COLLEGE OF POPULATION HEALTH

Healthcare Analytics Leadership: Clinical & Business Intelligence Plan Development

Jefferson
Thomas Jefferson University

Today's Presenters

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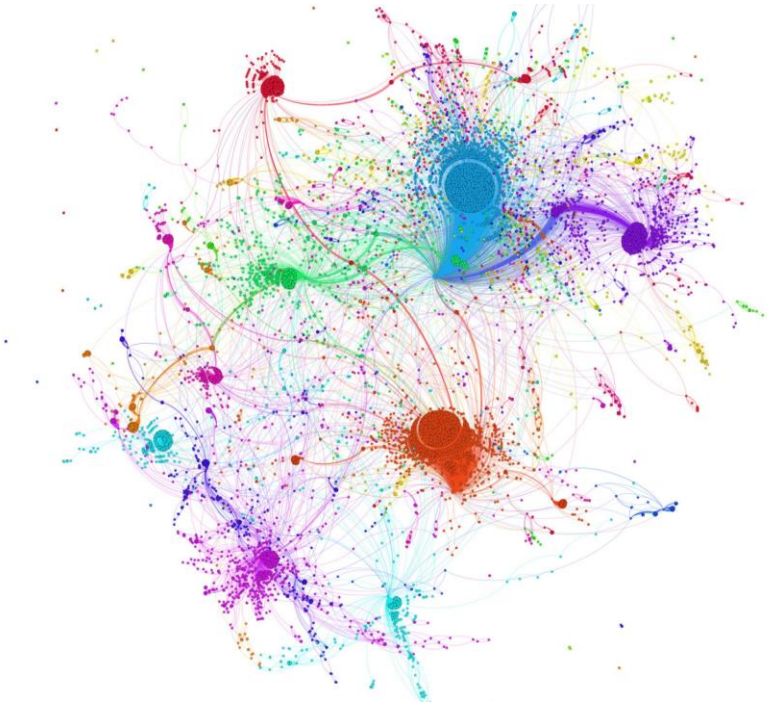
Agenda

- Introduction
- Healthcare Analytics Leadership: Clinical & Business Intelligence Plan Development
- Population Health Intelligence



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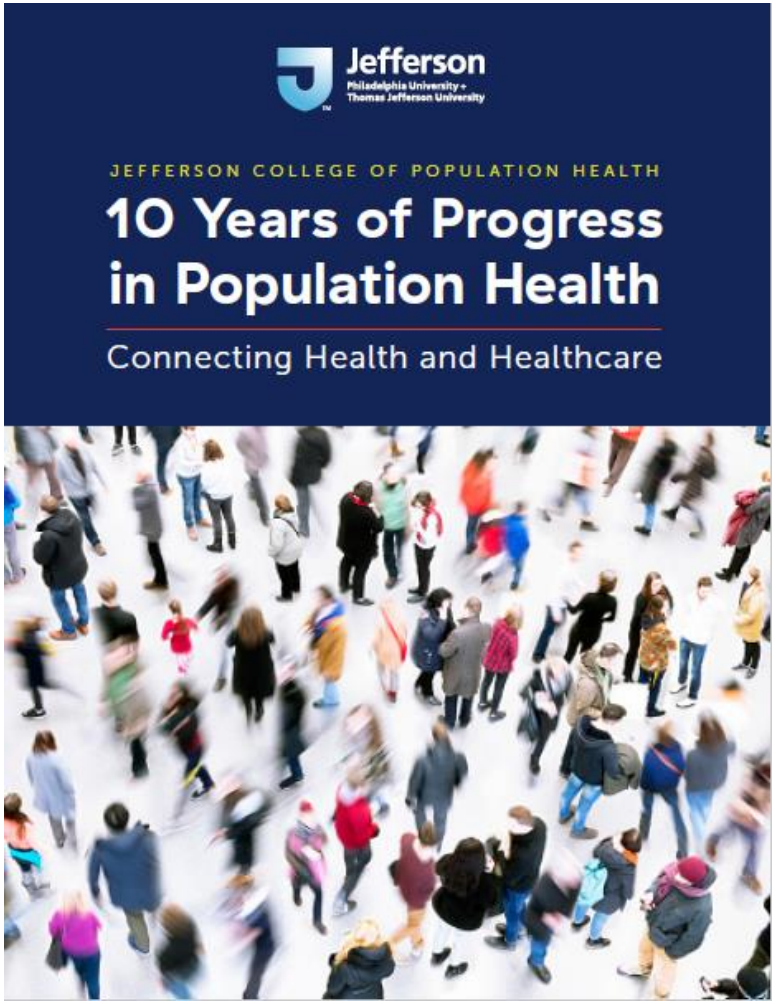


