



Epidemic of Care: A Call for Safer, Better and More Accountable Health Care

George C. Halvorson

Chairman and CEO, Kaiser Foundation Health Plan, Inc.
and Kaiser Foundation Hospitals

The Quality Colloquium at Harvard University
August 25, 2003

Health care costs are exploding.

Health care is the single biggest cost issue for employers – and a major budget issue for the government.

Government budget decisions are reducing the scope and eligibility for health care entitlement programs.

Employers are looking for fast and effective cost-reduction alternatives relative to health care premiums.

The easiest way of reducing cost for employers is to reduce benefits to employees.

Most non-union employers are reducing benefits – adding copayments, increasing co-insurance percentages, and adding deductibles.

But cost increases continue at unaffordable levels –
buyers are reaching a tipping point.

The last time health care cost increases hit double-digit levels for multiple years – in the late 1980s – employers abandoned traditional insurance and moved to managed care. Very quickly.

During the 1990s, various forms of managed care negotiated provider fees down, negotiated low drug prices, and eliminated outrageous waste in the system (e.g., Friday admissions for Monday surgery, overnight admissions for X-rays, 76 percent class C drugs).

For the 1990s, health care premium costs stayed fairly low, reflecting the new lower unit prices and the various managed care waste-reduction strategies.

These strategies temporarily “rebased” the market for provider services.

The cost pendulum is now swinging in the opposite direction.

Cost pressures have returned. Providers in a great many markets have consolidated to regain market power and pricing leverage.

Negotiated prices have hit rock bottom and are pretty much all going up.

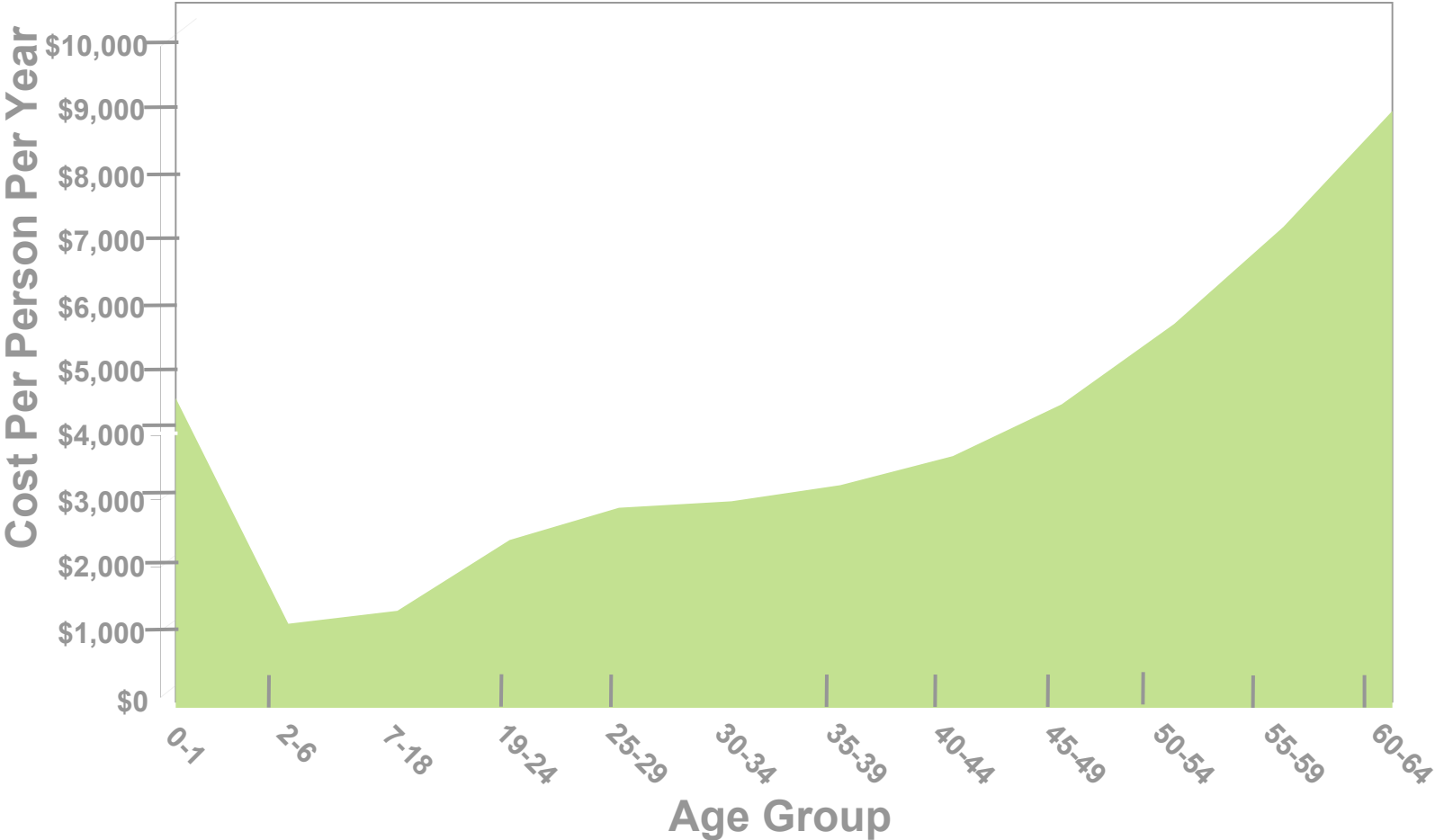
Drug companies have concentrated on chronic care treatments and new drugs.

The old model: “Take these for the next 10 days.”

The new model: “Take a pill a day forever.”

Also: Prices have gone up for “drugs that work.”

Health care costs by age group



Source: Milliman USA 2002 Health Cost Guidelines

Chronic care costs are exploding.

The number of diabetics is up by 50 percent since 1990.

New technologies are expanding the scope and reach of care.

Heroic medicine is commonplace ... and very expensive.

