

Population Health

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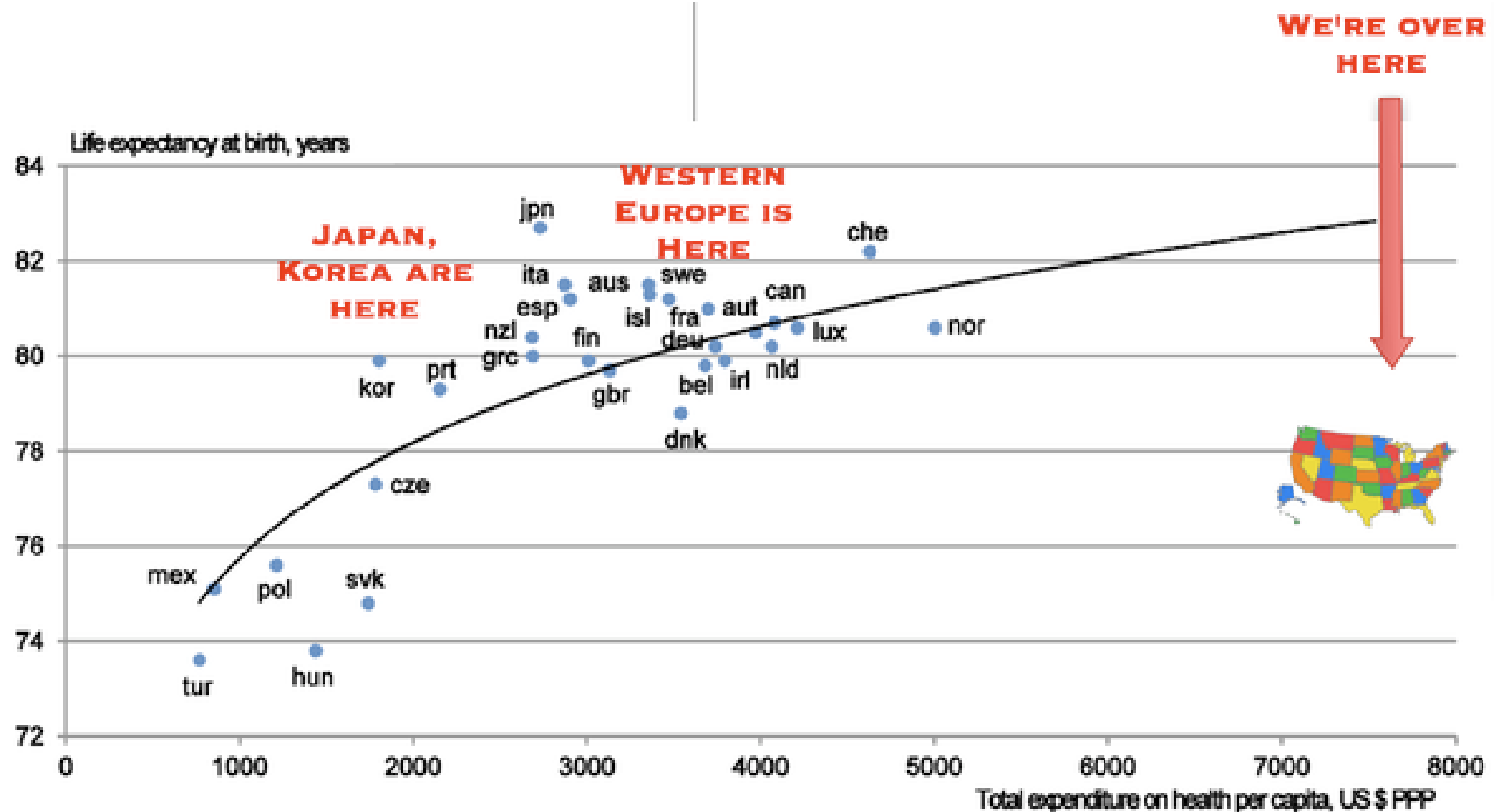
*Associate Chief Medical Officer
and VP of Care Delivery*



Louisiana

Blue Cross and Blue Shield of Louisiana is an independent licensee of the Blue Cross and Blue Shield Association and incorporated as Louisiana Health Service & Indemnity Company.

Per Capita Expenditure on Health Care vs. Life Expectancy



Performance of US Healthcare System

2013 World Health Care Report Card – U.S. Ranks LAST

COUNTRY RANKINGS

Top 2*

Middle

Bottom 2*



	AUS	CAN	FRA	GER	NETH	NZ	NOR	SWE	SWIZ	UK	US
OVERALL RANKING (2013)	4	10	9	5	5	7	7	3	2	1	11
Quality Care	2	9	8	7	5	4	11	10	3	1	5
Effective Care	4	7	9	6	5	2	11	10	8	1	3
Safe Care	3	10	2	6	7	9	11	5	4	1	7
Coordinated Care	4	8	9	10	5	2	7	11	3	1	6
Patient-Centered Care	5	8	10	7	3	6	11	9	2	1	4
Access	8	9	11	2	4	7	6	4	2	1	9
Cost-Related Problem	9	5	10	4	8	6	3	1	7	1	11
Timeliness of Care	6	11	10	4	2	7	8	9	1	3	5
Efficiency	4	10	8	9	7	3	4	2	6	1	11
Equity	5	9	7	4	8	10	6	1	2	2	11
Healthy Lives	4	8	1	7	5	9	6	2	3	10	11
Health Expenditures/Capita, 2011**	\$3,800	\$4,522	\$4,118	\$4,495	\$5,099	\$3,182	\$5,669	\$3,925	\$5,643	\$3,405	\$8,508

Notes: * Includes ties. ** Expenditures shown in \$US PPP (purchasing power parity); Australian \$ data are from 2010.

Source: Calculated by The Commonwealth Fund based on 2011 International Health Policy Survey of Sicker Adults; 2012 International Health Policy Survey of Primary Care Physicians; 2013 International Health Policy Survey; Commonwealth Fund National Scorecard 2011; World Health Organization; and Organization for Economic Cooperation and Development, OECD Health Data, 2013 (Paris: OECD, Nov. 2013).