To prepare leaders with global vision to *develop*, *implement* and *evaluate* health policies and systems that improve the health of populations and thereby enhance the quality of life

Analytics Leadership & Administration

Developing	Developing Future Leaders of Data-Driven Continuous Learning Organizations
Converting	Converting Massive Amounts of Unconnected Data into Useful Information
Interpreting	Interpreting Information in Real Time for Prospective Insights and Guidance
Serving	Serving as the Brains and CNS of Future Continuous Learning Organizations
Promoting	Promoting the Best Evidence Based Delivery & Purchasing of Healthcare Services

Developing a Strategic Framework for Healthcare Analytics—Six Components

- Business and Quality Context
- Stakeholders and Users
- Processes and Data
- Tools and Techniques
- Team and Training
- Technology and Infrastructure
- https://searchhealthit.techtarget.com/tip/Six-components-of-a-healthcare-analytics-plan

Business and Quality Context

Operational Goals

Clinical Quality Goals

Business and Financial Performance Goals

Need for a Clear and Concise Definition of Problems to Address Organizational Root Causes and Not Just Symptoms to Permit the Cost- Effective Deployment of Healthcare Data Analytics Resources

Stakeholders and Users

The Importance of Knowing Who are the Key Stakeholders and What are their needs that can be met through the appropriate use of data analytics

The specific roles that specific types of analytics capabilities (e.g. traditional and AI/Genomics, etc.) can play in meeting the needs of key stakeholders

How to balance scarce technological and human resources to meet the analytics needs of key stakeholders

Process and Data

The overwhelming need for accurate, timely and readily accessible data as the backbone for all analytics-driven decision making

Determining what data sources are available, the quality of the sources and how the data can provide insight into many workflows and processes that are a part of cost-effective healthcare delivery is essential

What is the impact of Big Data (including that from social media concerning patient and family experience with care)

Data Analytics Tools and Techniques

Traditional Tools (descriptive, predictive and prescriptive analytics)

Emerging Tools (AI, Machine Learning, Genomics Analytics, Social Determinants of Health, SDoH, etc.)

Evaluating and Selecting the Proper Tools and Techniques to address Organizational Operations, Clinical Quality and Financial Performance Goals: "Build vs. Buy" Decision Making

Teams and Training in Data Analytics

Achieving	Achieving the Right Mix of Talent to Execute Health Data Analytics Strategies (e.g. Data Scientists, Analysts, Database Managers, etc.)
Ensuring	Ensuring that the Each Person understands his or her role and has (or can acquire through training) the capabilities to execute effectively
Determining	Determining the need for internal or external training and/or consultants/advisers to execute the plan (see Slide 10)

Technology and Infrastructure

The need to measure the analytics needs (short and longer term) of a healthcare organization prior to acquiring analytics-related capabilities

Technology choices depend on these organizational needs (including where and when analytics insights are necessary and who requires these to optimize their decision making on behalf of the organization)

These choices also hinge on the organization's resources and having an adequate budget to finance the technology infrastructure and trained people to use them effectively to meet organizational needs

