



rchn
community health foundation

NHIT Collaborative: HIMMS18 Workforce Panel

Tuesday, 6 March, 11:00

David Hartzband, D.Sc.

Director, Technology Research

RCHN Community Health Foundation

&

Research Scholar

Institute for Data, Systems & Society

Massachusetts Institute of Technology

Workforce: Thought Questions

- **What competencies & roles are needed to advance HIT use in underserved populations?**
- **How can we create opportunities for underserved communities to participate?**
- **What resources can be leveraged/created?**

HIT - Changing Fast

- **New regulations, requirements, etc.**
 - MIPS?, PCMH, ACA evolution,...
- **New organizational types**
 - ACOs, HIEs, IPAs, e-referral, networks, etc.
- **New clinical & administrative workflows**
 - Including cross-organizational workflows
- **IT evolution**
 - Much more data (eventually petabytes) to manage
 - New types of analysis required (pop health, “Big Data” etc.)
 - Even newer technologies
 - natural language, machine learning, predictive modeling etc.
- **List is constantly changing**
- **Workforce must evolve to use HIT for best care**

Competencies & Roles

- **There will be several competencies that will be essential in the next 0-4 years (Note: 0 means now...)**
- **Primary driver is the need for better outcomes & improved systems of care that will drive information needs & usage as well as interaction models**
 - All CHCs & most other healthcare organizations have a good deal of investment in community programs, but as with with Population Health, we're looking at a different scope & level of effort here.
 - focus of population health programs is not related to regulations &/or payer models but to actually improving the trends in health outcomes for populations - requires planning, goal setting, community engagement, analytics, intervention & community feedback

Competencies & Roles - 2

- **In addition are those areas associated with information & analytics:**
 - Analytics will become the primary way to deal with data Data Scientist & Chief Analytics Officer will become important
 - Analytics will change the relationship between healthcare organizations & the communities they are located in as population health becomes more important
 - Ability to understand & manage much larger amounts of data
 - CHCs typically have multiple GBs (up to 100) of data, PCAs have 2-4 TBs, Public hospitals often have 8-10 time as much
 - In the next several years these number will triple, in 10 years organizations will have PBs of data Infrastructure & the roles & competencies around data management will need to change

Roles with Competencies...

Roles needed within the next 3 years:

- **Community Interaction Officer** - relations with the local community will become even more important over this time, many CHCs already have this role, planning & leading group & individual community interactions wrt collection of SDoT & related programs, clinical programs etc.
- **Chief Data/Analytics Officer** - more data (up to petabytes in 5 years), new storage & usage modalities (distributed file systems, more analytics different analysis types), Machine learning; strategies for alignment of data & analytics with organizational strategy
- **Population Health Officer** - works closely with Community Interaction Officer, planning & execution of pop health projects to further understanding & of larger scale trends leading to improvement of group & individual outcomes, i.e. population health in the large

Creating Opportunities

- **Emphasis on community interaction & population health creates opportunities for community involvement**
 - Broader scope of population health means community members can be recruited as resources for interaction & pop health efforts, cohorts recruited with specific interests &/or capabilities to be used in multiple projects
 - Community members could be recruited to fill Community Interaction Officer role, some people in the community will certainly have these skills
- **Conjunction of Analytics & Population Health creates opportunities for new ways of providing group & individual care**
 - Healthcare organizations can plan & provide better levels of individual & group care by focusing on the alignment of these areas
 - All people in the CHC, or any healthcare organization need to have a level of data awareness & a feeling of responsibility for the use of data aligned with the strategic goals of the organization. Data can not be the exclusive responsibility of the IT group.

Resources

- **Culture shift requires a skills shift & therefore a resource shift**
- **People across the organization need to develop new competencies in data awareness, information use & community engagement**
- **In addition, new resources & existing resource will be used in new ways:**
 - People in the community as resources as well as community based data & expertise sources
 - Public information sources
 - Local community colleges & universities
 - Local non-profits
 - Local businesses that commit to social programs
 - Local, State & Federal government



Thank You

Please feel free to contact us
for more information

David Hartzband

RCHN Community Health Foundation

55 Broadway, Suite 1502

New York, New York 10006

Phone: (617) 501-4611

Email: dhartzband@rchnfoundation.org