Moving Upstream to Improve Population Health

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Patterns of myriad health determinants over the life course

Health outcomes and their distribution in a population
Population Health
(Kindig and Stoddard)

Patterns of health determinants over the life course

Health outcomes and their distribution in a population

Policies and interventions at individual, community and societal levels
Social Ecological Model of Health Determinants

- Public Policy
- Community (cultural values, norms)
- Organizational (environment, ethos)
- Interpersonal (social network)
- Individual (knowledge, attitude, skills)
WHO Conceptual Framework of Social Determinants of Health

- Socioeconomic and political context:
  - Governance
  - Macroeconomic policies
  - Social policies (labour market, housing, land)
  - Public policies (education, health, social protection)
  - Culture and societal values

- Social class:
  - Gender
  - Ethnicity (racism)

- Social cohesion & social capital:
  - Education
  - Occupation
  - Income

- Structural determinants:
  - Social determinants of health inequities

- Intermediary determinants:
  - Social determinants of health

- Material circumstances:
  - (living and working, conditions, food availability, etc.)
- Behaviors and biological factors
- Psychosocial factors

- Impact on equity in health and well-being

Health system
Johan Peter Frank, (German Physician) *The People’s Misery: Mother of Diseases, 1790*

“...the diseases caused by the poverty of the people and by the lack of all goods of life are exceedingly numerous.”
Epidemiological Transition

- England & Wales
- Japan
- Chile
- Ceylon

Yearly data for different causes of death, including:
- Other Causes
- Violent death
- Vascular of CNS
- Heart disease
- Cancer
- Dis of early inf
- Diarrhea
- Infectious diseases
- Tuberculosis
Key Population Health Finding: U.S. is an Outlier
History of Population Health

2007 Institute for Healthcare Improvement

Triple Aim

Improving Patient Care
Reducing Cost

Improving the Health of Populations
Conflation of a number of different fields of inquiry and practice

- Population health
- Public health
- Preventive medicine
- Population medicine

- Population health management
- Precision medicine
- Precision health/precision public health
Population Health Management

- Telehealth Device Integration
- Claims & Beneficiary Management
- Clinical Integration
- Population Analytics
- Patient Engagement
- Reporting and Measuring
- Care Coordination

Measure Outcomes

1. Define Population
2. Identify Care Gaps
3. Stratify Risks
4. Engage Providers & Patients
5. Population Health Management
6. Manage Care

#185962950
Over 60 universities in U.S. have colleges, departments, degree programs in population health, population medicine or population health management

Themes:
- Triple Aim - Emphasis on patient populations/care
- Partnerships with public health & community resources
- Population health management is big business—huge growth in services/products for analytics, risk stratification, claims management, quality metrics, etc.
- Focus of interventions/services is primarily downstream at individual level
**Medicalization**: Process by which health issues that are primarily the result of social conditions/factors become viewed and treated as individual medical problems or pathologies.

- Stronger focus on sickness than on health
- Gives clinicians the *authority* to *diagnosis* and *treat* problems within boundaries of medical expertise/practice
- Often creates new clinical services and/or business services and products
- Focuses resources and interventions downstream

PM Lantz, *Milbank Quarterly*, 2018
Examples of Medicalization

**Menopause:** Normal female aging became *Estrogen Deficiency Disorder*

**Obesity:**
- Disease/pathology *versus* result of myriad obesigenic environmental factors and social contexts that influence and constrain behaviors
- Framing obesity as a disease does not explain obesity epidemic, and prioritizes very different policy paths and interventions

**Attention Deficit/Hyperactivity Disorder:**
- Higher incidence in males, low income urban schools and school districts that have December 1 start dates
- Some view AD/HD as in part the result of the medicalization of behavioral disruptions in resource-constrained classrooms
- White children more likely to receive medical diagnosis for behavioral disruption; African American children more likely to receive punishment
Implications for Population Health Research, Policy and Practice

- **Denominator shrinkage**
  - Populations of patients who temporarily share providers/insurers versus sociopolitical/geographic populations

- **Conflation of health and health care:**
  - Population health versus population health management
  - Social determinants of health and patient social needs

- The framing of problems, focus of research, targets of policy and interventions and resource allocation is focused **downstream at the individual level**

- **Ignores** or is timid about macro-level factors (including policy) that create population health problems and inequities
There is a difference between:

- Policies that promote affordable housing in communities *versus* supportive housing interventions for chronically homeless persons

- Addressing the social reasons African American women of reproductive age have higher rates of hypertension, diabetes and STIs *versus* focusing on prenatal care as a way to reduce racial disparities in pre-term delivery

- Poverty prevention and income security policies *versus* screening patients for troubling pay for prescriptions or utility bills

*Disturbing trend: Increase in health care setting screening for patient social needs*
Health Care System Cannot Solve the Fundamental Causes of Health Inequity

- U.S. life expectancy ranks 35th in the world and is declining
  - Overdose, suicide, Alzheimer’s deaths increasing

- 40% of U.S. children live below or close to the poverty line
  - Black children 4 times as likely to live in poverty than white kids

- Racial segregation in schools is as high as it was in the 1970’s
- Socioeconomic/racial disparities in high school graduation rates
- Racial wealth divide is huge and growing
- 70% of Americans cannot afford to buy a home

- High rates of mental health problems/suicide among LGBTQ youth
- Institutionalized discrimination and systemic racism
“Health care system has the money” = looking for keys under the lamppost
The Imperative for Upstream Paths to Population Health
Support for timing and spacing of pregnancy
Early childhood investments
Universal Pre-K
Income security for families
  - Child allowances; Universal basic income
Housing affordability and quality
Environmental justice
Employment training
Juvenile justice system reform
Address institutional/systemic racial discrimination
Health care system/health insurance reform
The medicalization of population health as “population health management” has brought some new attention to social determinants of health and health equity. It has also steered total population health efforts towards a downstream path that is becoming bigger and better groomed but not heading towards fundamental change. This path needs some critical re-evaluation and redirection. Otherwise, as Sharfstein laments, “we may find ourselves awash in population health efforts, without meaningful progress in the health of our population.”