

Using Big Data to Empower Consumer Choice

Oregon State of Reform Health Policy
Conference
September 24, 2014



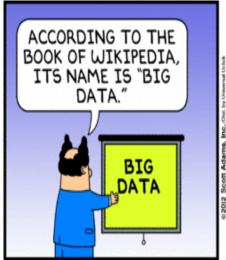
Agenda

- Big data
- Ideal state for consumers
- The best and worst of health information
- What is coming next
- Questions and debate
- Discussion: What do you think?





















Big Data on the Gartner Hype Cycle Chart

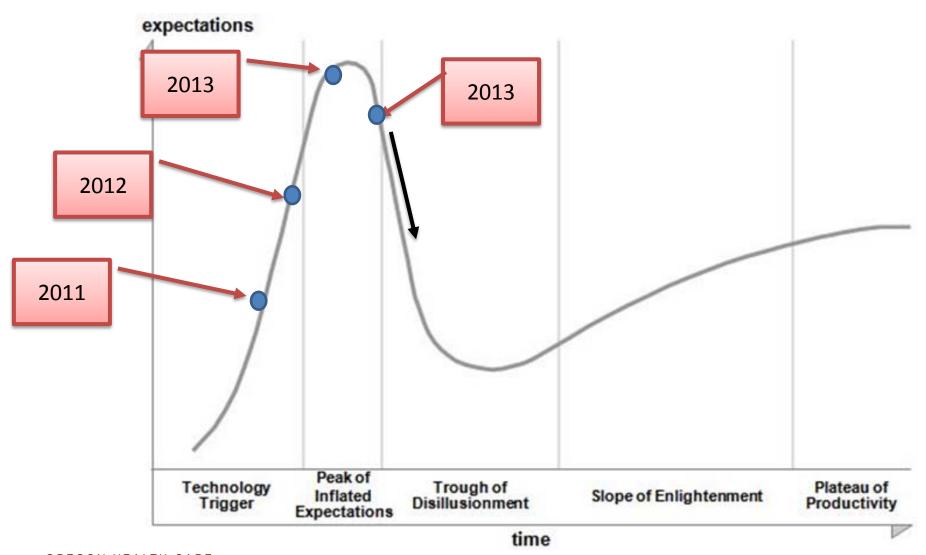




Exhibit 2: Primary data pools are at the heart of the big-data revolution in healthcare.

Activity (claims) and cost data

- Owners: payors, providers
- Example data sets: utilization of care, cost estimates

Clinical data

- Owners: providers
- Example data sets: electronic medical records, medical images

Integration of data pools required for major opportunities

Pharmaceutical R&D data

- Owner: pharmaceutical companies, academia
- Example data sets: clinical trials, high-throughput-screening libraries

Patient behavior and sentiment data

- Owners: consumers and stakeholders outside healthcare (eg, retail, apparel)
- Example data sets: patient behaviors and preferences, retail purchase history, exercise data captured in running shoes

Source: McKinsey Global Institute analysis

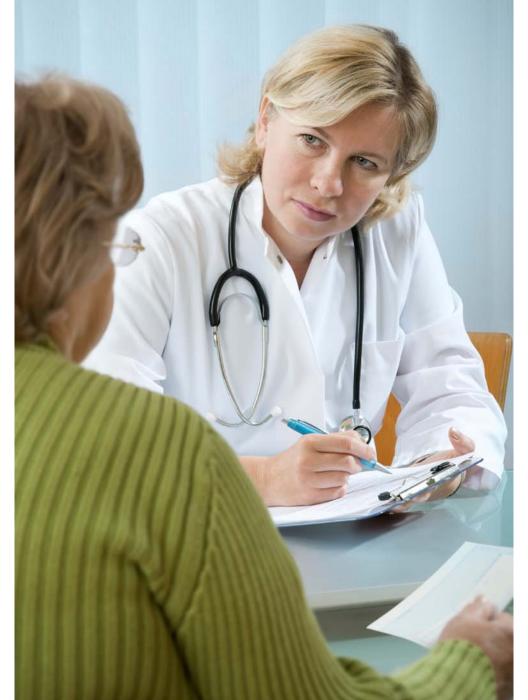


Overall Goals of Big Data Analytics in Healthcare Big Data Analytics Electronic **Health Records** ower costs. **Evidence Behavioral** Genomic + Insights Improved outcomes through smarter decisions **Public Health**

- Take advantage of the massive amounts of data and provide right intervention to the right patient at the right time.
- Personalized care to the patient.
- Potentially benefit all the components of a healthcare system i.e., provider, payer, patient, and management.



