increase awareness
  – Provider performance reports

• Provide tools
  – Cultural competency training
  – Monthly educational “tips”
Collecting Patient Race and Ethnicity

Welcome

Our goal at Harvard Vanguard Medical Associates is to provide the best care possible to all of our patients. The collection of data about patient race and ethnicity will allow us to ensure that all patients receive equal treatment, regardless of race and ethnicity. This information will be used to identify and understand areas where we can work with diverse patients and communities to improve the health of all of our patients.

---

Working with you to improve the health of all of the diverse communities we serve

Name ______________________

Harvard Vanguard Medical Associates wants to make sure that all of our patients get the best care possible, regardless of their race. Please tell us your race so that we can review the treatment that all of our patients receive and make sure that everyone receives the same high quality care.

This information will become part of your medical record and will be kept confidential, like all information in your record. We will only use it to develop programs to improve care for the diverse communities we serve.

How would you best describe yourself (check only one)?

☐ White, non-Hispanic
☐ Black, non-Hispanic
☐ Hispanic
☐ Asian
☐ Native Hawaiian and other Pacific Islander
☐ Native American
☐ Other
☐ Decline

Please give this card to the medical assistant.

Thank you for your help.
Sample Performance Report

December 2007 Disparities in Diabetes Care Report (Dr. Thomas Sequist)

This Month

- % HbA1c < 7%
  - Your panel
  - Across HVMA

Monthly Trend

- White-Black Difference
  - June
  - August
  - October
  - December

Figure 1. % Achieving HbA1c < 7%

Figure 2. Trend in % Achieving HbA1c < 7%

PCP = Dr. Thomas Sequist
N = 100 white patients
N = 40 black patients
# Baseline Racial Disparities

<table>
<thead>
<tr>
<th></th>
<th>White (n=4,858)</th>
<th>Black (n=2,699)</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Process measures, %</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual HbA1c test</td>
<td>87</td>
<td>89</td>
<td>0.14</td>
</tr>
<tr>
<td>Annual LDL test</td>
<td>83</td>
<td>83</td>
<td>0.99</td>
</tr>
<tr>
<td><strong>Outcomes measures, %</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HbA1c &lt; 7%</td>
<td>46</td>
<td>40</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>LDL &lt; 100 mg/dL</td>
<td>55</td>
<td>43</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>BP &lt; 130/80 mmHg</td>
<td>32</td>
<td>24</td>
<td>&lt;0.001</td>
</tr>
</tbody>
</table>
Impact on Clinician Awareness

Do racial disparities in diabetes care exist in....

- All health centers: 82% (P=0.003)
- Your health center: 70% (P=0.02)
- Your patients: 63% (P=0.04)

Sequist; Ann Intern Med 2010
“Even though their diabetes might be under horrendous control, it wasn’t the top thing on life’s list. You know they might have a kid in jail, or they might have been in the midst of an eviction proceeding or others are at risk of losing their jobs. There were a lot of other topics that were higher on their list than their HbA1c of 13”

“I think that I feel very overwhelmed by this whole kind of concept because in many respects I think that a lot of this is very, very difficult to change because of what happens outside of these four walls.”

“It’s just not useful information. I see very little that I have accessible at my disposal to make any impact on it, and telling me that it's there, it changes or doesn't change, seems to be random and have absolutely nothing to do with what I personally do or can do.”
Key Take Home Points

• Many practicing clinicians do not endorse presence of disparities
  – Medical education must be early and often
  – Data is a powerful tool
  – Experiential learning is critical

• Cultural competency training is not a panacea
  – Only one step in a long process
  – Must support clinicians to take action on what they learn via discussions inspired by training
  – Cross-disciplinary education is critical to addressing the social determinants of health
Integrating Equity into QI Education

Lisa M. Vinci MD MS
AAMC Integrating Quality
June 7th, 2013

Finding Answers
Disparities Research for Change

Robert Wood Johnson Foundation
Disclosures/Funding

• Nothing to disclose
QI Education at the University of Chicago

- Quality Assessment and Improvement Curriculum - 2006
  - Internal Medicine curriculum
  - Ambulatory Block- 24 total hrs/2 years
  - IHI Model for Improvement
  - Use American Board of Internal Medicine Practice Improvement Modules
    - Includes race/ethnicity data
  - Group projects

