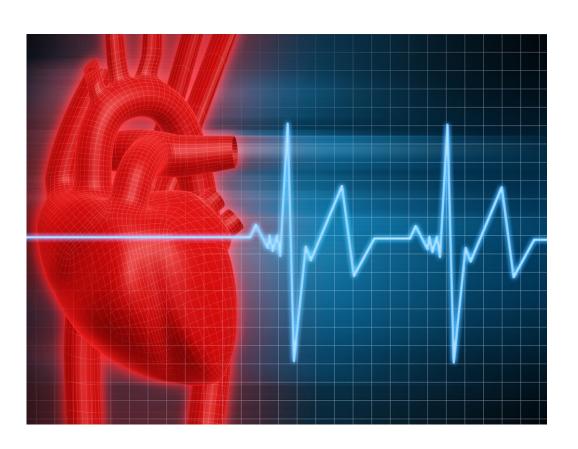
Two Models of Care One Patient, Lots of Data





How We think of Care Delivery and the Medical Model

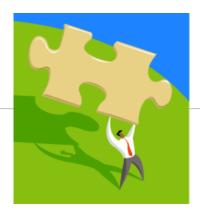
Primary Prevention

Secondary Prevention

Acute Care

Chronic Care







The Continuum of Care

Challenges in the Finnish System

- Fastest Ageing Population
- High Chronic Disease Burden
- Geographic Density Displacement
- Extremely Challenging Funding System
- Highly Educated and Demanding Consumer

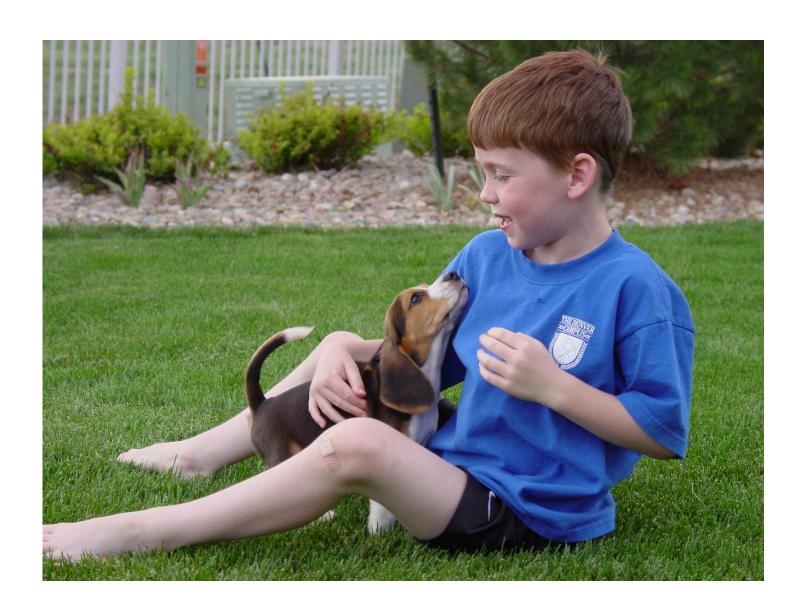


Integrated Delivery System with Coordinated Care

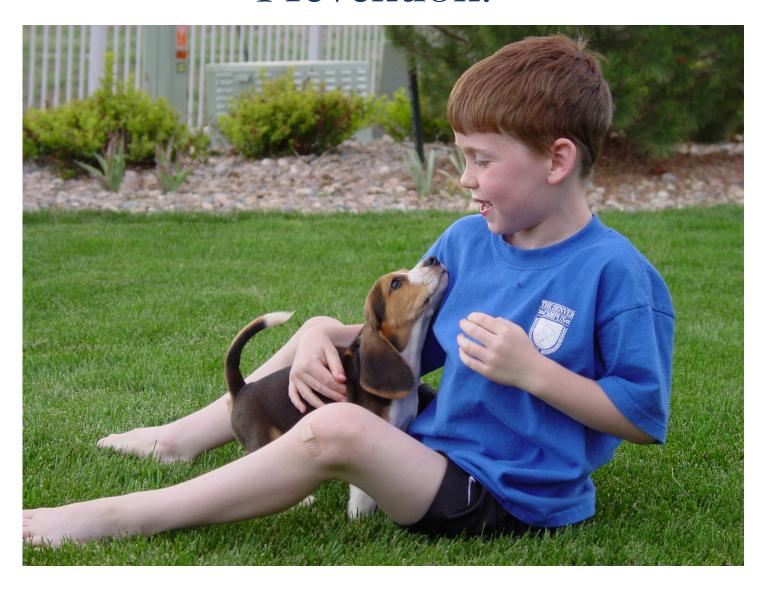
More than assembling the pieces of a puzzle

