

Intermountain Healthcare at 40



Hospitals (1975)
22 Hospitals
Hub and Spoke Strategy
Low Average Age of Plant



SelectHealth (1983) 730,000 Members



Medical Group (1994)
1,200 Physicians
530 Advanced Practice Clinicians
185+ sites



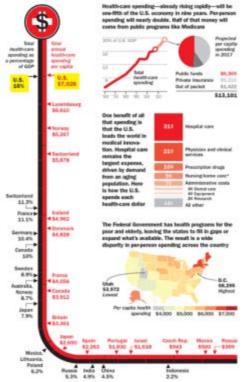
Clinical Programs (1998)
10 Key Service Lines
System-wide Approach
Evidence-based Best Practices
Advanced Data tracking



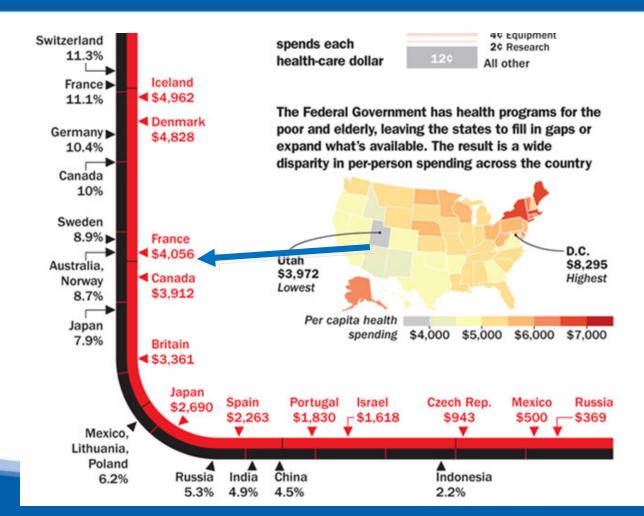
The national challenge of healthcare costs













Perspective on the cost of healthcare in the U.S.



Shannon Brownlee
Author
"Overtreated"

"When you think of the budget deficit, think healthcare."

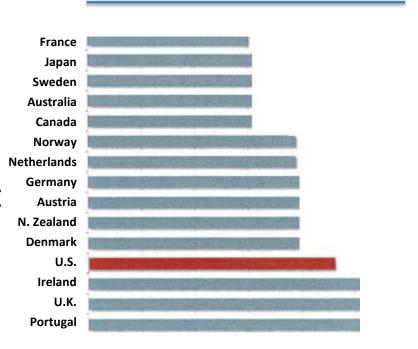
"When you think of unemployment, think healthcare."

"Our children's futures depend on whether or not we can solve the healthcare cost problem in this country."



INTERNATIONAL Mortality Amenable to Healthcare

People whose lives might have been saved with appropriate care



25

50

100

125

150

Source: World Health Organization, Nolte and McKee, Rutgers Center for State Health Policy Standardized for age (1998) Utah from 2003, normalized for general U.S. change from 1998



American Healthcare Amazing Successes and Tragic Failures



Rescue Care

VS

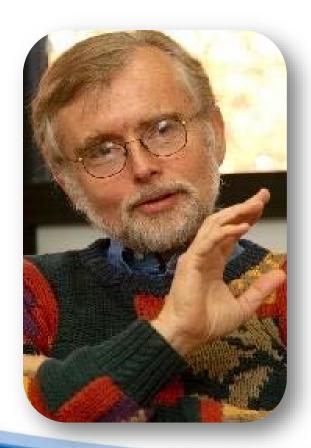
Prevention
and Effective

Management
of Chronic
Conditions

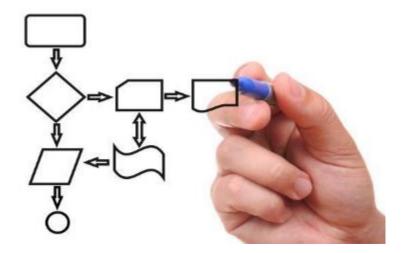








"Every system is perfectly designed to obtain the results it gets." Paul Batalden, MD





Can healthcare be better?



W. EDWARDS DEMING

"We have learned to live in a world of mistakes and defective products as if they were necessary to life.

