Essentials of Population Health: What is it?

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Dilbert on Population Health

Source: Scott Adams/Dilbert
So Many Buzzwords...

Predictive Analytics

Big Data

Interoperability

mHealth

Risk Management

Value Reimbursement
**Population:** a group of patients with some common characteristics

**Health:** complete state of well-being; not only the absence of disease or pain

*Improving the health needs of a defined group of people*
Defining Population Health

• “the distribution of health *outcomes* within a population, the *determinants* that influence distribution, and the *policies/interventions* that affect them…”

(Nash et al, 2016)
• Targeted interventions that improve the health outcomes and the determinants of these outcomes (medical, societal, behavioral, other) for a specific group

(Kindig et al, AJPH, 2003)
Population Health Has Shifted

• Original: emphasis on *economic* tradeoffs between $ and Outcomes (Public Health)

• Now: social determinants, health disparities and improving ‘cost/health/care’ equation (Clinical)

• Transition from pure public health definition to more Clinical Populations

• “All population health programs should foster collaboration between clinical providers and community/public health agencies”

(Hacker and Walker, AJPH, 2013)
UTHealth – PH Planning Model

ORGANIZE
Assemble diverse Committee from all Schools

- Implement a unique Clinical program
- Define targeted Research Projects

BASELINE MEASUREMENT
Identify faculty capacity (current project inventory) and Data Resources

- Develop List of faculty and clinicians with Pop Health focus
- Create a needs/inventory survey

IMPLEMENT
Measure Outcomes, Finalize Plans and Funding

- Select a core set of populations to focus on
- Identify and pursue funding opportunities
- Work with UT System for internal funding
- Structure of ongoing programs

ANALYZE
Generate and Evaluate Strategic Choices (disease, regional focus)

- Develop List of Data Resources
- Summarize Project Inventory
- Meet and identify Alternative Population Projects

Identify Value Opportunities
• We discovered that there were at least:
  • 25 faculty with active projects in Pop Health
  • $60 million of current funding
  • Interest from all schools and across all UT components
  • Collaborators from dozens of local and state agencies
  • Focus on multiple populations, regions, and diseases
UTHealth Projects by Condition Focus

- Obesity/Nutrition/Phys Activity: 39%
- Womens/Reproductive Health: 9%
- Cancer: 8%
- Mental Health: 6%
- Environ. Factors: 7%
- Substance Abuse...: 7%
- Homelessness: 7%
- Cardiovascular Disease: 6%
- Diabetes: 1%
- Smoking: 7%
- Other: 8%
Population Health Management

Is the intervention working?

Adherence; Follow-up

Who? What? Where? When?

Define Population

Measure/Improve/Compare Outcomes

Data Integration
Database Management
Statistical Analyses
Alerts/Reporting
Feedback

Identify Care Gaps & Risks

Manage/Deliver Care

Engage Patients in Intervention

Mobile Apps; Social networking
Clinical PHM

- Focus on finding revenue opportunities or value from accountable care organizations (ACO) or payers
- Works well in larger integrated systems or ACOs with financially-vested clinicians and large patient populations
- Ex: targeting cardiovascular patients for post-discharge primary care follow-ups prior to secondary arrival in an ED
  - Payers see value in reducing avoidable ED visit or admissions
Plethora of Population Health Vendors

Pharmacists’ Role in Public and Population Health

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Abstract
In 2006, the American Public Health Association published a policy statement on the public health role of pharmacists with a focus on the major functions of public health: 1) assessment, 2) assurance, 3) prevention and public preparedness, and 4) policy development. These topics align well with the focus on population health in new care models such as Accountable Care Organizations (ACOs), advanced primary care practices, and community-based health teams. Pharmacists can make a valuable contribution to public health initiatives given their unique training and expertise areas. Health care organizations, researchers, public health officials and policymakers need to consider how pharmacists can participate in patient-specific care, as well as public health efforts, at the local, state, and national levels.

ABBREVIATIONS
ACO: Accountable Care Organizations; CDTM: Collaborative Drug Therapy Management

INTRODUCTION
In 2006, the American Public Health Association published a policy statement on the public health role of pharmacists [1]. This statement focused on the major functions of public health: 1) Assessment, 2) Assurance, 3) Prevention and Public Preparedness, and 4) Policy Development. In addition, the Joint Commission of Pharmacy Practitioners’ 2015 vision for adverse drug events by working with patients/families and prescribers based on the patient’s medical history, previous medication experiences, or interpretation of lab monitoring tests.

Pharmacists in 47 states have regulations that authorize physician-pharmacist Collaborative Drug Therapy Management (CDTM) [5] that is defined as the presence of a "collaborative practice agreement between one or more physicians and pharmacists wherein qualified pharmacists working within the context of a defined protocol are permitted to assume professional responsibility for performing patient assessments; ordering drug therapy-related laboratory tests; administering drugs;
Summary Points

• Medications are critical component of care for high and medium risk patient populations
  • Readmissions, medication errors, polypharmacy all issues for population health interventions

• Likely dozens of projects going on around you, although likely with different names

• Pharmacists play a key role as medication expert, healthcare professional, and care manager
Questions?

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