- To be successful "the integrated whole" must deliver substantially more value to all within the system than the "sum of the parts"
 - ✓ The right care to the right patient at the right time in the most appropriate setting
 - Shared commitment to eliminating functional, structural, funding impediments to efficiency
 - Aligned incentives across and within entities no one benefits by sub-optimizing partners
 - Rational Technology to support the end to end vision of care

Meet Bandit and Adam



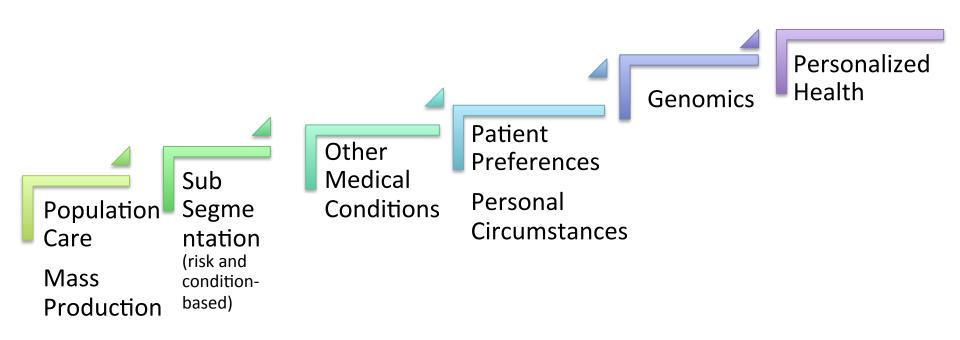
Who had the First Patient Registry for Prevention?



Emphasis Must be on Prevention & Population Care

- A first step with EHRs; moving vertically integrated care toward clinical integration
 - Disease Registries
 - Improved Pathways of Care
 - Improved Demand Management
 - Targeted Patient Goals Toward Prevention
 - Population Care Management Tools
- Second Step: Centralized Data for the Use of Tools and Applications
 - Development of Taltioni
 - Publishing of API's
 - Common Data Language

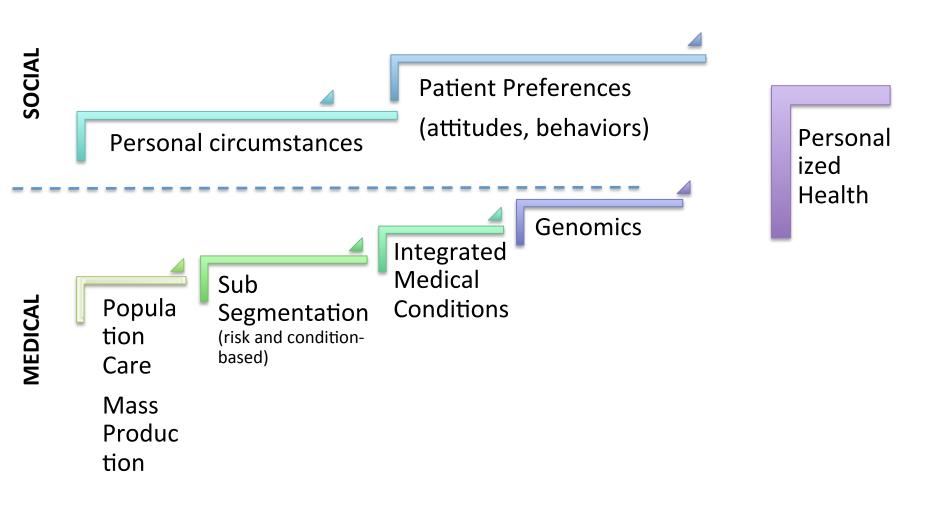
We Support the Medical Model with the Increased Use of Information