It is time to adopt a new philosophy in America."



Healthcare choices: The prevailing opinion

QUALITY

ACCESS

AFFORDABILITY

"PICK ANY TWO"



A business case for quality in healthcare?

A LEAP OF FAITH



Cost and Quality are inseparably linked



Evidence-based best practice will produce higher quality at lower cost



Understand systems and variation



W. EDWARDS DEMING

You can't improve your performance on things you can't objectively measure

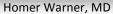
- Actual cost of providing care for a set of services
- Actual clinical outcomes (short and long term)



The importance of data (medical informatics)

"The key to improvement lies in identifying the causes for variation, and then developing a theory to reduce that variation so that the entire system can be improved."







Geographic variation in surgery

for non-cancerous enlargement of the prostate



Idaho Falls: 9 per 1,000



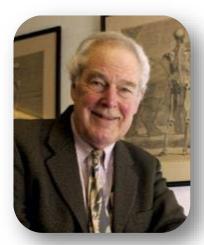
Ogden: 3 per 1,000

Salt Lake: 6 per 1,000

Provo: 7 per 1,000



Using information to improve performance



Jack Wennberg, MD

Dartmouth Institute for

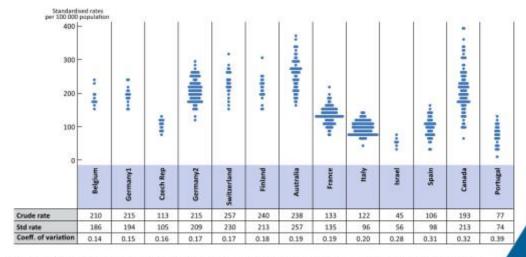
Health Quality and

Clinical Practice



Knee replacement rates vary by more than 4-fold across countries and by more to 5-fold within some countries

Knee replacement rates across and within a selected set of countries (2011 or latest year)



Source: OECD (2014), Geographic Variations in Health Care: What Do We Know and What Can Be Done to Improve Health System Performance?



A systems approach to improving healthcare quality

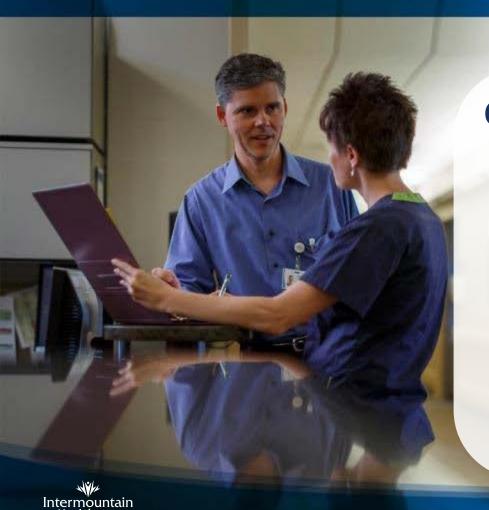




"I learned my most important lessons in quality theory from Dr. W. Edwards Deming, the father of quality improvement."

- Brent S. James, MD





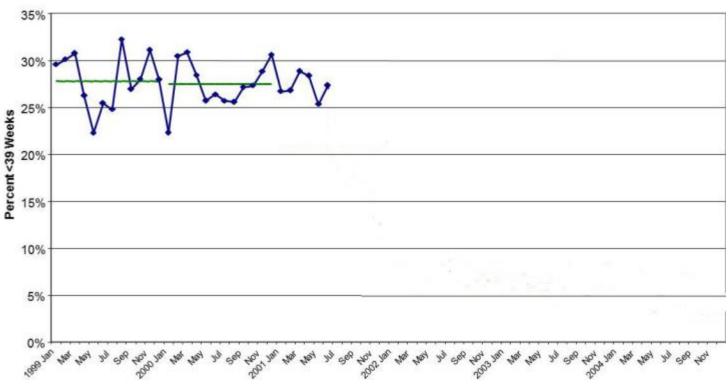
Clinical Program Principles

- There is usually wide variation in clinical practice
- **Objective data measurement** will demonstrate opportunity for improvement
- Performance improves with systematic adoption of best practices
- Intermountain's main physician engagement strategy: Optimal patient outcomes