Why Change Is Needed...

Louisiana's Medical Cost Crisis

REPORT BRIEF JULY 2013

INSTITUTE OF MEDICINE
OF THE NATIONAL ACADEMIES

Advising the nation • Improving health

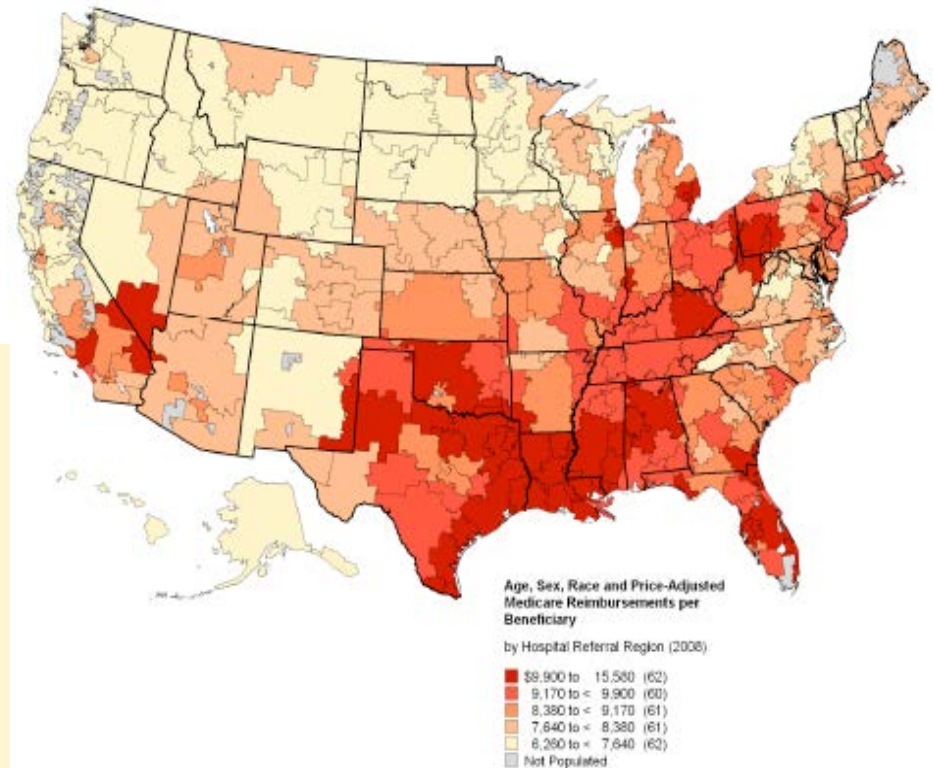
Variation in Health Care Spending

Target Decision Making, Not Geography



Ten Highest Spending Medicare HRR's after Adjustment

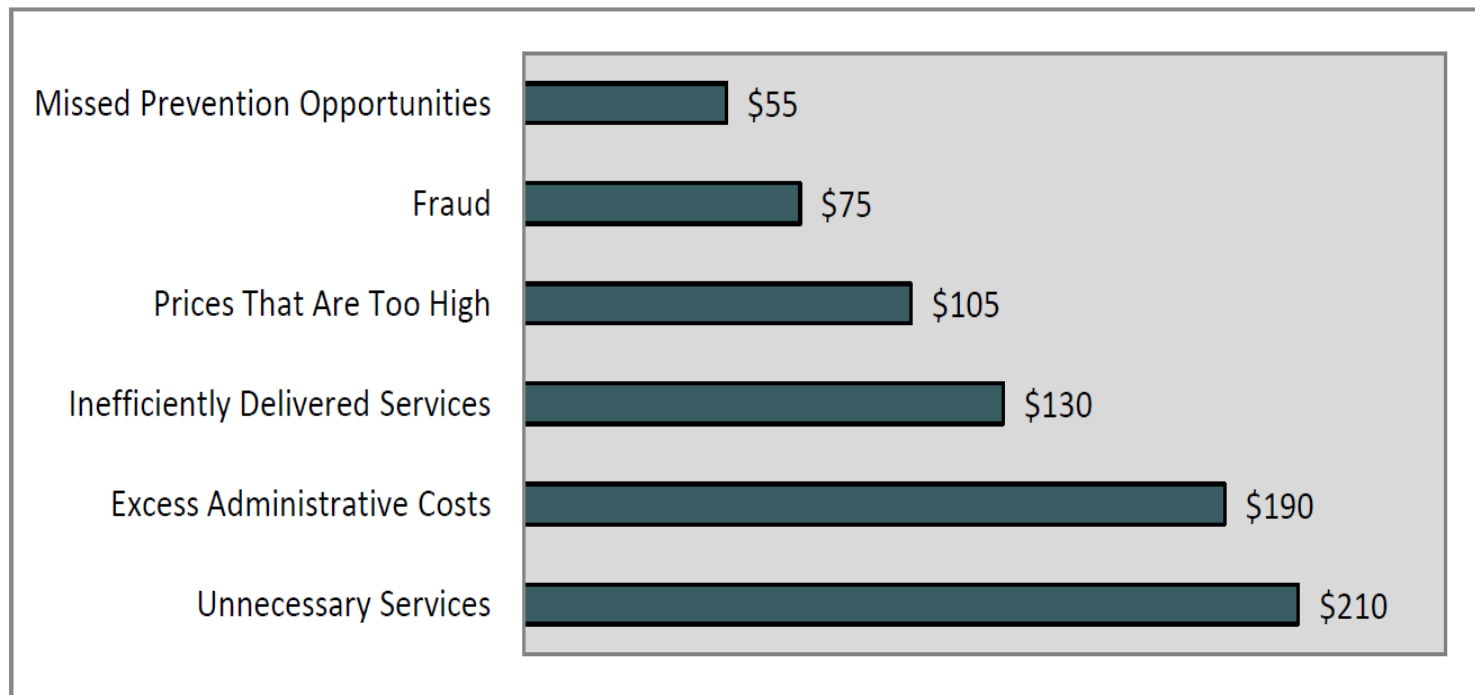
- | | |
|-------------------|------------------------|
| 1. Miami, FL | 6. Lafayette, LA |
| 2. McAllen, TX | 7. Shreveport, LA |
| 3. Monroe, LA | 8. Baton Rouge, LA |
| 4. Houston, TX | 9. Fort Lauderdale, FL |
| 5. Alexandria, LA | 10. Metairie, LA |



Why Change Is Needed...