8





Data Available Now

Claim Payment Transactions

Pharm Payment Transactions

Clinical record systems

Genomic

Behavioral / social

Useless in caring for patients but reproducible and consistent for data analytics

Most useful in care of patients but ambiguous and variable for data analytics

Little practical availability

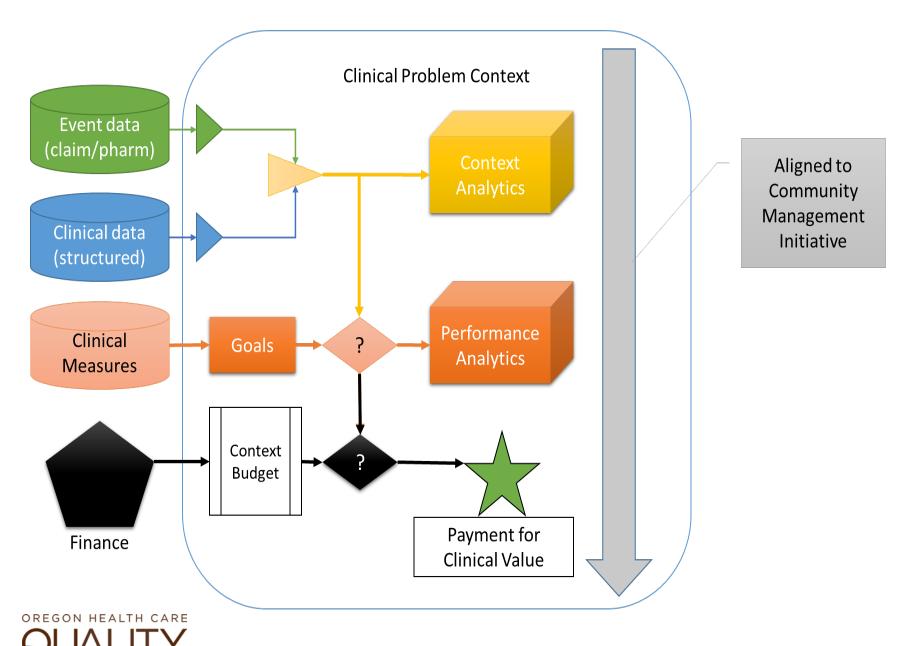
Analytic Usefulness



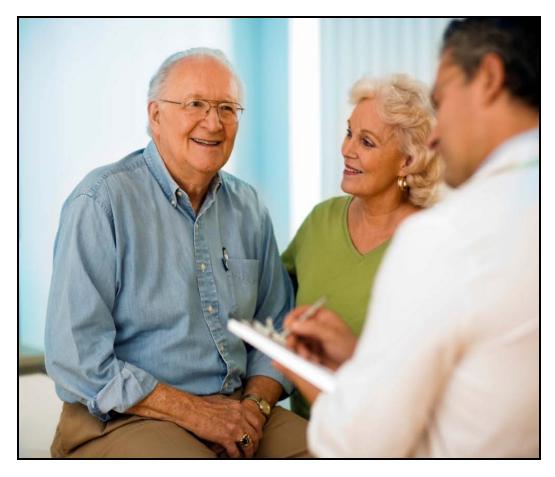
Context examples

- Primary Care Management
- Congestive Heart Failure
- Diabetes
- 4. Chronic Obstructive Pulmonary Dis.
- ED Utilization
- CCO or HEDIS Metrics
- 7. Hip Replacement
- Breast Cancer
- 9.



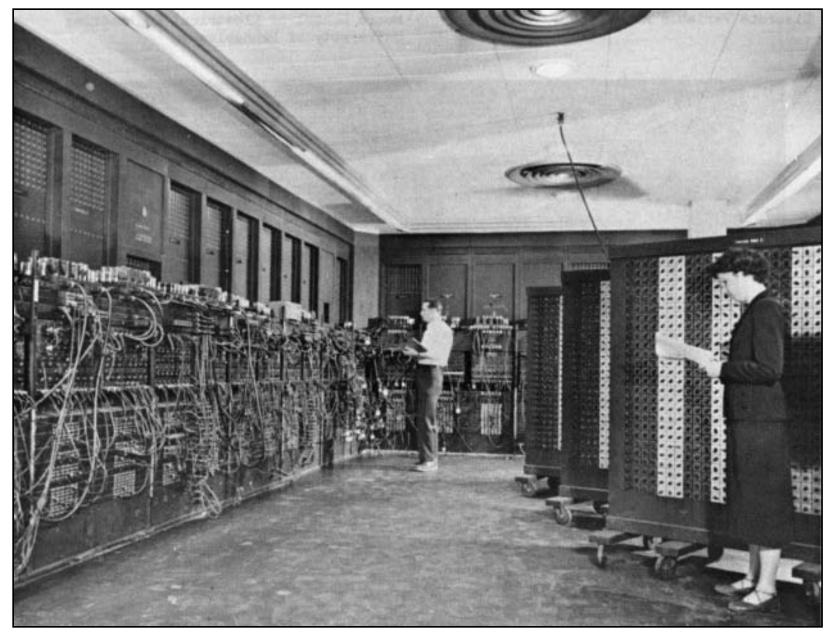


CORPORATION



- Patients review doctor performance
- Patients can see performance of consulting specialists
- Referring physician and patient use performance to guide referral
- REAL competition based on actual performance and value begins.