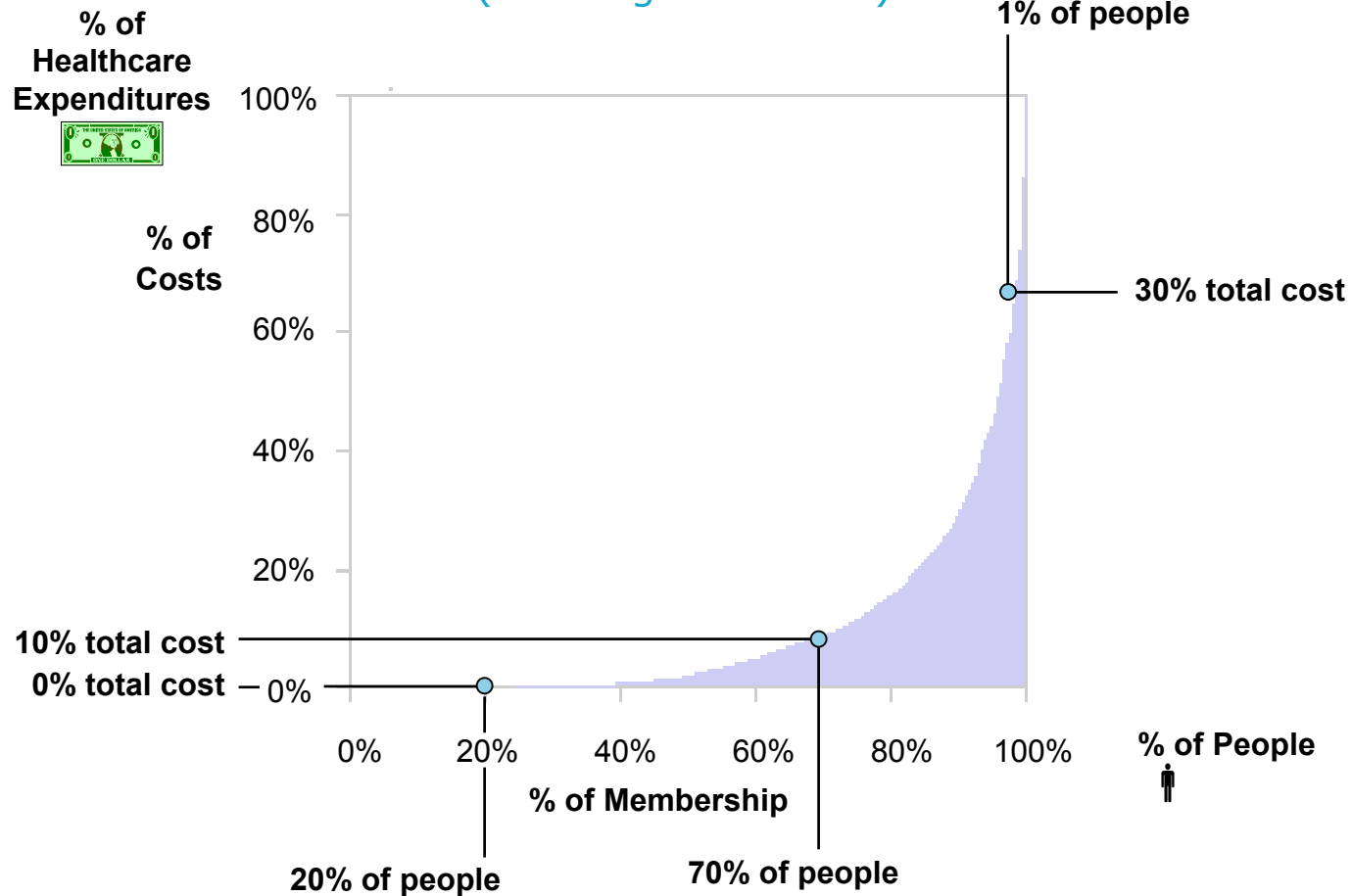
Miracles happen routinely.

We are facing health care worker shortages in a number of professions. These shortages will be resolved by: 1) paying more per worker or 2) re-engineering care delivery.

We will probably just pay more.

Cost distribution of care

(Working Americans)



20 percent = zero expense.

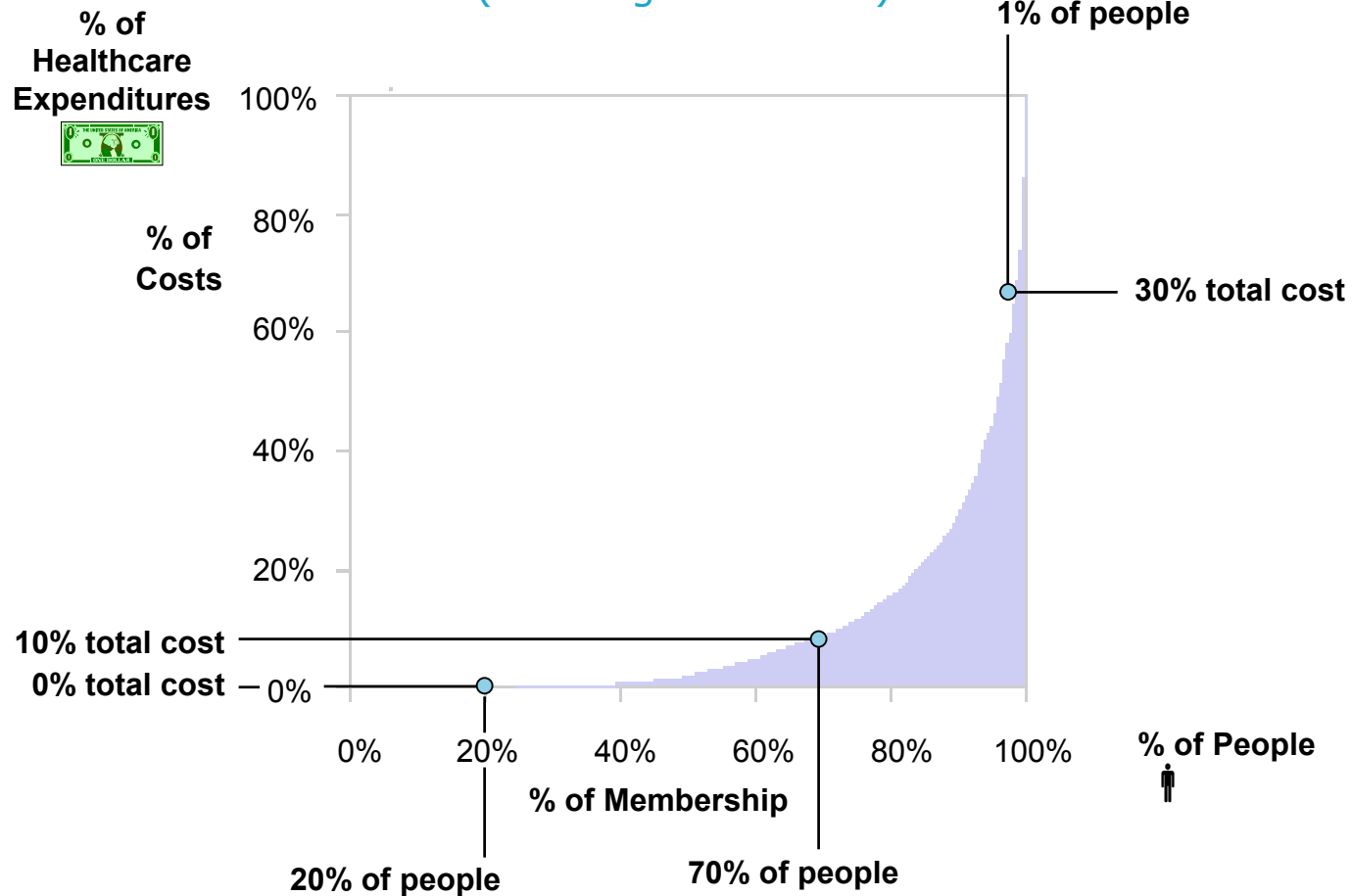
70 percent = 10 percent of expense.

5 percent = 50 percent of expense.

1 percent = 30 percent of expense.