“Waste” in the system

Figure 1.4: Sources of Healthcare Overspending (\$, billions)



Source: Institute of Medicine via *The Washington Post*¹¹

Health Creation

Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.

Determinants of Health

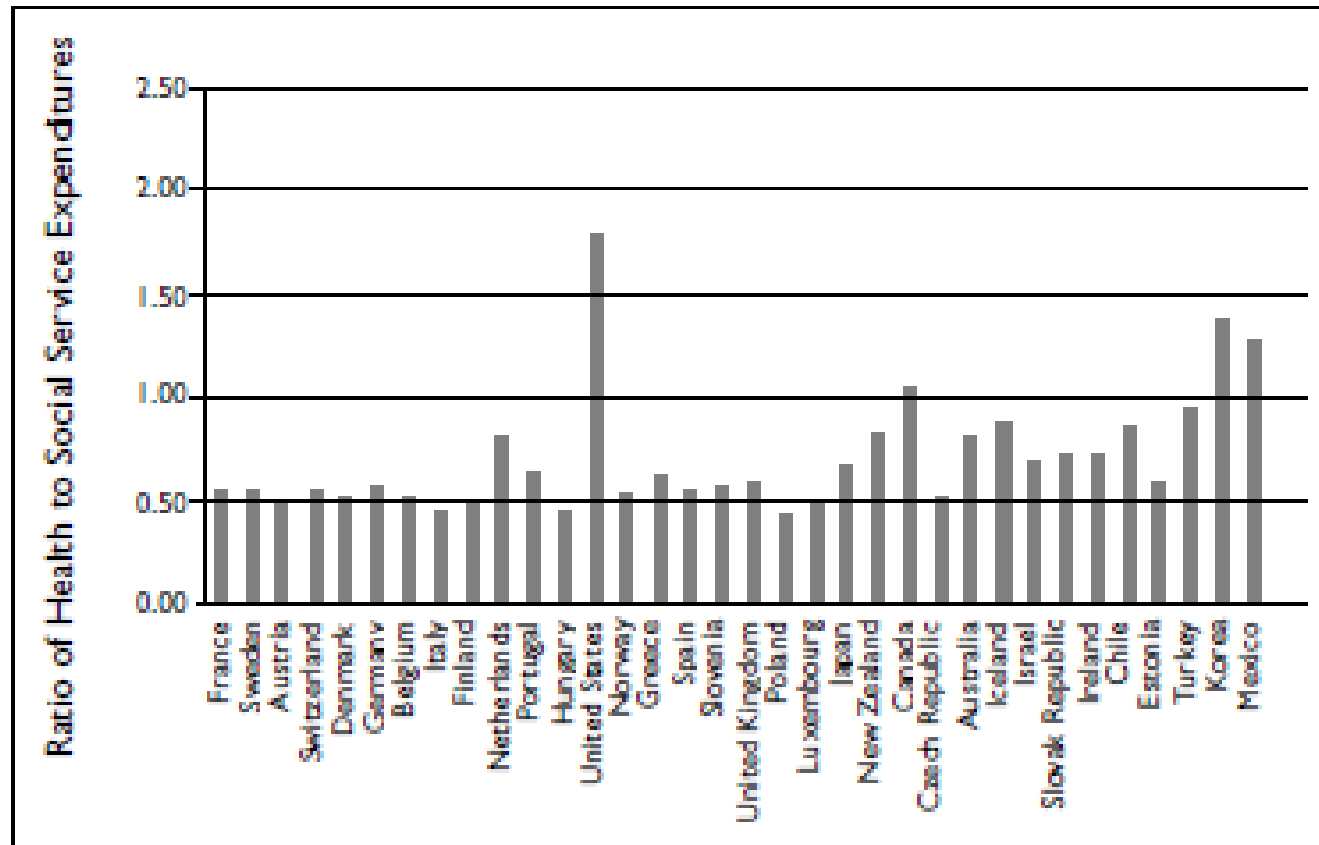
1. Income and Income Distribution
2. Education
3. Unemployment and Job Security
4. Employment and Working Conditions
5. Early Childhood Development
6. Food Insecurity
7. Housing
8. Social Exclusion
9. Social Safety Network
10. Healthcare Services



“Health is primarily a measure of each person's ability to do and become what he wants to become” – Rene Dubos