Health Information Technology Spending





"We are drowning in information but starved for knowledge."

John Naisbitt



- Top five best in consumer information
- Top five worst information in consumer information
- Other suggestions?



Q Corp Mission



To improve the quality and affordability of health care in Oregon by leading community collaborations and producing unbiased information.



Q Corp Partnership



- Started in 2000
- Non-profit
- Neutral, independent
- Multi-stakeholder collaboration
- Over 150 volunteers serving on standing committees



Q Corp Leadership in National Initiatives

- Aligning Forces for Quality (Robert Wood Johnson Foundation)
- Chartered Value Exchange (Agency for Healthcare Research and Quality)
- Network for Regional Healthcare Improvement (NRHI)
- CMS Qualified Entity one of first three recognized in the country



Claims Data Summary: 2006-2014

- 3.5 million unique patients captured in claims since 2006 – demonstrating the value of aggregating data
- 600+ million medical and pharmacy claims records



Claims Data Summary – 2014

- 80% Fully Insured Commercial population
- 35% Self Insured Commercial population
- 100% Medicaid population
- 92% Medicare
 - CMS "Qualified Entity" Incorporated Medicare
 FFS Data Spring 2014



2014: 14 Data Suppliers and 25 Primary Care Measures

New Public Measures

- -- Added to public reports July 2014
- Asthma Medications Child

Existing Public Measures

- -- Updated July 2014
- -- Previously reported 2013
- Breast Cancer Screening (age 50-74)
- Cervical Cancer Screening
- Chlamydia Screening
- Diabetes HbA1c Test
- Diabetes LDL-C Test
- Heart Disease Cholesterol Test
- Well-Child Visits for Children 0-15 Mths, 6+ Visits
- Well-Child Visits for Children 3-6 Yrs
- Appropriate Use of Antibiotics for Sore Throats
- Appropriate Low Back Pain Imaging
- Generic Prescription Fills: SSRIs, SNRIs, DNRIs
- Generic Prescription Fills: Statins

Private Measures

- Breast Cancer Screening (age 40-49)
- Breast Cancer Screening (age 40-69)
- Breast Cancer Screening (age 75-84)
- Breast Cancer Screening (age 85+)
- Diabetes Kidney Screening
- Diabetes Eye Exam
- Well-Child Visits for Children 0-15 Mths, 5+ Visits
- Potentially Avoidable Hospital Admissions (3)
 - Overall, Acute, Chronic
- Potentially Avoidable ED Visits (2)
 - Child, Adult
- Plan 30 day All-Cause Readmissions

NEW:

- Alcohol Misuse, Screening, Brief Intervention, Referral for Treatment (SBIRT)
- Ambulatory Care: Outpatient and ED visits (2)
 - Child, Adult
- Generic Prescription Fills: Anti-hypertensives
- Developmental Screenings in the first 36 Months of Life
- Adolescent Well-Care Visits
- Follow-up Care for Children Prescribed ADHD Medications
 - Initiation
 - Continuation and Maintenance



Q Corp Public Reporting



www.PartnerforQualityCare.org



Public Reporting: Quality

Home » Compare Doctor's Offices » Children's Health Clinic Report What do these mean? 53 Results for: Children's Health in the region of « Change Search Tips for Children's East Portland Metro Health » Routine visits to your child's doctor, often called 'well child' visits, help to keep your child healthy. Each visit is an opportunity to check on your child's growth and development and get preventive care. You can also talk to the doctor about any questions or concerns you might have about your child's development. The quality scores below show how each doctor's office rated at providing this recommended care. Sort:

By Score

Alphabetically Well Child: 3-6 Years Well Child: 0-15 Months Children 3-6 years old should have at Children should have at least six visits least one visit each year 🔞 from birth to 15 months old ? Kaiser Interstate Medical Office East Better Better Kaiser Mount Scott Medical Office Better Better Better Better Kaiser Rockwood Medical Office Too few Adventist Health Sandy Better score reliably Too few Bridge City Family Medical Clinic Better patients to score reliably Too few Providence Bethany Better score reliably Broadway Medical Clinic Better Average Average Kaiser Division Medical Office Better



Coming Soon: Cost of Care Reports

- Q Corp working with national organizations to measure cost of care and quality
- Q Corp working with local providers to develop useful & valuable cost of care reports
- Reports mailed to providers in fall 2014
- Public reports of rolled up "total cost of care" scores at the clinic level released in fall 2015



Coming Soon

- More useful and actionable patient information
- Easier to use and understand
- Right information at the right time for all parties (appropriate and secure)



Questions?

Mylia Christensen

Executive Director, Oregon Health Care Quality Corporation

Mylia.Christensen@q-corp.org

503-972-0862

Dr. Michael Rohwer

CEO, PHTech

Michael.rohwer@phtech.com

503-362-2818