- Quality and Safety Track- 2009
  - Medical Students
  - 4 year scholarly concentration
  - IHI Model for Improvement
# Integrating Equity into QI Projects

<table>
<thead>
<tr>
<th>Project</th>
<th>Problem</th>
<th>Interventions</th>
<th>Equity issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient Orientation Manual</td>
<td>Patients were not familiar with the clinic services offered and how to contact their PCP</td>
<td>Wrote and distributed brochure</td>
<td>Literacy level, Mistrust, Poverty/transportation</td>
</tr>
<tr>
<td>HIV screening</td>
<td>Low rates of HIV screening in our clinic</td>
<td>Added to health maintenance checklist, education re: indications</td>
<td>Sexual orientation, Culture, Religion, Mistrust</td>
</tr>
<tr>
<td>Follow up post discharge</td>
<td>Limited dental, mental health, and substance abuse resources</td>
<td>Researched, cataloged, and distributed info on resources</td>
<td>Literacy level, Poverty, Insurance</td>
</tr>
</tbody>
</table>
Be willing and able to explicitly discuss equity issues

Discrimination
Unconscious bias
Race
Ethnicity
Culture
Sexual orientation
Religion

Insurance status
Mistrust of healthcare system
Poverty
Education level
Environment
Health literacy
Ask learners to reflect on extent of responsibility

How far does the responsibility of the providers and health system extend in meeting the needs of their patients?
Examine your systems of care to identify structures and processes that foster disparities in outcomes

Structure + Processes = Outcomes
Equity in Community Partnerships: Improving Diabetes Outcomes

Monica E. Peek, MD, MPH
AAMC Integrating Quality
June 7th, 2013
Disclosures/Funding

• NIDDK R18 DK083946
• NIDDK P30 DK092949
• Merck Company Foundation
• University of Chicago Collaborative Translational and Clinical Studies Award
Improving Diabetes Care & Outcomes on the South Side of Chicago

- QI + Disparities
- Geographic areas
- Community + Healthcare systems
- Chronic care model
Provide real-world opportunities to learn about community-level health equity issues

- Residential segregation
- Food deserts
- Violence/crime
- Health insurance/Access
- Social challenges

- Community-based organizations
- Faith community
- Academic partnerships
- Healthcare safety net
- Sociocultural institutions
Equity in Community Partnerships: Improving Diabetes Outcomes

- Food and Exercise Rx
- Food Pantry collaborative
- Nutrition tours at low-cost grocers
Opportunities for Learners

• Medicine, nursing, public health, culinary

• Medicine
  – Medical students: volunteerism, didactic learning
  – Residents: clinical skills, research involvement
  – Research fellows: independent research projects

• Pritzker Scholarship & Discovery Program
  – Longitudinal experience
Bringing Health Care & Education to the Community
Culturally tailored education and empowerment for African-Americans with diabetes

Ndang Azang-Njaah, MS III
- 3 presentations
- AAMC Diversity Award
Food Rx: Mobilizing outpatient clinics to prescribe healthy food for underserved patients

Katie Raffel, MS IV
- 6 presentations
- 3 publications

A NEW MODEL OF RETENTION FOR HEALTH EDUCATION/BEHAVIORAL INTERVENTIONS: URBAN AFRICAN-AMERICANS IN THE DIABETES EMPOWERMENT PROGRAM

BACKGROUND: Culturally-tailored diabetes education can improve diabetes self-management and self-efficacy among African-Americans, but attrition is often a barrier to program effectiveness. Attrition from basic diabetes education ranges from 4-57% and is associated with higher HbA1c, blood pressure and BMI as well as increased complications. Despite the importance of retention in health outcomes, research describing minority retention in health education/behavioral interventions is lacking. The Diabetes Empowerment Program combines diabetes education and patient/provider communication training and is culturally-tailored for African-Americans. This program not only improved diabetes self-management but also had notably high retention rates. Despite the intensity of the ten-week program, 70% of the 90 participants attended 80% of the classes. We sought to investigate the program’s successful retention in order to address significant gaps in the literature describing minority retention in health education.