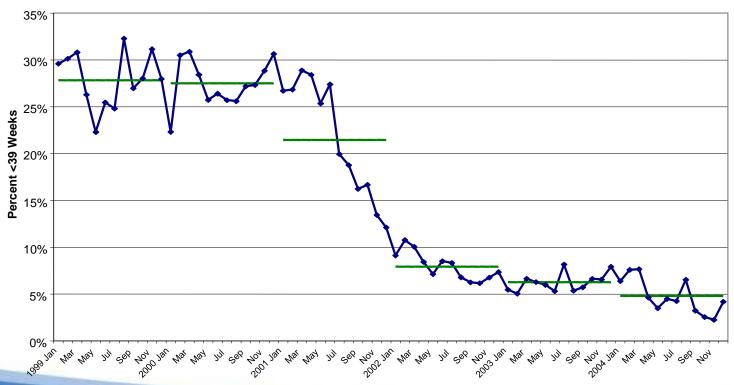


Percent of deliveries prior to 39 weeks



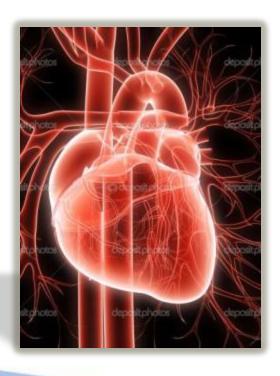


Percent of deliveries prior to 39 weeks





Evidence-based cardiac interventions



- Nuclear Stress Testing
- Angioplasty and Stents (PCI)
- Implantation of Permanent Pacemakers
- Implantation of Defibrillators

Clinical Outcomes:

Remained Excellent

Costs to Community:

 Decreased by \$15 million as compared to expected volume-adjusted charges



Source: Clinical Program

Moving to team-based care



Atul Gawande, MD
Surgeon, Author,
Public Health
Researcher

"As economists have often pointed out, we pay doctors for quantity, not quality. As they point out less often, we also pay them as individuals, rather than as members of a team working together for their patients. Both practices have made for serious problems."



Moving to team-based care

Mental Health Integration Intermountain Primary Care Clinics

- Holistic approach to patient's health
- Best practices in all clinical domains
- Team members work at the "top of their licenses"
- Established routine protocols and system-based care coordination





More effective utilization of healthcare services





Obstacles to change



Lack of evidence-based treatments and technologies



Misaligned incentives rewarding volume not value



Lack of shared accountability and shared decision-making



Technology vs. Evidence

Has high tech become synonymous with clinical excellence?





Gizmo Idolatry¹

gizmo: "A mechanical device or procedure for which the clinical benefit in a specific clinical context is not clearly established."



gizmo idolatry: "The general implicit conviction that a more technological approach is intrinsically better than one that is less technological unless, or perhaps even if, there is strong evidence to the contrary."



What causes Gizmo Idolatry?

- 1. Common sense appeal
- 2. Human love of bells and whistles
- 3. Exploits vs. uneventful diligence
- 4. Proof of competence
- 5. Proof against negligence
- 6. Channeling money





Options for the Definitive Treatment of Prostate Cancer



Options for the Definitive Treatment of Prostate Cancer

Surgical Removal of Prostate \$





Options for the Definitive Treatment of Prostate Cancer

Surgical Removal of Prostate \$

Robotic Prostatectomy \$\$



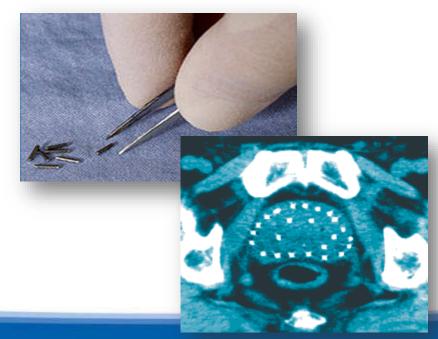


Options for the Definitive Treatment of Prostate Cancer

Surgical Removal of Prostate \$

Robotic Prostatectomy \$\$

Brachytherapy (seed implant) \$





Options for the Definitive Treatment of Prostate Cancer

Surgical Removal of Prostate \$

Robotic Prostatectomy \$\$

Brachytherapy (seed implant) \$

Radiation Therapy \$\$\$





Options for the Definitive Treatment of Prostate Cancer

Surgical Removal of Prostate \$

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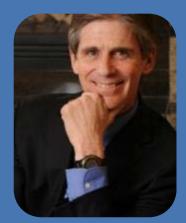
Radiation Therapy \$\$\$