Cost distribution of care

(Working Americans)



In other countries –

Single payer systems balance their budgets primarily by not funding the availability of expensive care for the most costly 5 percent – but providing solid access for care to the 90 percent who use smaller amounts of care. Political systems naturally create voter-centric care models.

The United Kingdom has set up a National Institute of Clinical Effectiveness (NICE) that assesses the suitability of drugs and treatments based primarily on a cost-effectiveness measure of £30,000 per extra year of life. Anything over £30,000 adding less than a year should not be funded.

– *Methods of Cost Containment: Some Lessons from Europe*, Julian Le Grand, London School of Economics

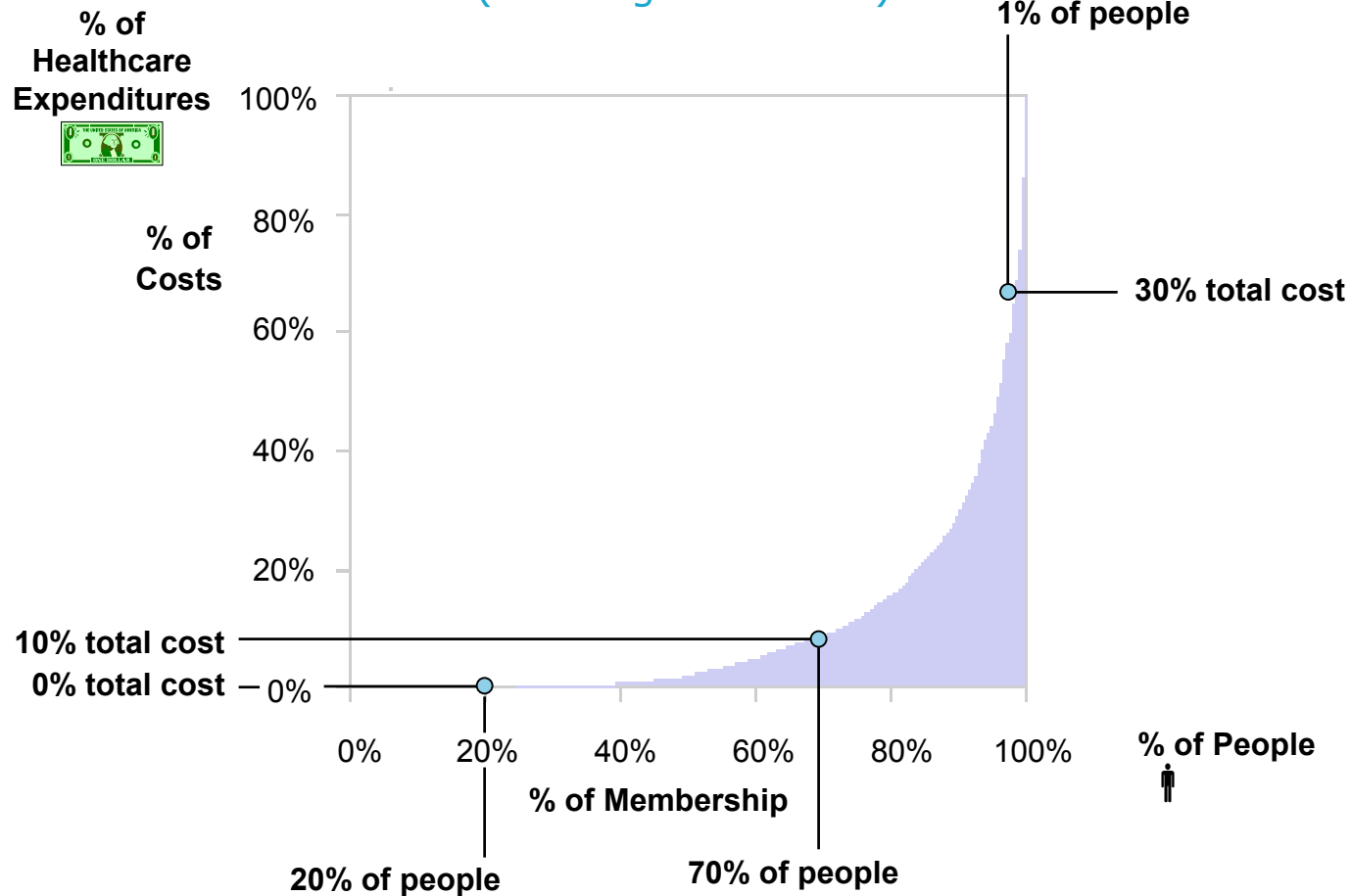
Wait times for specialty procedures in the United Kingdom:

- 29 weeks for inpatient hospital treatment in 2000--some 50,000 patients are waiting for hospital admission.
- 37 weeks for orthopedic surgeries.
- 30 weeks or more for heart surgeries--in London, about 500 patients die each year waiting for heart surgery.

--*Epidemic of Care: A Call for Safer, Better and More Accountable Health Care*

Cost distribution of care

(Working Americans)



So how good is the care being practiced in the world's most expensive care environment?

Two Institute of Medicine studies – *To Err is Human*
and *Crossing the Quality Chasm* – answer that
question well.

Institute of Medicine findings:

- 44,000-98,000 Americans die in hospitals each year from medical errors – the 8th leading cause of death in America.
- “The status quo is not acceptable and cannot be tolerated any longer. It is simply not acceptable for patients to be harmed by the same health care system that is supposed to offer healing and comfort.”

Other statistics:

- Patient non-compliance causes 125,000 deaths annually in the U.S. – “Compliance Packaging: A Patient Education Tool,” D. Smith, *American Pharmacy*
- 50 percent of all prescriptions filled are taken incorrectly.
 - U.S. Chamber of Commerce
- \$177 billion is spent by the U.S. health care system every year to treat medication error-related problems.
 - Med Ad News, 2001

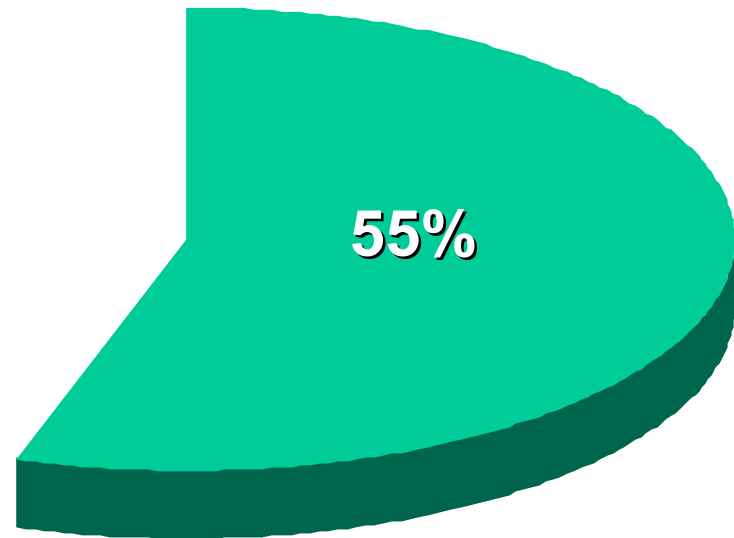
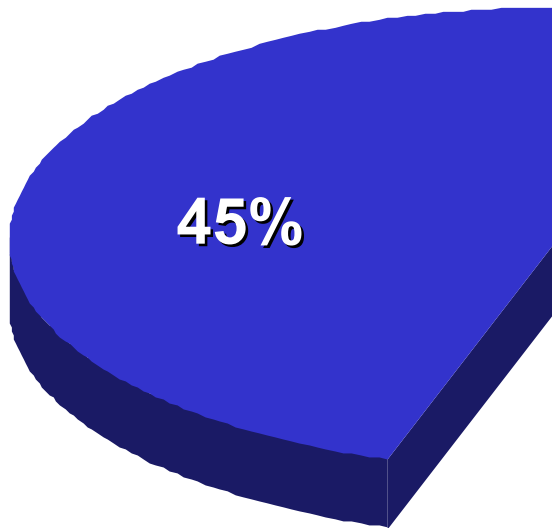
RAND study confirms care problems