METHODS: We conducted four focus groups (n=31) and seven in-depth interviews (n=7) with former participants of the Diabetes Empowerment Program. Interviews and focus groups were conducted by trained interviewers with experience discussing health and communication. Using a structured topic guide, interviewers asked participants to identify and discuss factors influencing their attendance. Each interview/focus group was audiorecorded, transcribed verbatim and analyzed using Atlas.ti software. Coding was conducted using an iterative process; each transcription was independently coded by two members of the research team.

RESULTS: Participants discussed multiple program characteristics contributing to successful retention, from which we identified the following key themes:...
Using mobile health to support the chronic care model

Shantanu Nundy, Research Fellow
- 6 presentations
- 5 peer-reviewed publications

Feasibility and Usability of a Text Message-Based Program for Diabetes Self-Management in an Urban African-American Population


Abstract

Purpose:
We pilot-tested a text-message-based diabetes care program in an urban African-American population in which automated text messages were sent to participants with personalized medication, foot care, and appointment reminders and text messages were received from participants on adherence.

Methods:
Eighteen patients participated in a 4-week pilot study. Baseline surveys collected data about demographics, historical cell phone usage, and adherence to core diabetes care measures.mail interviews using closed-ended and open-ended questions were administered to patients at the end of the program. A 4-month follow-up interview was conducted surveying patient's perceived self-efficacy. We used paired t-tests to compare baseline survey responses about self-management activities to those at pilot's end and at 3-month follow-ups.

Results:
Eighteen urban African-American participants completed the pilot study. The average age was 35 and the average number of years with diabetes was 8. Half the participants were initially unaccustomed with text messaging. Examples messages included “Did you take your diabetes medication today?” and “How many times did you check your feet for wounds this week?” Participants averaged 220 text messages with the system, responded to messages 85% of the time, and an average response within 5 minutes. Participants strongly agreed that text messaging was easy to perform and helped with diabetes self-care. Missed medication decreased from 1.44 per week to 0.34 (p = .043). Patient confidence in diabetes self-management was significantly increased during and 1 month after the pilot (p = .002, p = .008).
Resources

J Gen Intern Med 25(Suppl 2):130–5

Community-based Teaching about Health Disparities: Combining Education, Scholarship, and Community Service

Crystal W. Cené, MD, MPH, Monica E. Peek, MD, MPH, Elizabeth Jacobs, MD, MPP, and Carol R. Horowitz, MD, MPH

The Institute of Medicine recommends that clinicians receive training to better understand and address disparities. While disparities in health status are primarily due to inequities in social determinants of health, current curricula largely focus on how to teach about disparities within the health care setting. Learners may more fully understand and appreciate how social contextual factors contribute to disparities through instruction about disparities in community settings. Community-based teaching about health disparities may be advantageous for learners, medical institutions, and participating communities because it addresses the root causes of disparities. The Institute of Medicine defines health disparities as differences in treatment provided to members of different racial or ethnic groups that are not justified by the underlying health conditions or treatment preferences of patients. This definition of disparities, which emphasizes the health services perspective, may contribute to the perception that disparities in health care are a major determinant of disparities in health status. While disparities in health care are important and must be addressed, medical care is only responsible for about 10% of health status. Disparities in health status are primarily due to inequities in social determinants of health.
Where Are You on the Roadmap?

Scott Cook, PhD
Rachel Voss, MPH
What concrete action can your organization take?

- Advocacy
- Building skills
- Equity in practice
- Culture of equity
- Community engagement
Questions for Discussion

1. **Advocacy:** To what extent are students and faculty encouraged to define themselves as advocates of equity, and supported in seeking ways to advocate?

2. **Building skills:** How should medical education prepare new and practicing physicians to seek system-level solutions to patient barriers? How do we assess this type of skill and knowledge?

3. **Equity in practice:** How can we incorporate equity into teaching about quality improvement and practice-based learning?
Questions for Discussion

4. **Culture of equity:** How do equity and social accountability fit into our programs, organizational strategic plans, and curriculum?

5. **Community engagement:** How do we work with community partners to respond to patients’ disease management barriers? What opportunities do students have to practice these skills?
Final Thoughts

Philip Alberti, PhD