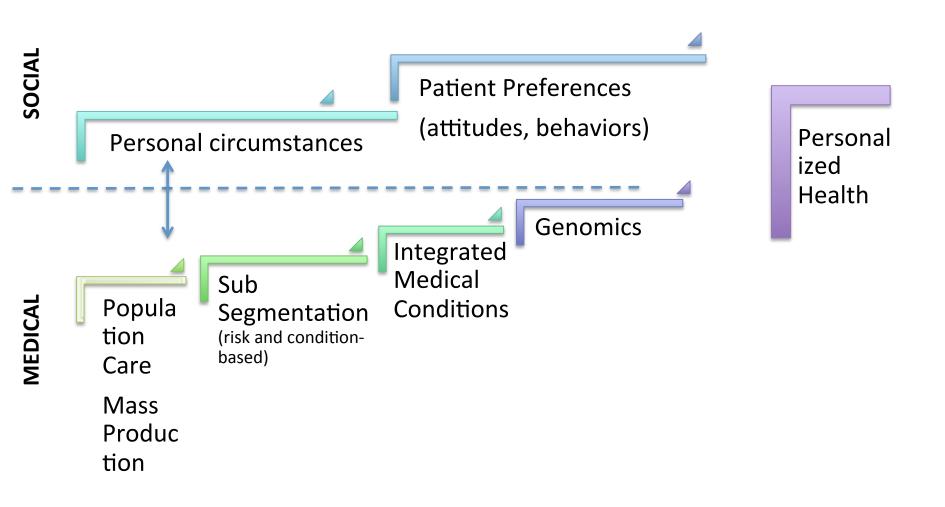
But There's a Catch



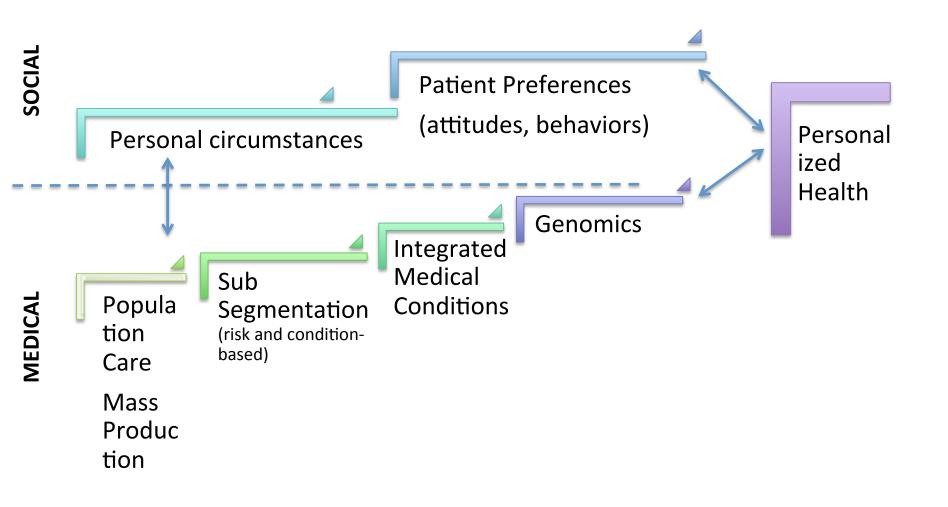
Moving From Medical to Health Model



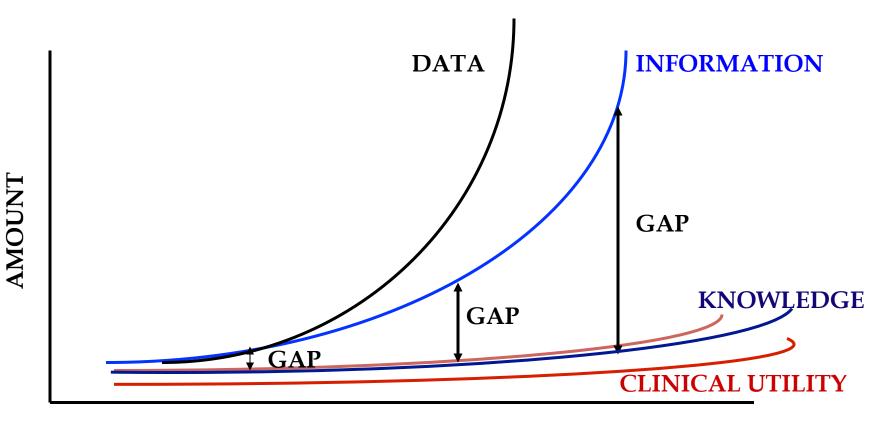
Moving From Medical to Health Model



Moving From Medical to Health Model



What to do with All the Data



TIME

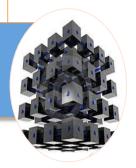
Source: Michael N. Liebman, PhD

Executive Director Windber Research Institute

Data Architecture and Use

How we stack the data in servers

Data Structure



How we access the servers themselves

Data Infrastructure



Business and Clinical operations use of the data

Business Operations and Utilities



A Multitude of New Applications



Moving Beyond Visit-Centric Medicine



Traditional Encounter Based Care

- One patient at a time
- Only know about patients who appear in your office
- No use of IT
- Limited use of data



New Model Elements