The study: 20,000 adults from 12 cities, 30 acute and chronic conditions, 439 quality indicators

The result: only 55 percent of American patients received the care recommended by experts and the most current medical science.

Hardly six sigma

Sub-optimal Care



Recommended Care

Only 55 percent of patients in the world's most expensive health care environment received appropriate care.

RAND (cont'd.)

- Only 45 percent of those presenting with heart attacks received beta-blockers.
- Only 24 percent of diabetics received three or more glycosylated hemoglobin tests within a two-year period.
- “The deficits we have identified in adherence to recommended processes for basic care pose serious threats to the health of the American public.” – RAND

Diabetes is the number one cause of blindness, kidney failure, amputations, and the highest co-morbidity factor for death from heart disease.

Less than half of American diabetics receive appropriate care.

America has no peer when it comes to high tech care.

But when more than half of all diabetics receive inadequate care, that points to a massive failure of health care policy, health care strategy, and health care delivery.

We are experiencing a massive, expensive and entirely unnecessary failure of care delivery.

Why does our system fail so many people and waste so much money?

The economics are obvious – we pay care providers for incidents of care – not for creating, maintaining or restoring health.

The economic incentives are clear:

There are more than 8,000 billing codes for procedures. Not one billing code for a cure.

– *Strong Medicine*

Care delivery is organized around its reward system –
not around patient health.

But economics are not the issue we need to understand today – today we need to understand mechanics.

Economics   Mechanics

In every other area of the economy, the mechanical processes of production are studied and constantly improved with the goal of improving outcomes and reducing cost.

Example: Best Buy

Four years ago, the company Best Buy sold a \$700 basic DVD player. Today, they sell a \$40 DVD player (with better features).

How did that happen?

In industry, outcomes are measured. In the production process, wobbly parts are identified and fixed.

In health care, outcomes are seldom measured and hugely wobbly parts are entirely ignored.

What are those hugely wobbly parts for health care?

Five are glaringly obvious.

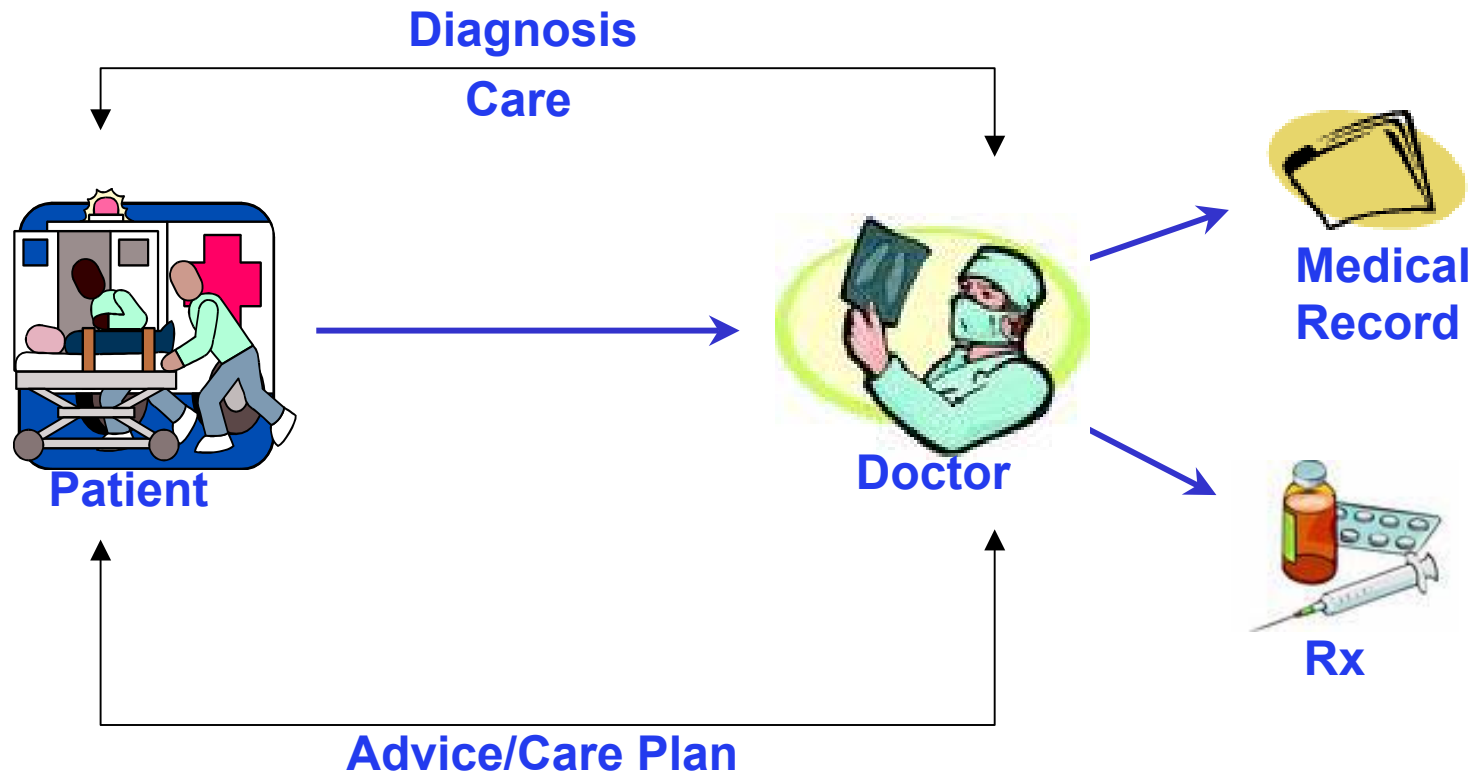
Wobbly part #1: The medical record

Paper medical records are:

- inadequate
- inaccessible
- often illegible
- sometimes inaccurate
- invariably inert

If you have five doctors, you probably have five separate medical records.

Health care is an information-dependent profession
with crippled access to information.