OECD Health Care Spending

FIGURE 1.4. OECD COUNTRIES: RATIO OF HEALTH TO SOCIAL SERVICE EXPENDITURES, 2007

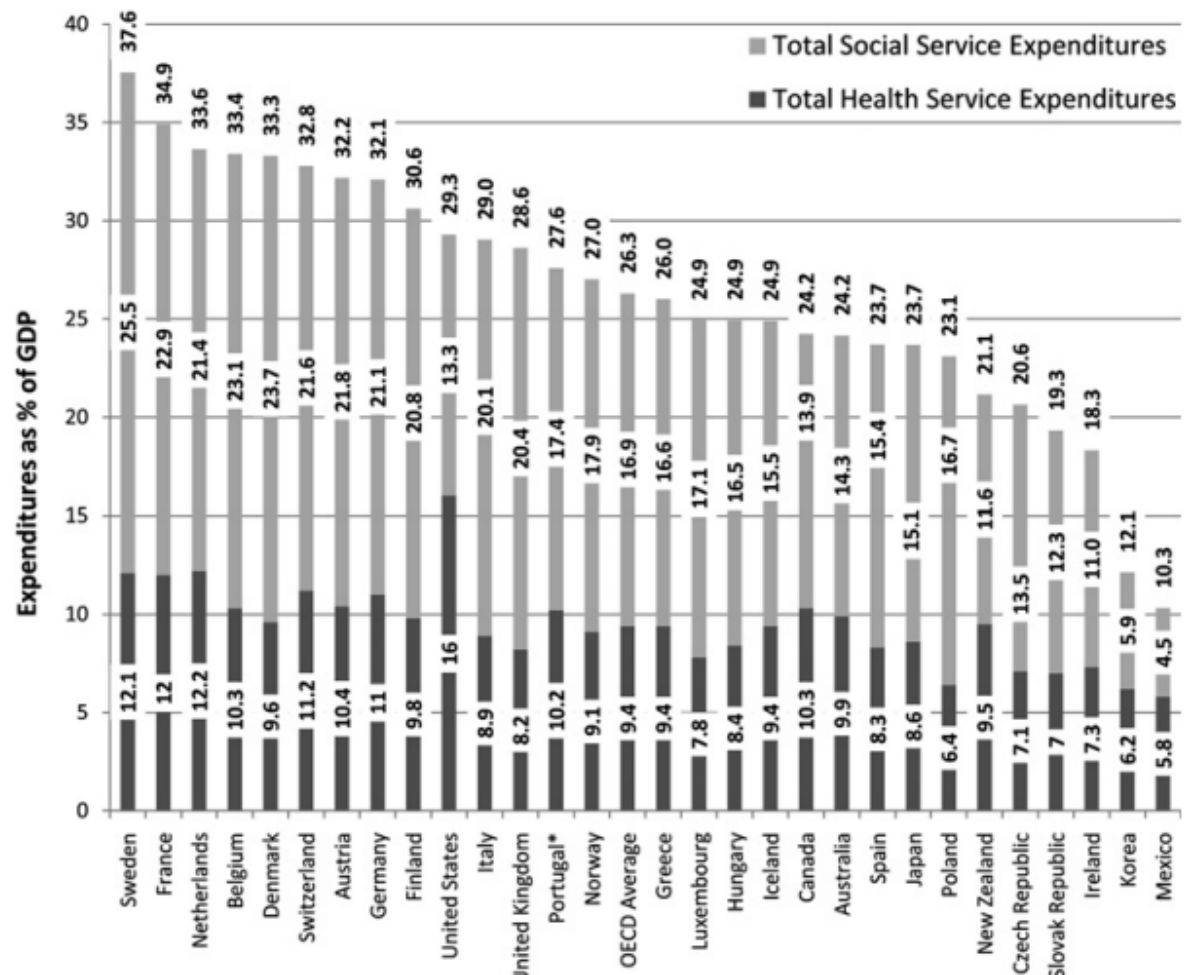


Source: OECD, *Health Data 2009* (Paris, France: OECD Publishing, 2009).

OECD Ratio of Health to Social Service Spending

Figure 1 Total health-service and social-services expenditures for Organization for Economic Co-operation and Development (OECD) countries, 2005.

*Expenditures for Portugal are from 2004, owing to missing data for 2005. Source: *OECD Health Data 2009* (accessed June 2009); *OECD Social Expenditure Dataset* (accessed December 2009); authors' calculations. GDP, gross domestic product.



The Built Environment

In recent years the public health community has become increasingly aware that the design of the built environment can have a major impact on the health of the public. For example, one may expect more physical activity and healthier diets among persons in communities with convenient, safe walking paths and accessible sources of fresh fruits and vegetables. On the other hand, poorer health indicators may be expected among residents of communities with high crime rates, few parks or walking paths, numerous alcohol and tobacco outlets, and little access to fresh food.

Grounded in the social determinants of health, and with a renewed sense of interconnectedness, dedicated and talented people in government agencies and communities who recognize that our future depends on cultivating local change and evaluating the results can come to grips with the enormous challenge that lies ahead to create more equitable, sustainable, and healthier cities worldwide.

What is Healthcare Delivery Science?

- The science of *promoting improved allocative and productive efficiency in healthcare delivery* where:
 - **Allocative efficiency** is ensuring that effective treatments go to well-informed patients who value those treatments
 - **Productive efficiency** is ensuring that every healthcare dollar yields the maximum possible value
- **Primary goal → To assure that everyone everywhere gets the care they need and no less, and the care they want and no more**



Reinventing the Healthcare Delivery Model



Why do we need healthcare delivery science?

