No Population Health with Health Disparities

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Conflict of interest

- None
Overview

- Context: public health, health disparities, health impact pyramid, and bias
- Opportunities for GIM
  - Education
  - Research
- Community partnerships

Usual population health focus

CDC, public health depts
Where GIM fits in: health impact pyramid

- Diet, tobacco, med adherence
- Rx hypertension, diabetes
- Immunizations, evidence-based weight control programs
- Sanitation, clean water
- Income, housing, education


Our focus: health disparities

- Preventable differences in the burden of disease, injury, violence, or opportunities to achieve optimal health for socially disadvantaged populations (CDC)

  - Racial and ethnic disparities in health care reflect access to care and other issues from differing socioeconomic conditions.
  - However, even after such differences are accounted for, race and ethnicity remain significant predictors of quality of health care.
Recognize biases

We are shocked when Whites start to fail....

*Death Rates Rising for Middle-Aged White Americans, Study Finds*

By GINA KOLATA  NOV. 2, 2015

Something startling is happening to middle-aged white Americans. Unlike every other age group, unlike every other racial and ethnic group, unlike their counterparts in other rich...
The ratio of black non-Hispanic to white non-Hispanic mortality rates for ages 45–54 fell from 2.09 in 1999 to 1.40 in 2013.

However, for ages 45–54, the narrowing of the mortality rate ratio in this period was largely driven by increased white mortality.

“It is far from clear that progress in black longevity should be benchmarked against US whites”
Equity in the context of systematic inequity?

SGIM Annual Meeting

- Generalists engaged in population health: Improving outcomes and equity through research, education, and patient care
- Focuses on the health outcomes of a group of individuals
- Innovation and excellence, one patient at a time
Dichotomy of care: Osler

- Residency system developed by Sir Osler influenced by cultural conditions
- Before World War II, the U.S. and other industrialized nations used indigent patients as “clinical material.”
  - Poor patients received free care in exchange for participation in clinical education and research.
  - Paying patients used only if they grant permission
- “Two-tiered system of health care with an abundance of charity patients for house officers to learn”

Ludmerer K. http://blog.oup.com/2015/05/cultural-origins-residency-training/#sthash.y3surYW8.dpuf
Multiprofessional care to reduce disparities

Adapted from:
Defining Primary Care: An Interim Report, Institute of Medicine 1994

Community partnerships to address disparities

The Next Phase of Title VII Funding for Training Primary Care Physicians for America's Health Care Needs

Reconnect training hospitals to their communities with grants to involve trainees/faculty in community evaluation, description, priority-setting, intervention, and evaluation
10-20 grants annually to test new models of training, population management, and community engagement; support rigorous evaluation

Ann Fam Med 2012
Health impact pyramid

QI projects that address health disparities in processes of care and outcomes – both inpatient and outpatient.

Community partnerships to address root causes.

What about health disparities research?
Focus on disparities: Everywhere

Racial Disparities in Hypertension Control, but Not Treatment Intensification

Variables to address health disparities and identify high risk patients

- Race-ethnicity
- Insurance type and status
- Educational attainment
- Language
- Income
- Characteristics of neighborhood/residence
- Health literacy
- Adherence to care
SES and Environmental Data Sources

includes VHA’s EHR data + some administrative data

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Variables to address health disparities and identify high risk patients

- Race-ethnicity
- Insurance type and status
- Educational attainment
- Language
- Income
- Characteristics of neighborhood/residence
- Health literacy
- Adherence to care
• 275 consecutive patients aged >50
• Scheduled for first colonoscopy
• Kept <75% of visits to 4 primary care practices
• 61% African-American
• Peer coach intervention 2x greater adjusted odds of adherence
Change of venue!

Unique opportunity in Texas

ReACH Center
Research to Advance Community Health
Engaging minority patients and caregivers as stakeholders: PCORI project

Objectives

- A mixed methods study of sampling approaches to:
  - Recruit minority patients and caregivers as stakeholders
  - Identify community priorities for chronic pain-specific programs
- To develop a practical guide for researchers seeking to partner with hard-to-reach populations
Partners
Southcentral Texas Area Health Education Center
Texas A & M Agri-Life Extension Services
Frio community advisory board  Karnes community advisory board

Videotaped testimonials
Engage the community in research and clinical care

- Especially vulnerable populations
- Sustainable, bidirectional partnerships
- Community health workers
- Peer counselors
- Community advisory board
- Community stakeholder meetings

Focus on Outliers
VA Hospitalization and Mortality Data

Veterans in highest %ile of risk have 62% probability of admission, 30% probability of death, and 72% probability of either event.

Likelihood of hospitalization or death – VA

Fihn, et al
Health Affairs 2014
Where the poor and uninsured live

>1/2 of nation’s uninsured live in states that are not expanding Medicaid

Underlying Reasons Associated With Hospital Readmission Following Surgery in the United States

Table 6. Contribution of Individual Categories in Explaining the Risk of Readmission

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<th>Model</th>
<th>R²</th>
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<tr>
<td>Full model</td>
<td>0.570</td>
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<tr>
<td>Medicare eligibility only</td>
<td>0.264</td>
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<tr>
<td>Inpatient complication only</td>
<td>0.073</td>
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<td>Discharge destination only</td>
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<td>Hospital characteristics only</td>
<td>0.021</td>
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<tr>
<td>Postoperative care (hospital stay)</td>
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Reported R² is estimated using the Hosmer-Lemeshow measure of explained variation in survival models. Each of the 6 models were estimated using proportional hazards Cox models for which time to event was measured as days from discharge to first readmission. Observations with no readmission within 90 days of discharge were right censored. All models were estimated with robust clustered standard errors that account for hospital-level clustering.
Patients living in high-poverty neighborhoods are 24% more likely to be readmitted.

Take advantage of community needs assessment.
Health impact pyramid

Expand our research focus in to the community
Address underlying factors that lead to poor outcomes

Research

- Collaborations across GIM divisions around the nation – regions with better health outcomes work with those that have worse outcomes
- Take advantage of lived environment data sources
- Focus on the outliers
- Designate section heads for population health/health disparities
- Engage vulnerable populations in community-based participatory research
Disparities still loom: GIM can lead the way to address them