Patient



Doctor 1



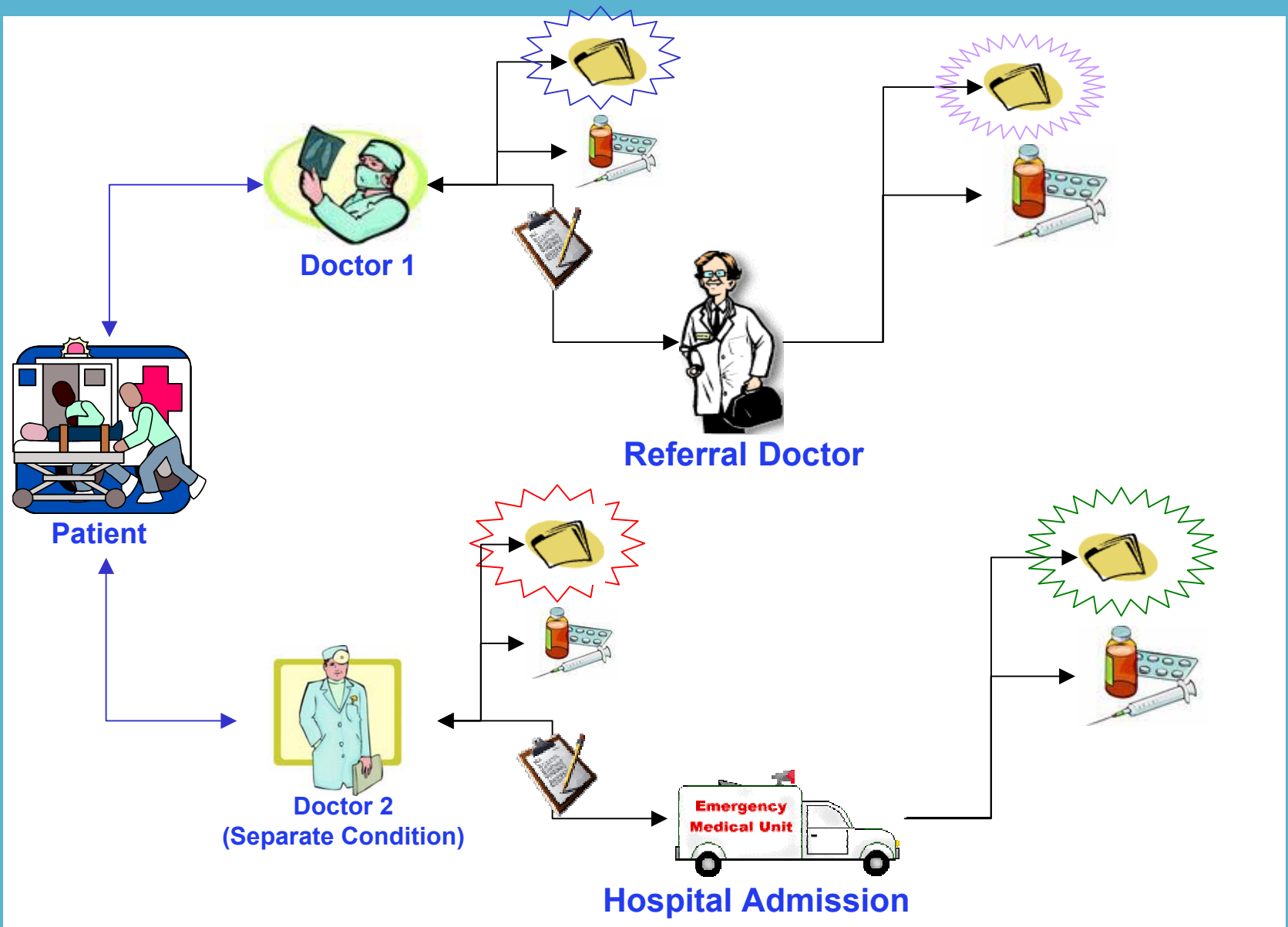
**Doctor 2
(Separate Condition)**



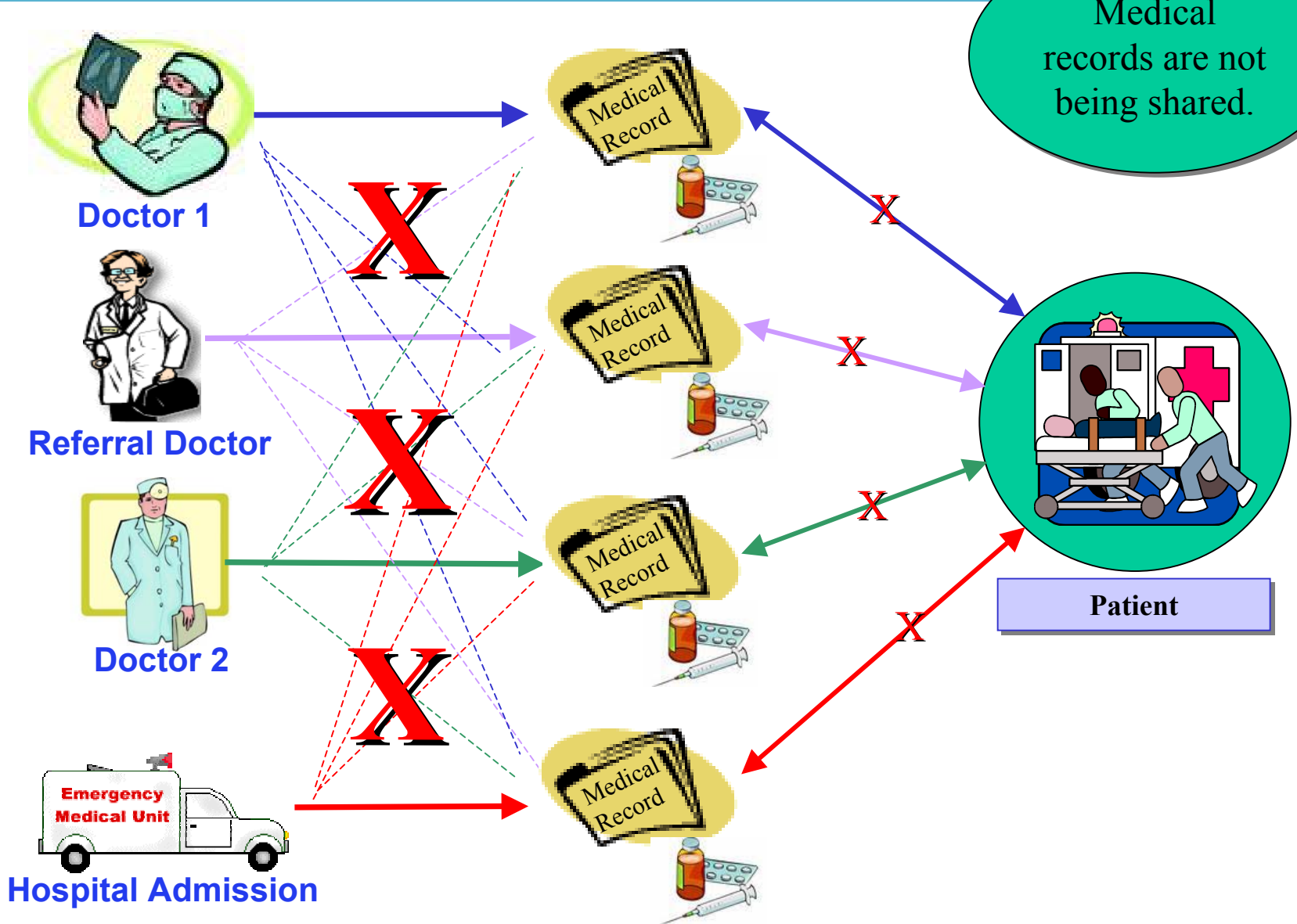
Referral



Hospital Admission



Medical records are not being shared.