- Accountability for panel/ population
- Transparency
- Use of EMR, registries, mobile
- Team care (including patient)
- Moving care out of doctor's office

The Clinical Ecosystem Impacted

People

- Physicians
- Nurses
- Other Care Providers
- Patients

Process

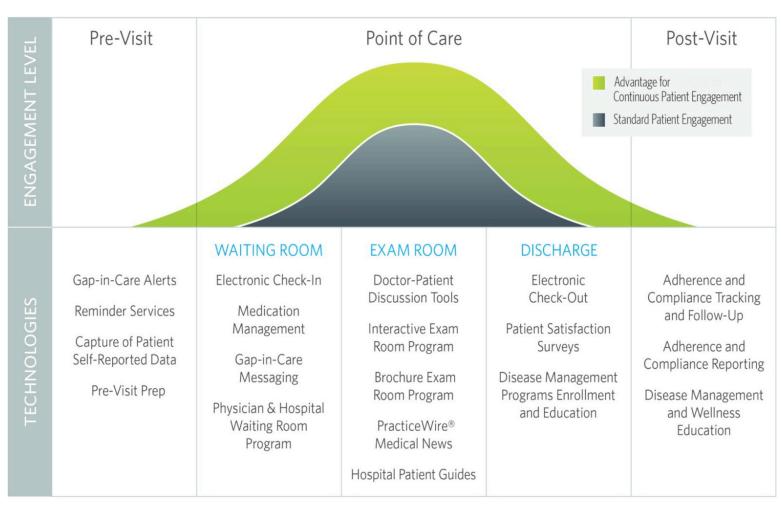
- Clinical Operations
- Administration
- Health Plan
- Legal
- Patients



Technology

- Mobile devices
 - Patient and Clinical
- Clinical Systems
- IT Infrastructure /Systems
- Facilities

Programs must Facilitate Continuous Patient Engagement "Just In Time"



Beyond Population Care Management

 Population care management depends upon the comparison of individual data against standards from large scale populations and national medical evidence protocols

How does the introduction of genom impact the integrated model, the use of team based care and the use of data?