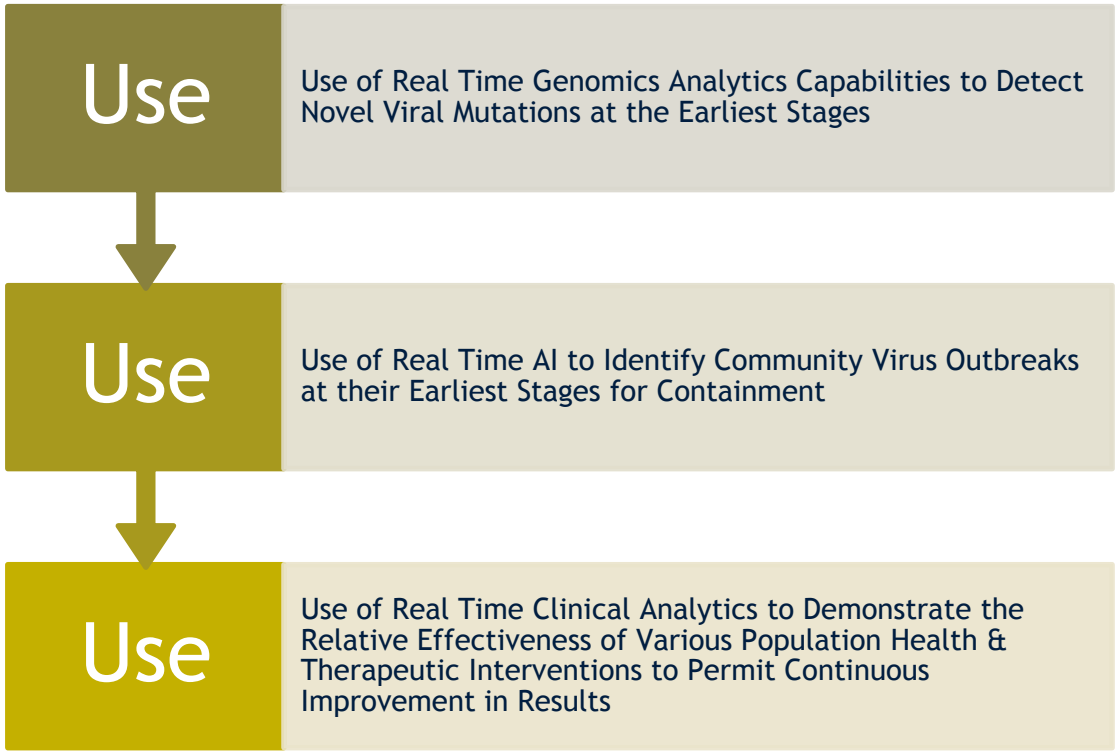
Creation of the Plan and its Implementation

- Perform a Key Stakeholder Analysis of Health Data Analytics Needs based on Achieving Operational, Clinical and Financial Performance Goals and Objectives of the Organization
- Evaluate Internal Data Analytics Capabilities (Technology, Processes and Current Human Resources able to Execute on them)
- Identify and Evaluate Gaps in Capabilities
- Make Build vs. Buy Decisions
- Capture all the above in a Clinical and Business Intelligence Health Data Analytics Plan
- Execute the Plan

Analytics Leadership in the Current COVID-19 Crisis

- USE OF THE MOST APPROPRIATE DESCRIPTIVE, PREDICTIVE & PRESCRIPTIVE ANALYTICS CAPABILITIES TO QUANTIFY AND PROJECT THE SCOPE OF COMMUNITY OUTBREAKS
- USE OF THE LATEST AI TECHNOLOGIES TO PREDICT THROUGH STATISTICAL PATTERN RECOGNITION AND OTHER MEANS IN WHICH POPULATIONS TO CONCENTRATE HEALTHCARE RESOURCES TO OPTIMAL EFFECT
- USE OF GENOMICS ANALYTICS TO TRACK THE RATE OF GENETIC MUTATIONS & EVOLUTION OF VARIATIONS OF THE SARS-COV-2 VIRAL PARTICLES IN CONTAINMENT EFFORTS