No feedback loops.

No quality control.

No patient-focused overview.

No information strategy.

No re-engineering of wobbly parts.

Prescriptions and work orders are too often illegible and misread.

It's a miracle (and a testament to a lot of hard-working, dedicated people) that the non-system works as well as it does.

Wobbly Part #2: Inconsistent access to current science

Current medical science is not consistently available to caregivers.

No one can keep up.

Dartmouth Atlas of Health Care, John Wennberg, MD

- Cardiac bypass surgery rates range from 3/1,000 in Albuquerque, NM to more than 11/1,000 in Redding, CA.
- During 1995-1996, the average number of specialist visits by decedents (patients in the last six months of life), ranged from two in Mason City, IA to more than 25 in Miami, FL.
- Average number of days per decedent spent in the hospital ranged from 4.6 in Ogden, UT, to 21.4 in Newark, NJ.
- Half of all decedents experienced an ICU admission in Miami, versus only 14 percent in Sun City, AZ.

30,000 medical journals.

Five-year lead time from proven new science to 50 percent usage.

– Jim Reinertson, MD

The new RAND study would say that Jim was an optimist.

How can doctors stay informed?

Patients using the Internet are now a common way of updating the medical libraries of individual physicians.

Other than that, providers get updates from occasional seminars, sporadic journal review, non-systemic peer contacts, and vendor sales people. No other industry has so many built-in barriers to the sharing of best practice information and current learning.

Wobbly part issue

No ill will – simply a very badly undesigned non-system.

Doctors need current information about best care in the exam room at the point of care for optimal results.

Wobbly part #3: Patient “compliance”

High levels of patient misunderstanding, or silent refusal to follow medical advice.

Automated prescription refill program

Unintended learning.

20 percent of prescriptions are not picked up – they're left in the pharmacy.

Patients need to be the key decision-maker regarding their own care.

But ... it's hard to figure out what works when we don't know what the patient actually did.

It's also hard for patients to remember how to do five or six things the doctor told them to do in a two-minute summary discussion of their care.

Wobbly part #4: Patient follow-ups

There are few, if any, follow-up care reminders or tracking systems for individual patients or providers.

Veterinary medicine and dentists do those functions well. Human medicine does them very poorly, if at all.

The problem is exacerbated when patients see multiple, unrelated doctors who have no idea of what care regimen a given patient is working on with other doctors.

Missed opportunities abound

Doctors forget to do chronic care follow-up when seeing patients for acute conditions (no reminder system).

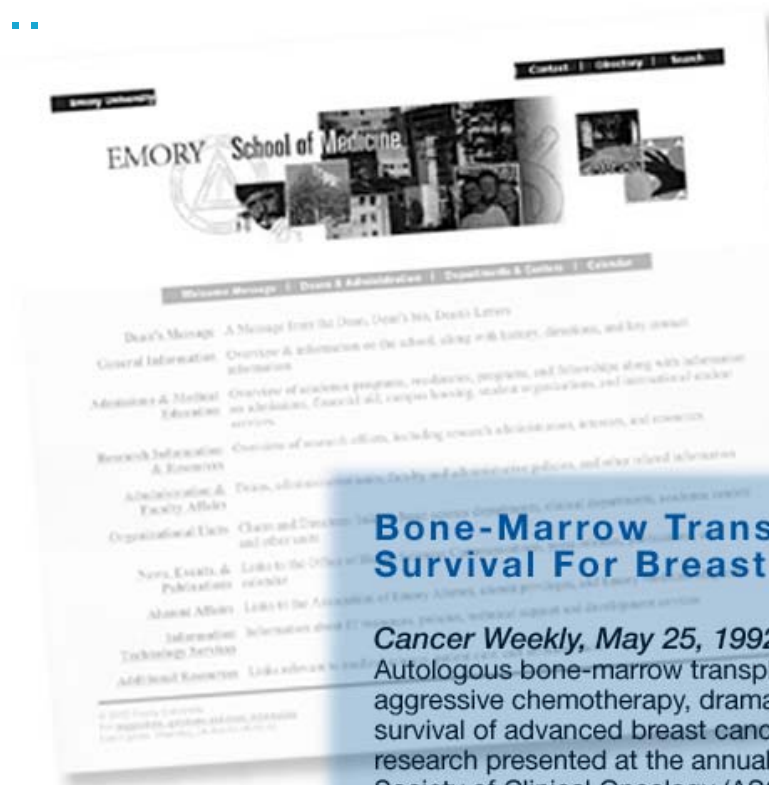
Wobbly part #5: Outcome tracking

No one tracks outcomes of care – we generally do not have good information about what really works.

The \$40 DVD wouldn't exist if no one tracked the quality process that creates each DVD player.

In too many cases, popular medicine is merely “bad” medicine – because no one did the outcomes research to validate the procedure.

Health care headlines: ABMT then...



Bone-Marrow Transplants Increase Survival For Breast Cancer Patients

Cancer Weekly, May 25, 1992

Autologous bone-marrow transplants (ABMT), used to support aggressive chemotherapy, dramatically increase event-free survival of advanced breast cancer patients, according to research presented at the annual meeting of the American Society of Clinical Oncology (ASCO) held May 17-19, 1992, in San Diego, CA.

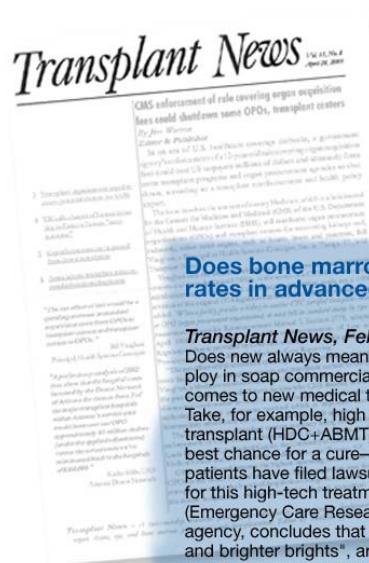
ABMT now...



Bone Marrow Transplant: Psychological Effects of ABMT May Remain Long after Physical Recovery from Treatment

Blood Weekly, Jan. 24, 2002

Despite achieving a remission after treatment with autologous blood and bone marrow transplantation (ABMT), the patients in a recent study continued to experience illness intrusiveness that compromised their subjective well-being, according to an article published in the December 15, 2001, issue of *Cancer* (Schimmer AD, Elliott ME, Abbey SE. Illness intrusiveness among survivors of autologous blood and bone marrow transplantation).