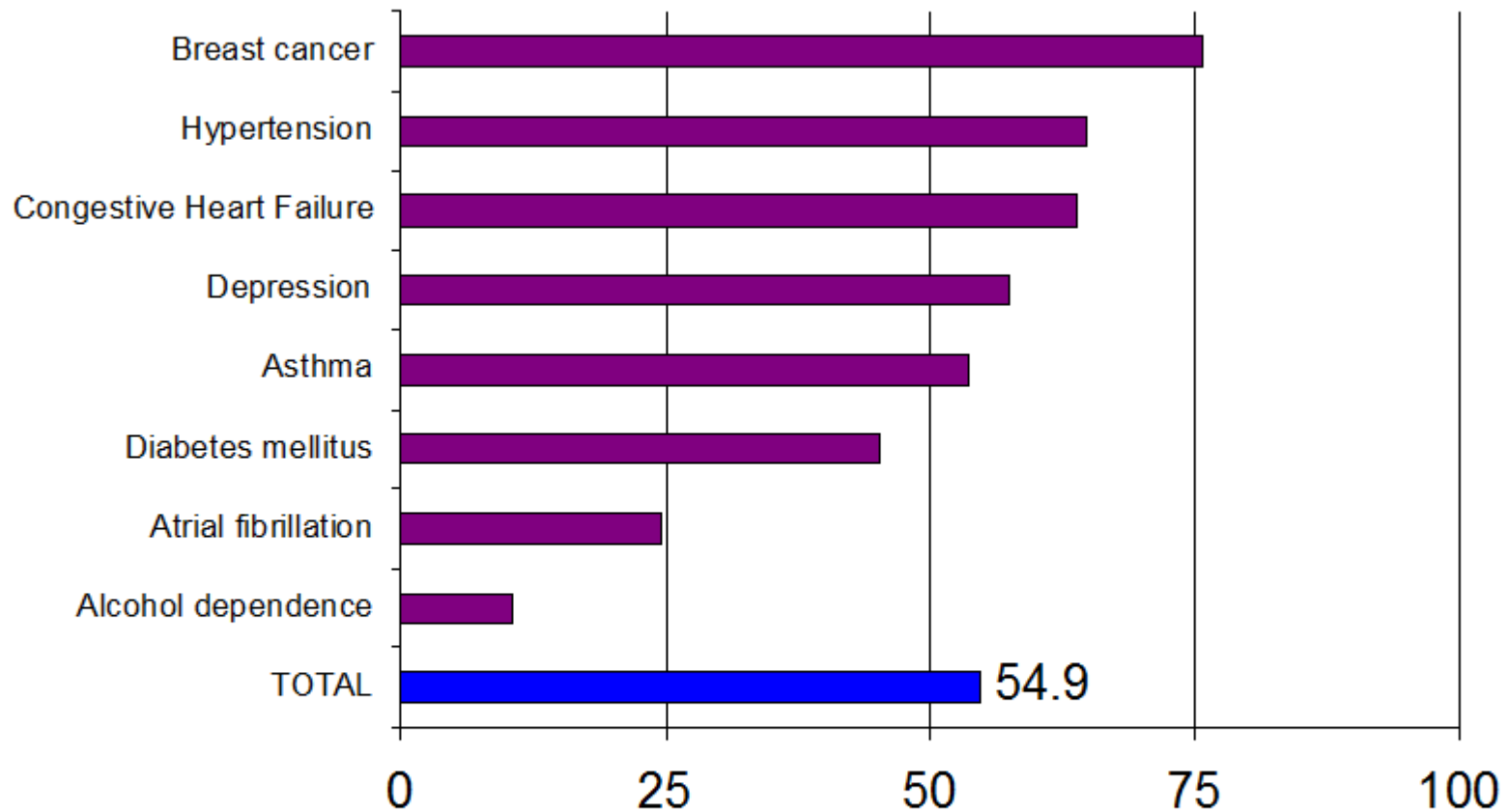
- The **demands of aging populations and increasing chronic illnesses** are rising faster than the capacity to respond to them
- Explosion of **amount and specificity of medical knowledge** beyond the limits of the capacity of the human brain to keep up-to-date
- The delivery of health care is often **inequitable and fragmented, prohibitively expensive, focused less on prevention and more on care and treatment, and disproportionately more on late-stage disease**
- Sound, **evidence-based clinical and managerial practices are conspicuously absent**
- The **mismatch of supply and demand** is stark → while more than a billion people lack access to basic health care services, excess capacity and the overuse of procedures elsewhere result in *unnecessary care, medical errors, and waste*

3 Problems with Healthcare Delivery

1. **We don't know what to do** → uncertainty about what to do in any given clinical situation
2. **We don't do what we know** → health care delivery is either over- or under-supplied, contrary to the recommendations of medical science
3. **We know what to do and we do what we know, but we do it wrong** → failure of execution

All 3 of these problems relate to the creation and application of medical knowledge to solve individual patients' health problems

We don't do what we know



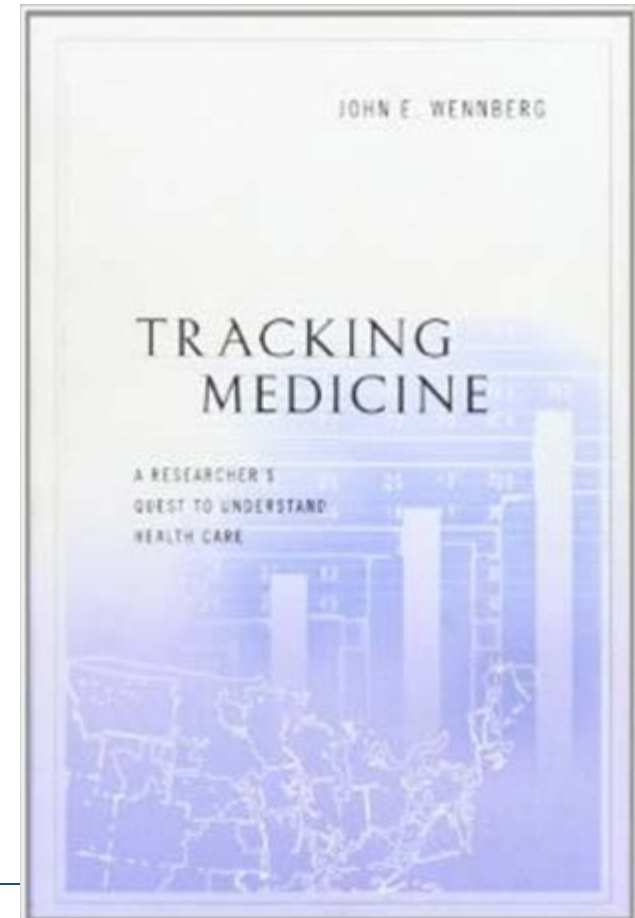
Source: McGlynn EA, et al. NEJM, 2003; 348: 2635-2645

In Healthcare, Geography is Destiny

Extensive and inexplicable *variation* in the way health care was delivered from one community to another in the state of Vermont

- Tonsillectomies
- Hysterectomies
- Cholecystectomies
- Rates of hospitalization for disease