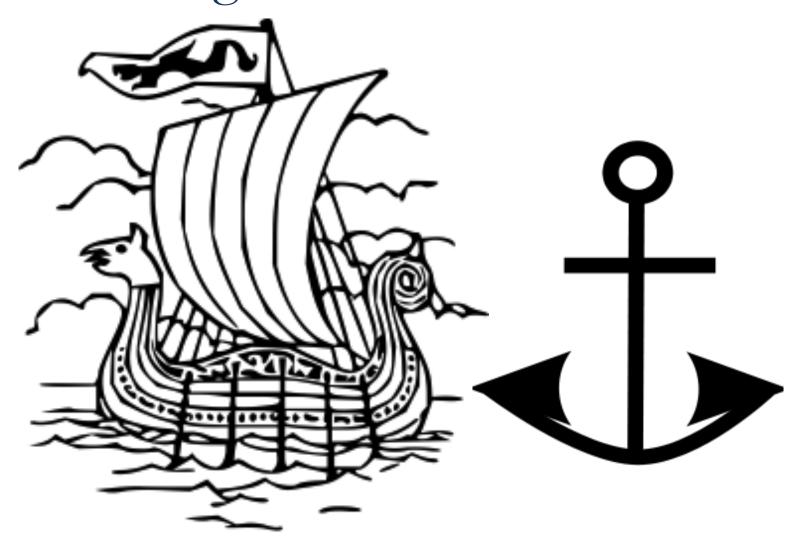
Genomic impact on the Eco-System

- When do Primary Care Physicians turn to specialist to focus treatment based on the individual protein levels of cells based on genetic preferences and influences?
- As medicine gains greater focus on individual based care via genomics, will practices become narrower sliced reflections of consumers seeking help based upon their projected disease states?
- Centers of specialized prevention?

Innovations and Changes Take Sail



Until the anchor of culture and regulation sets in.



The Advancements of Change must Coincide with Reform

The role of government is to balance reimbursement policy between the expectations of innovation, the need of change and the rewarding of entrenched

interest.

Critical Equations to Remember

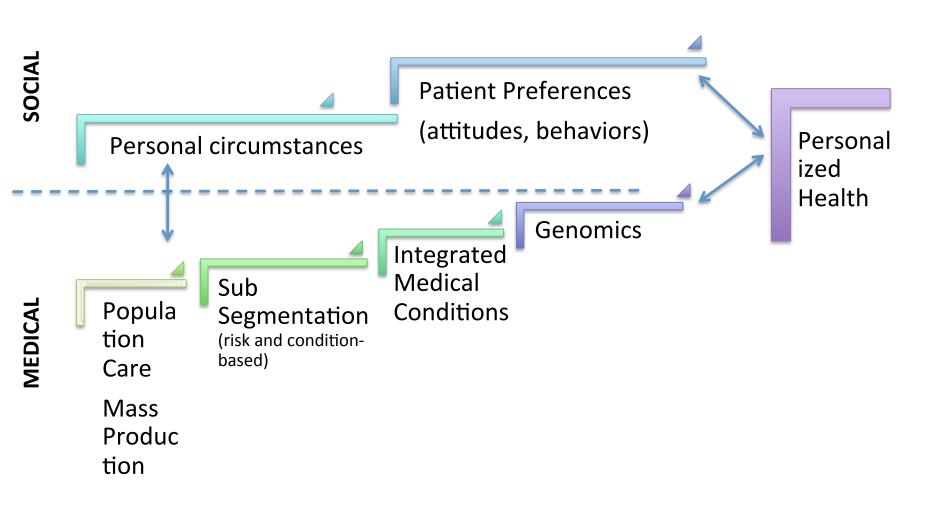
$$NT + OO = COO$$

Critical Equations to Remember

$$NT + OO = COO$$

New Technology + Old Organization = Costly Old Organization

Personalized Health





Thank You

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