Does bone marrow transplant increase survival rates in advanced breast cancer? New study says no

Transplant News, Feb. 29, 1996

Does new always mean improved? Consumers may scoff at this time-worn ploy in soap commercials, but they tend to be more credulous when it comes to new medical technologies, particularly those labeled "lifesaving". Take, for example, high dose chemotherapy plus autologous bone marrow transplant (HDC+ABMT) for advanced breast cancer. Touted as the last best chance for a cure—or, at the very least, added years of life, scores of patients have filed lawsuits against insurance companies refusing to pay for this high-tech treatment. However, a report issued this month by ECRI (Emergency Care Research Institute), an independent technology assessment agency, concludes that the claims for HDC+ABMT, like ads for "whiter whites and brighter brights", are simply a lot of hype.

Health care headlines: HRT then...



Hormone Replacement Can Treat Distress of Menopause

Chicago Tribune, July 22, 1988

This is a terrible time of life for me. What happens to women at menopause?

A-Menopause is a time of many changes in a woman's body: psychological and physical. It usually lasts several years, so the changes may occur slowly.

Changes in life circumstances may coincide with menopause, so it may be difficult to determine what causes what. Children grow up and move away, parents die, women and their spouses retire, and all the changes that go along with growing older usually occur during menopause.

The physical changes of menopause are many. The ovaries slow their functioning and eventually stop producing estrogen. The lack of estrogen creates the "hot flashes" common to menopause, as well as drying of the vaginal tissue, which makes sexual intercourse uncomfortable. Women are usually protected from coronary artery disease while they are producing estrogen, but menopause robs them of this. Estrogen also protects bones from becoming brittle; consequently osteoporosis affects 25 percent to 50 percent of women at menopause.

Women vary greatly in physical response to menopause. Some merely stop menstruating, while others have disabling symptoms. Most women report that they fall between those extremes. Many complain of anxiety, depression, nervousness, difficulty sleeping and headaches.

The distress of menopause can be treated safely with hormone replacement. In particular, hormones can relieve hot flashes and vaginal dryness while preventing osteoporosis. Concern that hormonal replacement can increase a woman's risk for cancer is largely unfounded.

HRT now...



First Year of Hormone Treatment Is Found to Raise Risk of Heart Attack

New York Times, Aug. 7, 2003

Hormone therapy nearly doubles a woman's risk of having a heart attack during her first year of treatment, according to a new report, lending more weight to the idea that its use should be limited to healthy middle-age women seeking temporary relief from the symptoms of menopause.

HRT now (cont'd.)...



Hormone Use's Link to Cancer Risk Reinforced

Washington Post, Aug. 8, 2003

Women who take hormones after menopause face a greater risk of breast cancer than had been thought, and are at risk regardless of which formulation they use, according to the largest study to examine the link.

The majority of procedures done in some medical specialties do not have a validated database demonstrating their effectiveness and value.

In the absence of data, decisions are made based on professional judgment.

Professional judgment wouldn't create a \$40 DVD player.

So what is the answer?

The answer is mechanical

An automated, computerized, all-inclusive electronic medical record that includes medical best practice protocols, interactive programming, and patient-friendly explanations, clear communications, and standardized, automatic reminder systems.

A system that tracks results. A system that instantly can be changed as science improves.

Each of the wobbly parts that damages health care outcomes is fixable – but only with a dedicated system explicitly designed to fix each problem.

What happens when computers are used to make care more accessible and consistent?

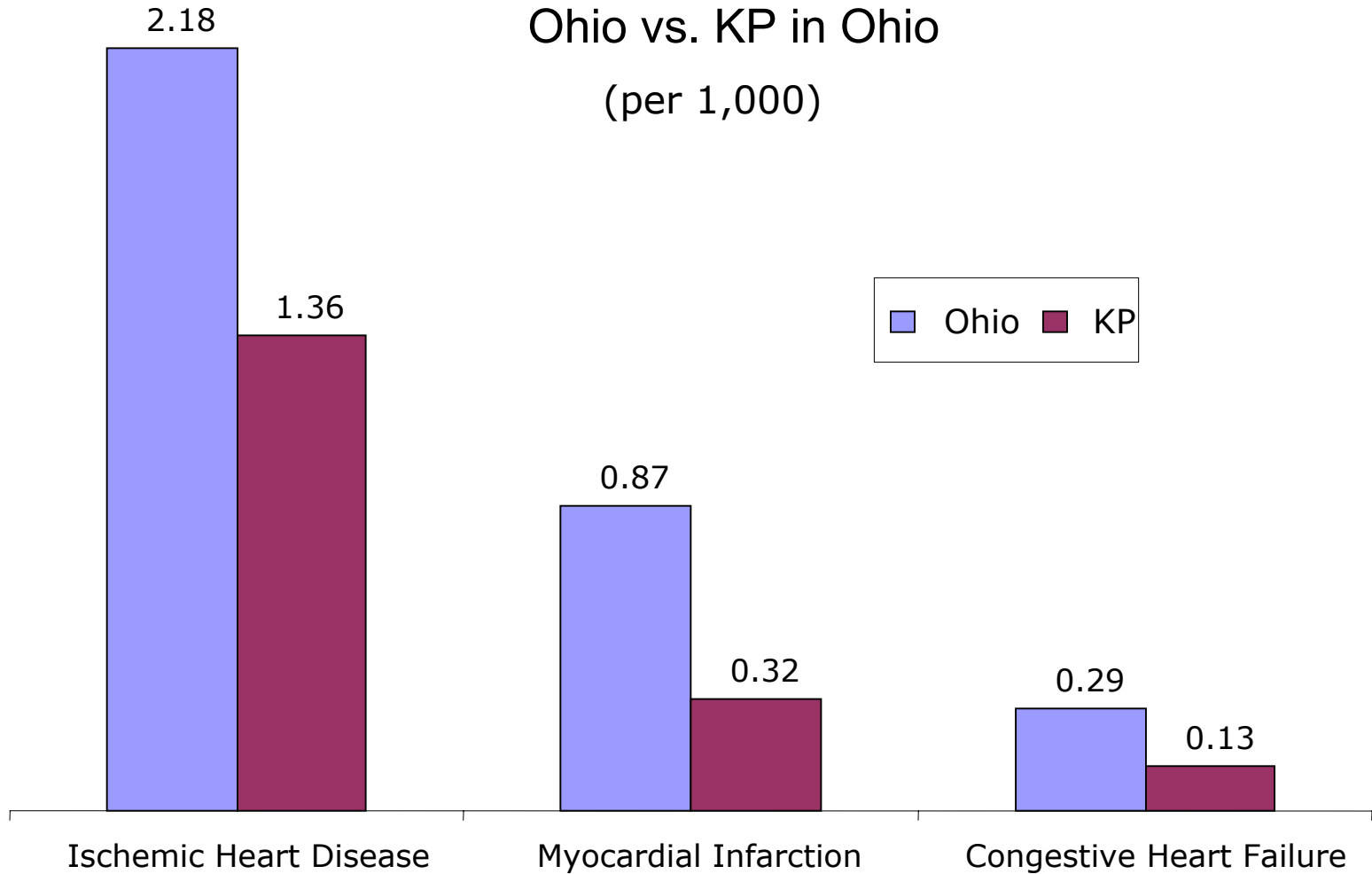
Pilot results (why we believe in computer-assisted care and care re-engineering).