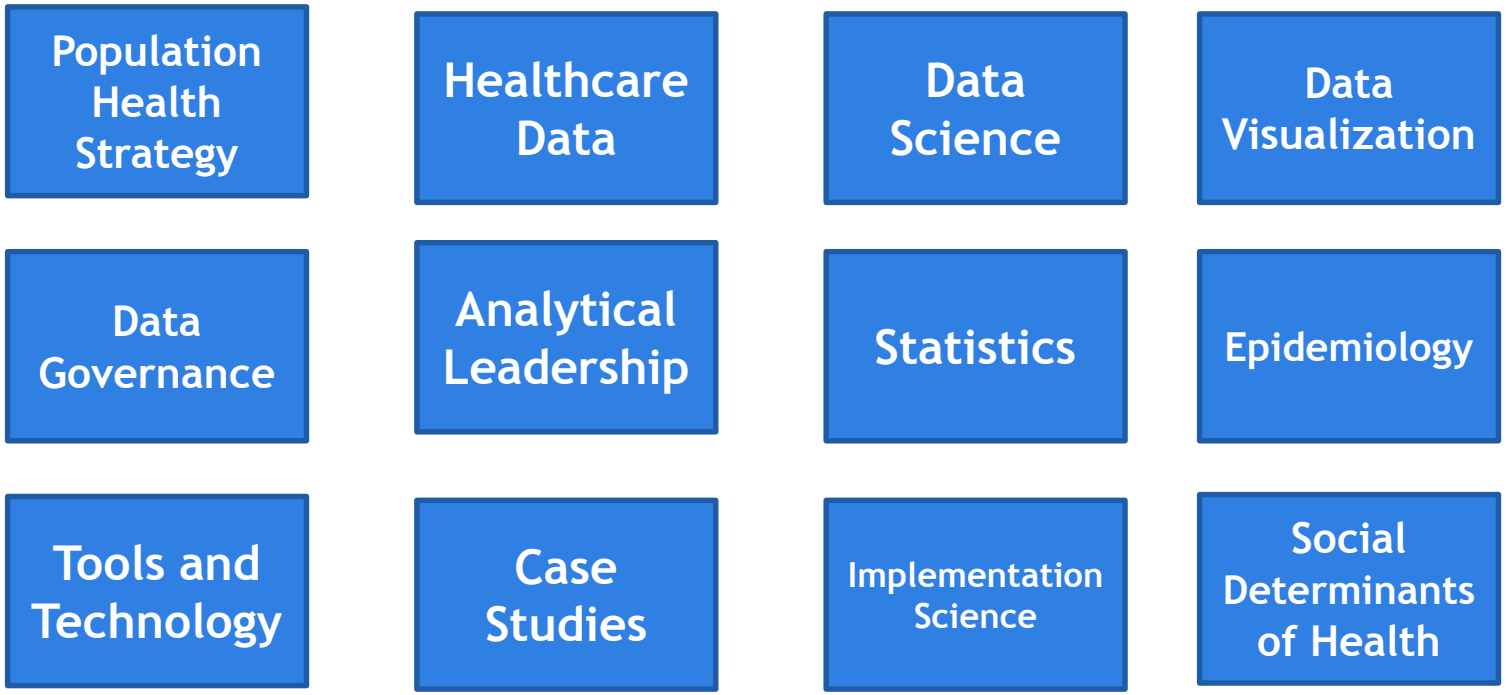
Analytics Leadership for Earlier Detection & Containment of Future Population Health Crises



What is Population Health Intelligence?

We coined the term Population Health Intelligence® to describe a new discipline whose role is to collect, organize, harmonize, analyze, disseminate and act upon the data available to clinicians, health system leaders, the pharmaceutical and biotechnology industry, and healthcare payers. The mantra of Population Health Intelligence is "turning data into insight and action."

Population Health Intelligence Training



Who should consider PHI training?

- Healthcare Plans
- Community Organizations
- Pharmacy or Biotech
- Healthcare Settings
- Academic Organizations
- Public/ Government
- Healthcare Business Consulting
- Healthcare Administration
- Healthcare Professional Organizations

Population Health Intelligence

- Certificate and Master's Degree Program
- 2-day Boot Camp (Fall 2020)

Learn more at: Jefferson.edu/PHI

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