Variation



The Dartmouth Institute For Health Policy and Clinical Practice

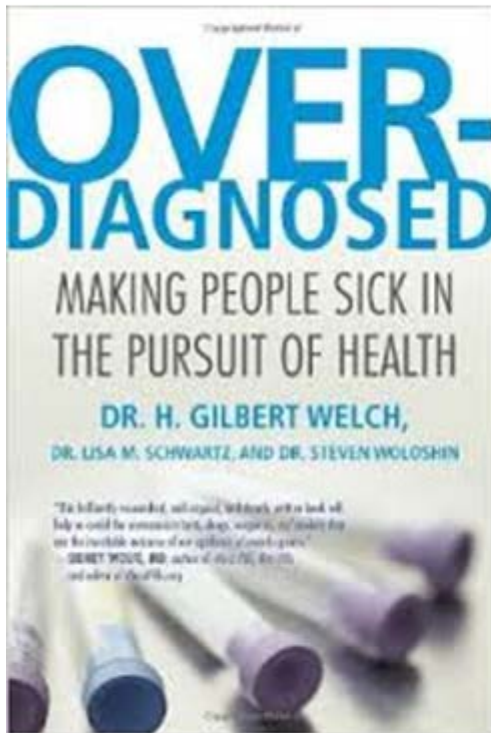
- Vermont findings confirmed throughout the country
- **Unwarranted variation** in health care delivery—variation that cannot be explained on the basis of *illness, medical evidence, or patient preference*—is ubiquitous
- By understanding practice variation we learn that controlling costs will **NOT** require rationing—if by “rationing” we mean withholding of care that patients want, and that is effective in improving outcomes
- Informed patients often prefer a form of treatment other than the one their physicians actually prescribe



Where Knowledge Informs Change

More care is not necessarily better care

Inappropriateness and Oversupply



'over-diagnosis is actively harmful'
BMJ, 2012

'concern about over-diagnosis is justified'
JAMA 2012

'over-diagnosis of disease: a modern epidemic'
Archives of Internal Medicine, 2012

Potential for Harm with Over-Diagnosis

Without Screening

1000 patients with clinical lung cancer

10 years later

900 are dead
100 are alive

$$10 \text{ year survival} = \frac{100}{1000} = 10\%$$



With Screening

4000 patients with pseudodisease
1000 patients with clinical lung cancer

10 years later

4000 are alive
900 are dead
100 are alive

$$10 \text{ year survival} = \frac{4100}{5000} = 82\%$$

Medical Errors

- Combined with its complexity, it is well-documented and accepted in the industry that hospitals are indeed very unsafe.
- A wide variety of studies have confirmed that there is a huge volume of preventable medical errors daily (approximately 40,000), resulting in more than 100,000 preventable deaths annually.
- We are currently at a rate of **250 preventable deaths daily** in hospitals or the equivalent of two 737s crashing every day with no survivors. Clearly, there would be no airline industry if this was the safety performance delivered, yet healthcare remains virtually invisible in terms of safety performance

Categories of Care

- **Three categories of care:**

1. **Effective or necessary care** → *accounts \leq 15% of total Medicare spending*

- Includes care that **all** eligible patients should receive
- Defined by medical science—by objective information about outcomes of treatment and by evidence-based guidelines
- Problem is *underuse*

2. **Preference-sensitive care** → *accounts for 25% of Medicare spending*

- More than one option exists and decision as to which option is right for the individual patient depends on patient preference

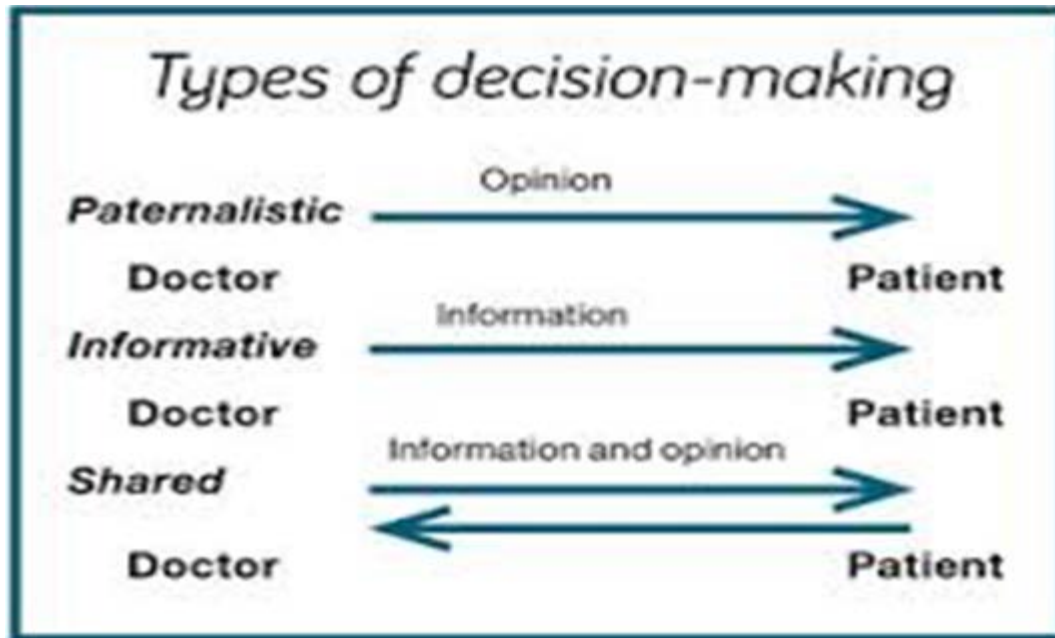
3. **Supply-sensitive care** → *accounts for ~ 60% of Medicare spending*

Examples of Preference-Sensitive Care

- Breast cancer screening
- Prostate cancer screening
- Treatment for BPH
- Treatment of early stage breast cancer → lumpectomy + radiation therapy vs. mastectomy
- Knee or hip replacement surgery
- Back surgery

Ways to reduce preference-sensitive care include moving from informed consent and delegated decision making to informed patient choice and shared decision making