Proton Beam Therapy \$\$\$\$\$





The fee-for-service dilemma



Elliot Fisher, MD

Dartmouth Institute for

Health Quality and

Clinical Practice

"Experts all agree that we're wasting about 30 percent of U.S. health care spending on simple waste. It's wasted on fraud. It's wasted on overtreatment. It's wasted because we don't provide good care. And it's wasted because we have a fundamentally flawed payment system."



Photo credit: Dartmouth Website Source: "Sick in America" NPR

The fee-for-service dilemma

What FFS rewards

- High volume, high cost care
- Expensive new technologies, regardless of proven benefit
- Defensive medicine rather than shared decision-making
- Measuring processes rather than outcomes

What FFS doesn't Reward

- Effective prevention of disease
- Effective management of chronic illness
- Choice of optimal diagnostic or therapeutic option
- Elimination of all unproven tests, procedures, and treatments that add only cost or risk



Making the Change: Aligning Incentives





Challenge: Engage patients and help them make optimal choices

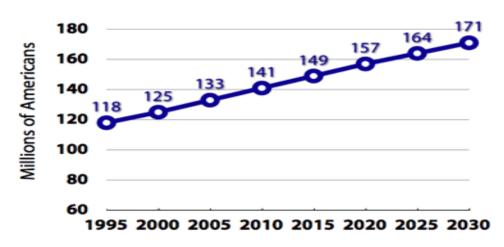






In the U.S. the number of people with chronic conditions is projected to increase steadily for the next 30

Prevalence of Chronic Disease in the U.S.



Source: Wu, Shin-Yi et al. 2000. Projection of Chronic Illness Prevalence and Cost Inflation. RAND Corporation.



Indomethalia song 30 day some
Potassium zoneg ta
Terazosia zoneg ta
Terazosia zoneg ta
Tramadol 50 ng Kor Porta
Verapamil Ed 240 mg Ideily OTY THEM INTEL

DIY ITEM TOTAL 5 Double Cheeseburger 7.45 1 L'Sprite



We can change health behaviors



DRUNK DRIVING DEATHS



Cut 50% since 1982



SEATBELT USE



14% in 1985 85% in 2012



TEEN PREGNANCY



Cut 50% since 1991



TEEN ALCOHOL, DRUG, TOBACCO



Trending down since 2002



HIGH LDL CHOLESTEROL



59% in 1976 27% in 2010



ADULT SMOKING



45% of all adults in 1965 15% in 2014



A path to better healthcare

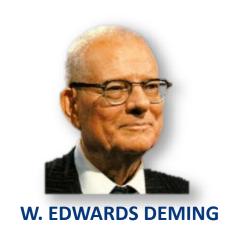


Atul Gawande, MD
Surgeon, Author,
Public Health
Researcher

"Better is possible. It does not take genius. It takes diligence. It takes moral clarity. It takes ingenuity. And above all, it takes a willingness to try."



Clarifying the Aim



"The first step is clarification: **Everyone**in the organization must understand the
aim of the system, and how to direct his
or her efforts toward it."

WHAT SHOULD THE AIM BE FOR HEALTHCARE? Optimal Health at Sustainable Costs







Evolution of Intermountain's Mission





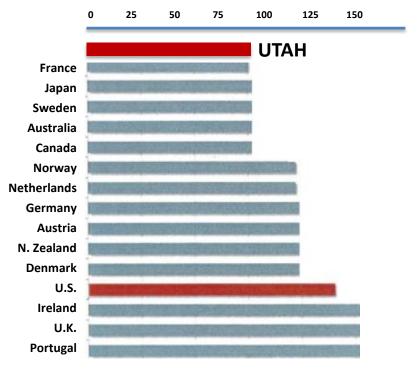
"Helping people live the healthiest lives possible"





