

Better, Cheaper Health Care: Can Technocrats Help?

Science for the People: Stories from the Movement

University of Massachusetts Amherst
April 13, 2014

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Who am I?

- Math PhD in health services research (HSR)
- 20+ yrs @ BU in Medicine & Public Health
- Developed (health-based) payment models now used in CMS' Medicare Advantage
- Founded DxCG, Inc. (now Verisk Health)
- Since 2009, Professor and Division Chief in Quantitative Health Sciences (QHS) at UMass Medical School in Worcester
 - <http://www.umassmed.edu/QHS>

My Department's Vision

- Improve population and individual health by transforming health care delivery through methodological innovation
- Do good translational research
- QHS leaders:
 - Care about health equity and social justice
 - Appreciate the tension between for-profit medicine and creating a healthy nation
- SFTP perspective highlights that tension

I hope to help reform how we

- Pay for health care
- Measure and reward “quality” in health care
- Remain aware of the limited role of “health care” in creating and sustaining “health”

Making Payment Match the Need: Why Old-Style Capitation Models Failed and How We Can Do Better

March 26, 2012
Research into Practice and Policy

The random walk of a socially concerned mathematician

- College –given Vietnam etc., why math?
- Peace Corps, graduate school – “falling into” math – *choosing*: statistics + politics + health
- What problems can I help solve with math?
 - Efficacy of therapies, predictive models for making fair O-to-E comparisons
 - Environmental safety, employment discrimination, electoral integrity, ...

Peace Corps, Philippines

Hey, math is
useful
everywhere!



Returned to graduate school in math at Wash U in St. Louis, then U of Illinois Chicago. Fell in love, got political ...



Finding my “calling” in Chicago

- Founding 2 women’s self-help health centers
 - Emma Goldman Women’s Health Center
 - Chicago Women’s Health Center
- Changed from pure math to statistics
 - Can I help “reform” health care?
- Transitional job(s):
 - Post-doc at Dartmouth, then BU (both in math)
 - Clinical trials work at Harvard
 - “Health Services Research” at the BU Med School

Thinking about Primary Care



Thinking About Primary Care

- How can we identify, quantify, encourage and support value in health care?
- Patient-centered primary care practice
 - A “practice” is defined by the population it serves, not the number of visits it delivers
 - It works to maintain/improve the health of its patients
 - A “patient-centered medical home” (PCMH) is a clinical team that provides comprehensive primary care to a defined patient panel
- Fee-for-service (FFS) cannot pay for “health care use that is avoided because health was managed well”
 - Scenario 1: Woman is repeatedly hospitalized for CHF ...
 - Scenario 2: Man asks his PCP for an MRI ...

Patient-Centered Medical Home

- PCMH requires whole-practice transformation
 - Patient-centric, longitudinal, not physician-centric, episodic
 - Addresses potential problems, not merely reactive
 - About “health,” not just medical care
- Can care transform absent *radical* change in:
 - What society values?
 - How we pay for care?
 - Concern for public health (social solidarity)?

Payment Reform for **Primary Care**: Is Capitation the Answer?

- Capitation encourages spending less
- Providers should save money by keeping people healthy, not:
 - Skimping on care
 - “Cherry picking”
- The *system* should:
 - Pay enough to address patients’ needs
 - Measure and reward quality

Multiple Roles for Risk Adjustment

- Match dollars to the health needs of patient panels
- Allow practices to innovate
 - Deploy their resources as they see fit
 - Become more efficient and effective
- Help identify providers who improve patient health
 - Facilitate improved patient care through real-time feedback to practices
- Allow payers, regulators and policy people to
 - Encourage , disseminate effective innovations
 - Identify and address problems



2008 HSR Impact Awardee

Risk-Based Predictive Modeling

Improving the Financing and Delivery of Health Care with Risk-Based Predictive Modeling

THE ISSUE

In the early 1980s, CMS, then called the Health Care Financing Administration, needed a practical method to calculate medical-risk-based payments for its new Medicare risk contracting (HMO) program. The urgency increased with studies suggesting that Medicare HMOs enrolled healthier-than-average members, while the sickest beneficiaries remained enrolled in Medicare's traditional fee-for-service program. Health-based payments are designed to provide plans with the money needed to care for sick patients while not overpaying for healthy ones. It is now widely recognized that virtually all provider assessments require risk adjustment, because appropriate and expected costs, processes and outcomes of care vary greatly across providers' very different patient panels.

THE IMPACT OF HEALTH SERVICES RESEARCH

This award honors a body of work which brought risk adjustment to many users, especially Medicare, as it adopted health-based payments to health plans. The award recipients have promoted and facilitated risk-adjusted payments for protecting sick people and their providers through numerous peer-reviewed publications, national and international presentations, through consulting and in congressional testimony. They also provided the technical and practical tools that have helped make risk adjustment integral to health care management and financing today.



Risk-based predictive modeling using administrative claims data to predict health care costs and other patient outcomes has revolutionized the financing, management and delivery of health care.

The Centers for Medicare & Medicaid Services (CMS) was a pioneer in recognizing the need for practical methods to assess medical risk and adjust payments to health plans for the underlying health of their Medicare enrollees. The urgency increased with studies documenting that Medicare was actually losing money in the Medicare risk contracting program because plans attracted "favorable selection." Medicare has used risk adjustment with increasing sophistication and weight since 2000, affecting 100 percent of health plan payments for the first time in 2007.

What made the DCG story unique was its focus on developing a practical tool to facilitate fair and efficient health plan competition.

For two decades, a team of researchers and analysts headed by Arlene S. Ash, Boston University School of Medicine, Randall P. Ellis, Boston University Department of Economics, and Gregory Pope, RTI International has provided the technical and practical

tools for the wide-spread use of risk adjustment in health care management and financing.

The risk adjustment story has many heroes, with CMS administrators and staff being its original and steadfast champions and with early help from the Alpha Center. Research teams at Brandeis and Boston Universities, RTI International, Johns Hopkins, RAND, the University of California, Kaiser, and Harvard have made important, continuing contributions. Additional lead developers and disseminators of risk adjustment include Barbara Starfield and Jonathan Weiner of Johns Hopkins, Richard Kronick of the University of California, San Diego, and Melvin Ingber and John Kautter of RTI International. Several companies have extended the tool set, producing "industrial strength" software that facilitates national and international adoption by governments, as well as mainstream use by health care actuaries, health plan administrators and medical directors. What made the DCG story unique was its focus on developing a practical tool to facilitate fair and efficient health plan competition.

Drs. Lisa I. Iezzoni and John Z. Ayanian of Harvard Medical School provided key clinical support for Medicare's Diagnostic Cost Groups (DCG) modeling framework. CMS now uses such models for paying plans, monitoring quality and assessing programs.

Many constituencies in U.S. health care and internationally now rely on predictive models

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Questions:

- Can insurance companies add value?
- How can any payer use its money wisely?
 - FFS vs. capitation?
 - Can “pay for performance” encourage quality?
 - Roles for professionals/unions/community health workers (CHWs)?
- In what time frame and scope of can innovations be cost-effective? E.g.,
 - Oregon Health Insurance Experiment (2008 -)
 - Abecedarian Project (1972-77 recruitment + 30 yrs)

Closing Thoughts

- My work is being used to improve health care!
- But,
 - Obamacare is unpopular
 - "Single payer" is off-the-table
 - Time-frame for ROI exceeds corporate (and political) timelines
 - We won't invest in "social capital" to improve health and reduce total health care spending
- Both technical and political problems must be solved to create a healthier nation.

Can We Get Serious About Health?

**What can we do to make the US
the healthiest nation in one
generation?**