Informed Consent vs. Informed Patient Choice



Moving from
Informed Consent
and Delegated
Decision Making

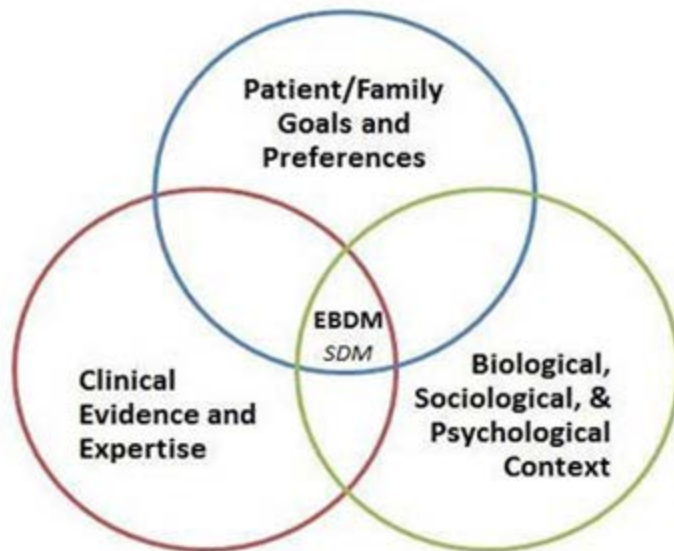


To Informed
Patient Choice and
Shared Decision
Making



Informed Patient Choice

- **Shared Decision Making** → *process in which the provider discusses high quality, up-to-date information about the condition, including risks and benefits of available options and, if appropriate, the limits of scientific knowledge about outcomes; values clarification to help patients sort out their values and preferences; and guidance or coaching in deliberation, designed to improve the patient's involvement in the decision process*



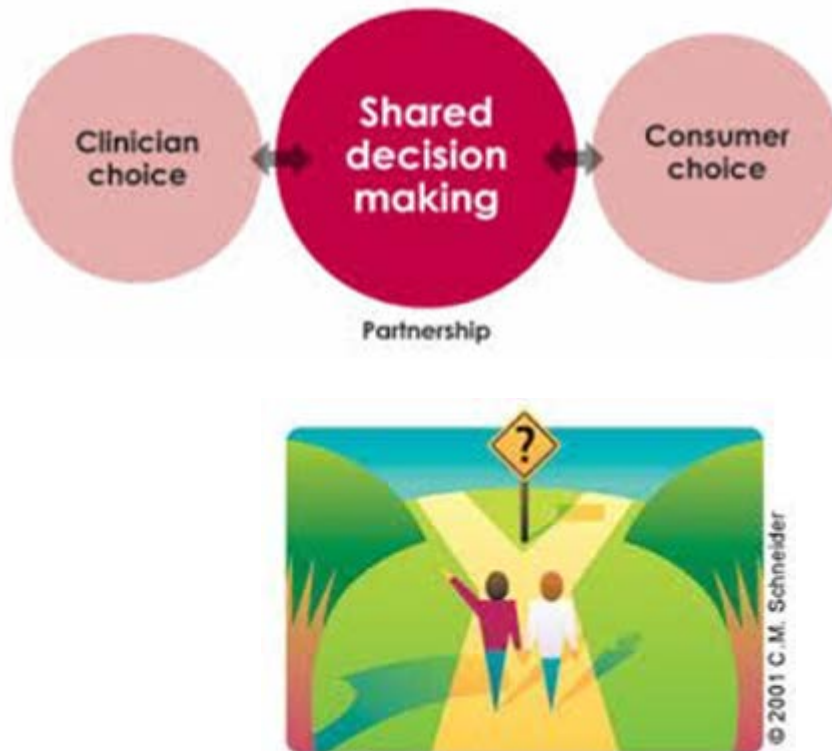
Sharing Expertise – Clinician's vs. Patient's Experience

Clinician's expertise	Patient's Expertise
Diagnosis	Experience of illness
Disease aetiology	Social circumstances
Prognosis	Attitude to risk
Treatment options	Values
Outcome probabilities	Preferences

Source: Making Shared Decision Making Reality: No decision about me, without me. The King's Fund and Foundation for Informed Medical Decision Making, August 2011.

Informed Patient Choice

- **Patient Decision Aids** → a written, audio-visual, or online tool that provides a balanced presentation of the condition and treatment options, benefits, and harms, including if appropriate, a discussion of the limits of scientific knowledge about outcomes, and that is certified by one or more national certifying organizations



Supply-Sensitive Care

- About the frequency with which everyday medical care is used in treating patients with acute and chronic illnesses
- Examples include:
 - Frequency of physician visits
 - Referrals for consultation, home health care, or imaging exams
 - Admissions to hospitals, ICUs, or skilled nursing homes
- These types of medical interventions are generally NOT driven by explicit medical theories and scientific evidence
- These types of decisions are strongly influenced by the capacity of the local medical market—the per capita numbers of PCPs, medical specialists, and hospitals or ICU beds
- ***Market is in disequilibrium → supply pushes demand or utilization***

Reducing the Overuse of Supply-Sensitive Care

- **Improving the science of healthcare delivery** → converting the “black box” of supply-sensitive care into evidence-based care that is effective or preference-sensitive, thus reducing the power that capacity exerts on its use
- Reducing the overuse of supply-sensitive care will also require **organized *systems* of delivery**
 - Capable of managing the care of a population of chronically patients over time and across locations of care, and adjusting capacity to reflect medical evidence and patient preferences
 - Organized systems of care are generally more efficient and effective
 - Use fewer resources (and spend less) in serving their chronically ill patients
 - Achieve high-quality care and satisfied patients

