Socially Determined: Moving to Public Health 3.0

Outlines of an Implementation Road Map for Chronic Disease Programs
U.S. Life Expectancy vs. Health Expenditure

From 1970 to 2014, citizens of OECD countries have outlived their American counterparts – for a fraction of the associated costs.

Source: Visual Capitalist
The U.S. is an anomaly in health and social spending patterns

Source: OECD
Distribution of Average Income Growth During Expansions

Source: Pavlina R. Tcherneva calculations based on Piketty/Saez data and NBER

- 1949 - 1953
- 1954 - 1957
- 1958 - 1960
- 1961 - 1969
- 1970 - 1973
- 1975 - 1979
- 1982 - 1990
- 1991 - 2000
- 2001 - 2007
- 2009 - 2012

bottom 90%  top 10%
Factors Influencing Health Status

Future Directions for Public Health

1.0
- Infection control through treatment - TB
- Clinical preventive measures – immunizations

2.0
- Policy and environmental change – Seatbelts, tobacco tax
- Systems building – Diabetes Prevention Program

3.0
- Social determinants of health – food, housing, transport
- Partnerships – Education, Human Services, Transportation, Housing, Revenue....
Principles for the Development of Public Health 3.0

● Don’t reinvent the wheel, learn from others
● Don’t stop doing what you’re doing
● Use your training
  ○ Adhere to the evidence-base
  ○ Get the model right - social-ecological, multifactorial
  ○ Work through partnerships
  ○ Lead with humility
Five Domains of the Social Determinants of Health
Healthy People 2020

Economic Stability  Education  Health and Health Care  Neighborhood and Built Environment  Social and Community Context
BHMC Pilot: Qualitative Data Analysis

After the initial quantitative data analyses, the BHMC Pilot team conducted a baseline Rapid Needs Assessment (RNA) via scripted semi-structured interviews of DoD (unit leaders, retention non-commissioned officers, and recruiters) and non-DoD stakeholders (community health organizations, state and local health departments, employment assistance programs, and local healthcare providers). The RNA examined available resources and existing needs and used these qualitative data to identify six themes of the current gaps in optimizing readiness, resiliency, and well-being.

The 6 Themes

- **Transportation and Geographic Dispersion**
- **Mental Healthcare and Substance Abuse:** Access and Stigma
- **Communication and Coordination Between DoD and Community Resources**
- **Jobs and Employment:** Shifting Location, Employer Expectations, Financial Literacy
- **Family Supports:** Childcare, Spousal Employment, Higher Education Opportunities, and Housing
- **Adverse Health Behaviors:** Nutrition, Obesity, Chronic Conditions, and Tobacco Use
Socio-ecological model - how public health thinks

Individual: genotype, knowledge, beliefs, experience

Interpersonal: Family, friends, social network

Organizations: Schools, churches, social organizations

Community: Cultural, natural, and built environment; services

Government: Laws, policies, regulations,

Source: Wayne W. LaMorte, MD, PhD, MPH, Boston University School of Public Health
http://sphweb.bumc.bu.edu/otlt/MPH-Modules/QuantCore/PH717_ExposureAssessment/PH717_ExposureAssessment2.html
Risk and Protective Factors in the Social Ecological Model

- Laws and norms favorable or unfavorable to substance use
- Low neighborhood attachment and community
- Low levels of transitions and mobility
- Academic failure beginning in late elementary school
- Family history of substance use
- Family management problems
- Individual attitudes towards substance use
- Early initiation of substance use
- Parental attitudes towards substance use
- Family opportunities for prosocial involvement
- Access to a trusted adult

- Law that determines the availability of substances/policy
- Opportunities for prosocial involvement in the community
- School opportunities for prosocial involvement
- Social recognition for prosocial involvement
- Lack of safe, accessible places to play
- Lack of commitment to school
- Poor transportation options

Individual
Interpersonal/Family
School/Organizational
Community
Society & Policy
What Public Health Does Well

- Modeling disease processes
- Scientific rigor
- Collect and analyze data
- Acting as a trusted partner
- Leveraging resources

Use these strengths to find a way forward...
Disruptive Public Health 3.0 Practices

- Develop new projects, programs or public health practices
- Leverage Public Health expertise
- Using resources to grease or leverage action in other sectors
- Taking a more muscular posture on existing incentives to manufacturing illness
Public Health 3.0 - Potential Projects

- Re-entry systems with wrap-around services for incarcerated individuals
- Build work-based learning systems for those changing jobs or entering labor force
- Build systems of prescription and referral from health care to social services
- Build accessible support and training systems for 16-25 yr olds on life-skills, positive relationships, and employment training and matching
- Advocate for policies that require health impact assessments in housing stock, education systems, community plans, local transportation systems, and human service systems
- School district partnerships to assure health services to needy children, especially in areas of low educational attainment
- Build systems of affordable community banking and investment
Public Health 3.0 –
Leverage Public Health Expertise

- Public health approach to community policing and safety
- Nurse-family partnership model for parents of school-aged children
- Design changes to street-scapes that encourage physical activity and active transportation
- Communities that Care model for community action
- Rotary Club-styled community health coalitions
- Hot-spotting pockets of need by block or census tract
Public Health 3.0 – Resources to Grease the Skids

- Grants to schools to adopt healthier vending options
- Financial assistance and training to improve food prep in child care
- Funding for operation costs of community health coalitions
- Assisting states in public health transformation and funding initiatives
- Accessing the population health potential of EHRs
- Building resource and referral inventories for social services
- Funding for streamlining applications for social services
Public Health 3.0 – More Muscular Advocacy

- Raising tobacco taxes
- Looking at the food system critically - ag subsidies, portion sizes, sugar content
- Investments in pre-distribution
- Mass-transit, housing density, active transportation, design-based zoning
- Studies on guns, screen time, communications and health
- Mass communication on the social determinants of health
- Mass communication/ ROI studies on benefits of Universal Pre-K, Basic income, paid family leave
The Podcast Series

- Exploring the social determinants of health and the public health role
- Increasing popular understanding of the social determinants
- Community action, civic engagement, and mobilization strategies
- The Social Genome Project - a role for public health?
- ACES and their role in chronic disease
- Community development and health impact assessments
- Security enhancements - food security, income security and paid family leave