INTERNATIONAL Mortality Amenable to Healthcare

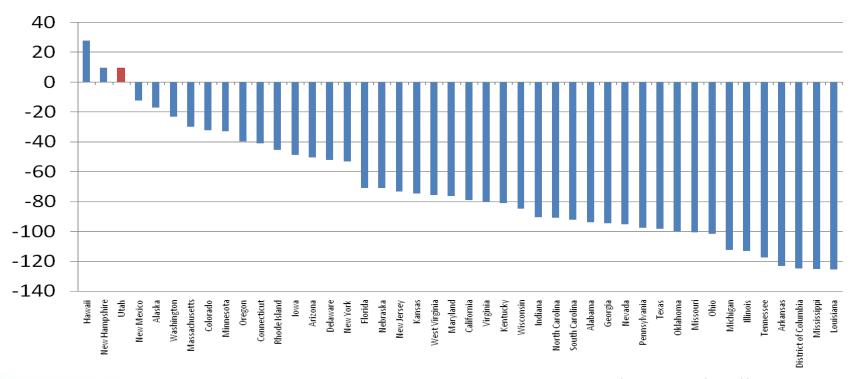
People whose lives may have been saved with appropriate care



Source: World Health Organization, Nolte and McKee, Rutgers Center for State Health Policy Standardized for age (1998) Utah from 2003, normalized for general U.S. change from 1998



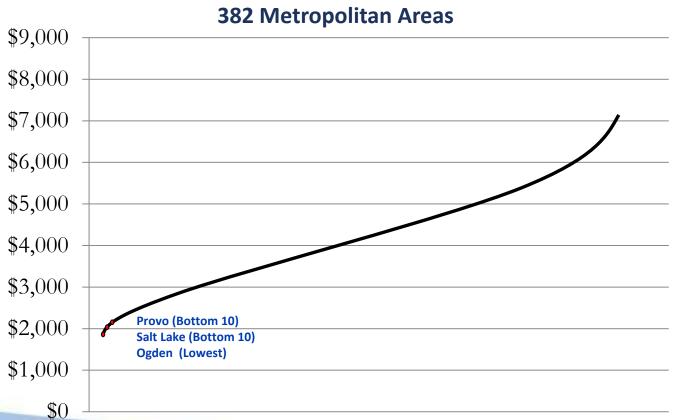
Ethnic Disparity: Mortality Amenable to Healthcare





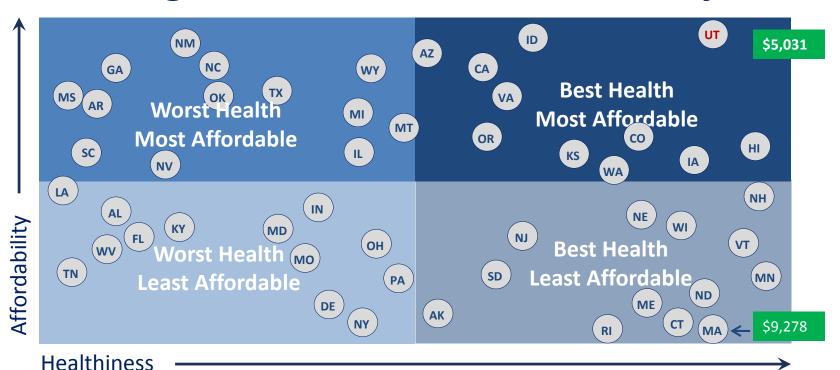
SOURCE: Aiming Higher, State Scorecard on Health System Performance, The Commonwealth Fund, October, 2009

Per Capita Total Health Spending Among Insured People:





Bending the cost curve the Utah way



Healtimess —

X Axis: Health Ranking by State, Source: United Health Foundation Y Axis: Health Care Expenditures by State of Residence, Source: Kaiser Family Foundation





What will we see in the *next* 40 years?



- Care will more often be based on evidence
- Care will be more personalized
- Patients will be more involved
- Incentives will be aligned with best outcomes
- Quality, Safety, Satisfaction, and Affordability will all improve





Healing for life"