Goal-Oriented Patient Care

Comparison of Traditional Disease-Specific and Goal-Oriented Outcomes.*

Measurement Domain	Examples of Diseases	Traditional Outcomes	Goal-Oriented Outcomes
Survival	Cancer, heart failure	Overall, disease-specific, and disease-free survival	None if survival not a high-priority goal; survival until personal milestones are met (e.g., grandchild's wedding)
Biomarkers	Diabetes, COPD	Change in indicators of disease activity (e.g., glycated hemoglobin level, CRP level, and pulmonary-function tests)	None (not a meaningful outcome observed or felt by patient)
Signs and symptoms	Heart failure, COPD, arthritis	Inventory of disease-specific signs and symptoms (e.g., dyspnea, edema, and back pain)	Symptoms that have been identified as important by the patient (e.g., control of dyspnea or pain sufficient to perform an activity such as bowling or walking grandchild to school)
Functional status, including mobility	Cancer, heart failure, COPD	Usually none or disease-specific (e.g., Karnofsky score, NYHA functional classification, and 6-minute walk test)	Ability to complete or compensate for inability to complete specific tasks identified as important by the patient (e.g., ability to get dressed without help)

* COPD denotes chronic obstructive pulmonary disease, CRP C-reactive protein, and NYHA New York Heart Association.

Minimally Disruptive Medicine (MDM)

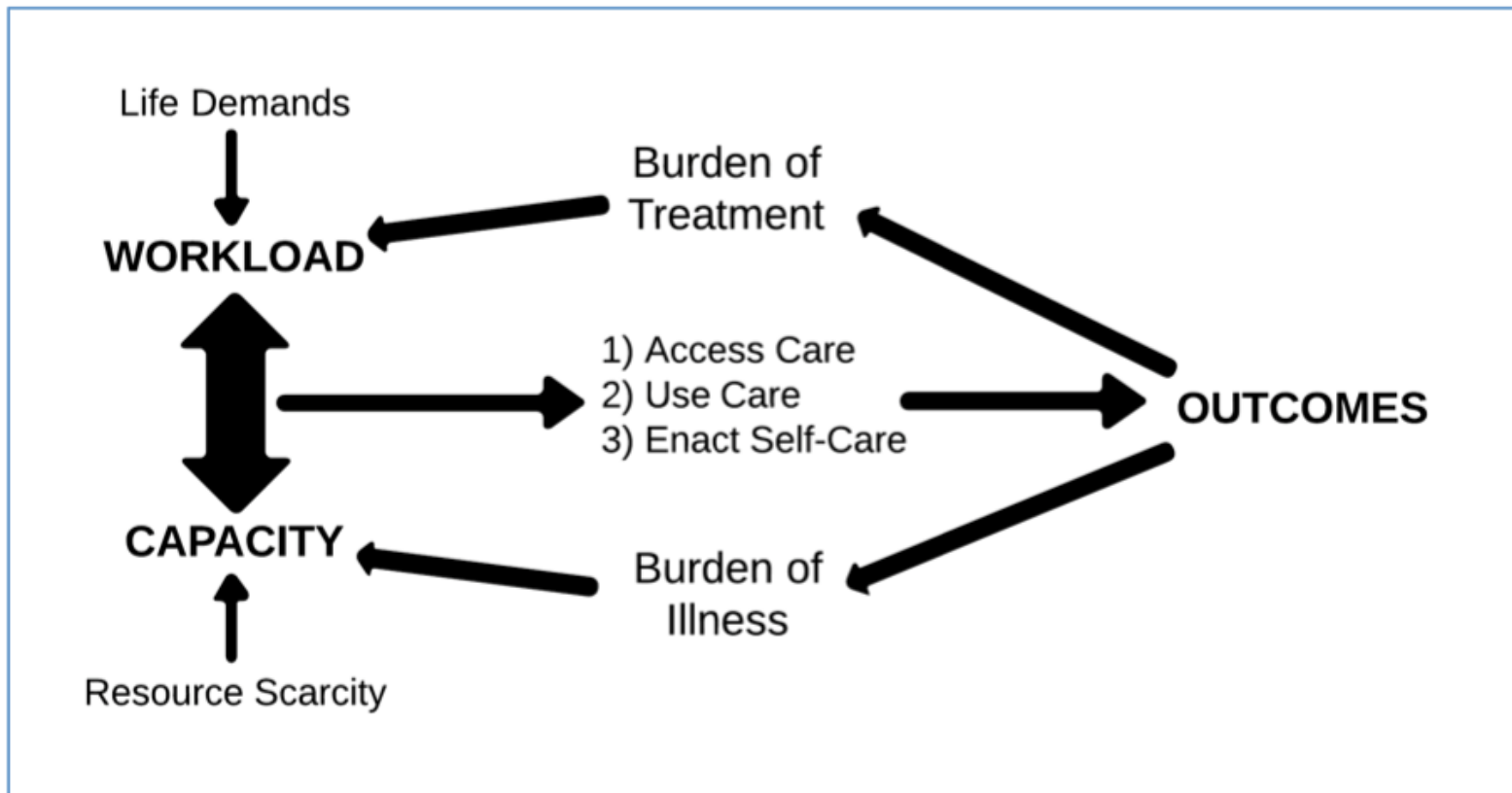
Minimally disruptive medicine (MDM) is a patient-centered approach to care that focuses on achieving patient goals for life and health while minimizing the burden that treatment demands impose.

MDM makes three important claims:

- 1) Being a patient involves work;
- 2) The ability to deal with this work is constrained by a patient's capacity and;
- 3) A balance between workload and capacity must be kept in order for healthcare to be effective in achieving patient goals.

MDM is particularly appropriate for patients who are overwhelmed by the demands of life, limited health, and burdensome care. These include patients with multiple chronic conditions. Finding more effective ways to care for this susceptible and expanding population is a national priority.

Cumulative Complexity Model



Institute of Medicine Report *Crossing the Quality Chasm*

Healthcare Should Be....

- ☐ Safe
- ☐ Effective
- ☐ Patient-centered
- ☐ Timely
- ☐ Efficient
- ☐ Equitable



3 conclusions from
that report.....

*Current systems
cannot do the job...
trying harder will not
work... changing
systems will*

IOM, Crossing the Quality Chasm, 2001

Questions & Answers