Pilot outcomes

When computer reports were used to remind each doctor exactly what care each heart patient needed in Ohio, the death rate from all three major forms of heart disease dropped to less than half the state average.

Death rates from heart disease

Ohio vs. KP in Ohio
(per 1,000)



Other similar results:

What happens when an AMR is attached to a pharmacy review program in Colorado to monitor and track patients on anti-coagulation therapy?

A 79 percent reduction in bleeding complications.

Southern California – Computer tracking of follow-up care for end-stage renal disease patients.

Result: a 31 percent reduction in the death rate from end-stage renal disease.

– Department of Health and Human Services Medicare Demonstration Project

Computer-assisted care has nearly eliminated new cases of blindness in diabetics in Northern California. Diabetes is the number one cause of blindness in the U.S.

The results for asthmatics, diabetics, heart disease patients, etc. have been dramatic in every pilot site when the computer is used to assist the physician in delivering consistent, science-based care.

For America –

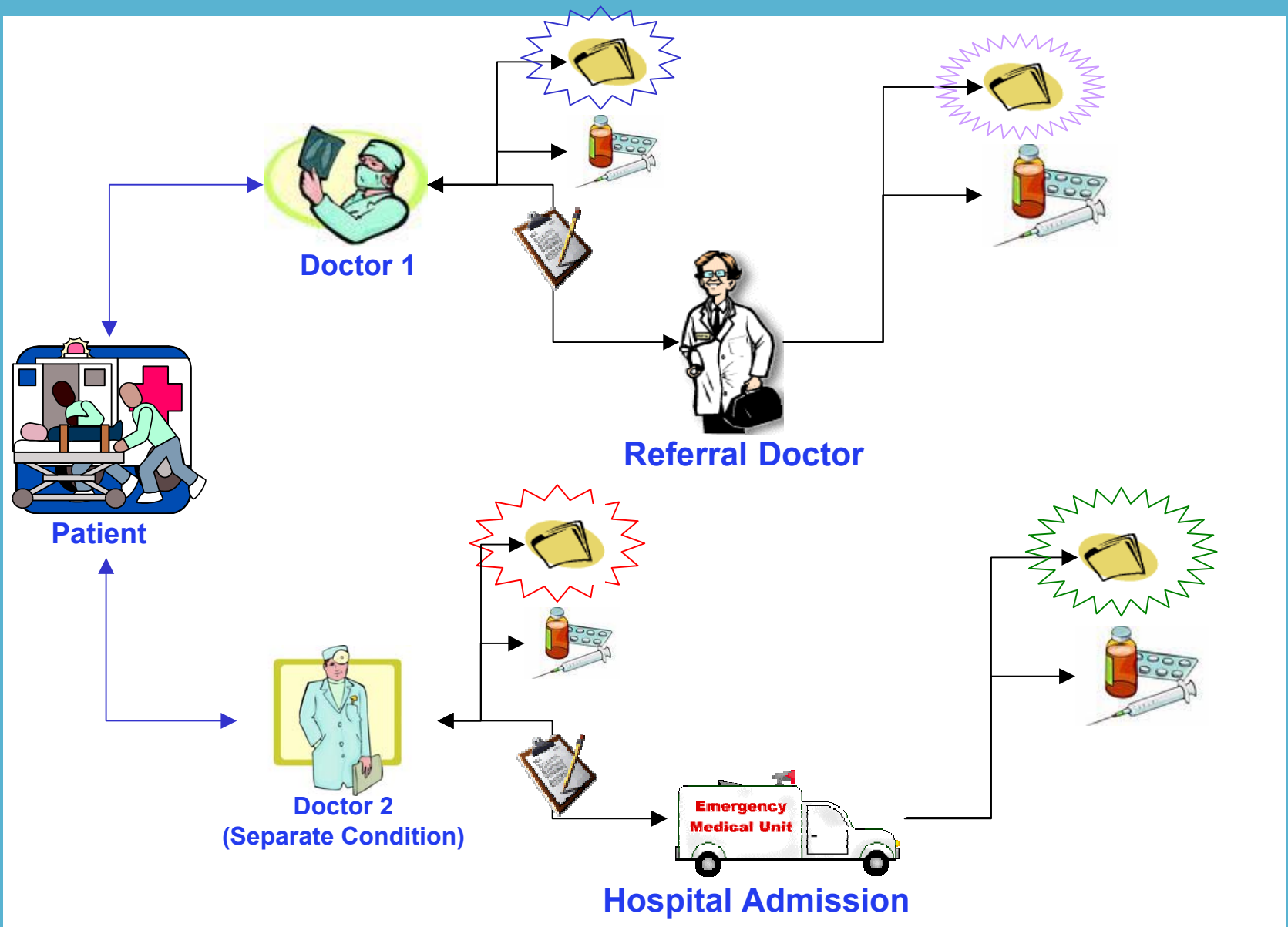
It's time to re-engineer care.

It's time to use the computer to assist caregivers and significantly improve outcomes.

No other approach has the potential to achieve remotely similar results.

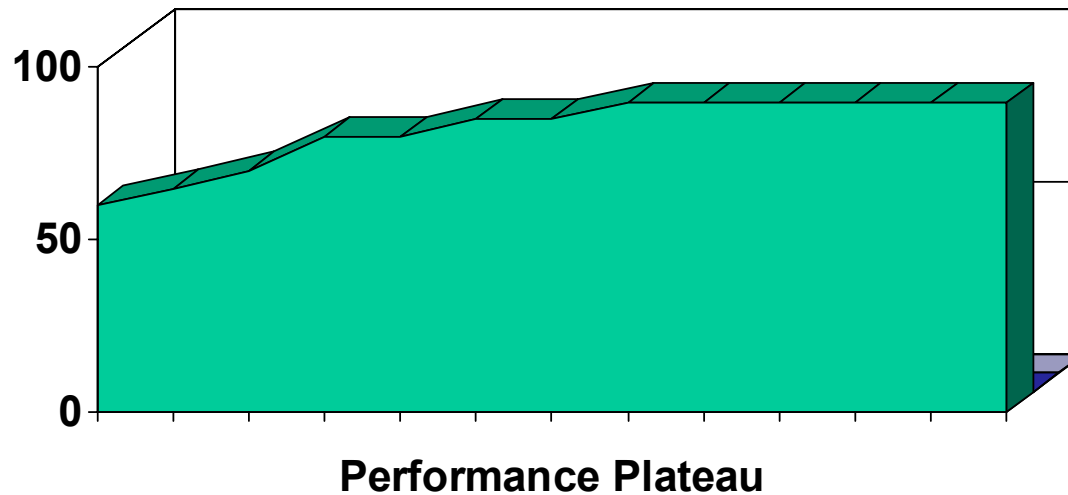
Every other approach hits the “wobbly part” quality barrier.

“Patient directed” care certainly does not deal with the issues that cause these problems. But “patient involved” care can make a big difference. It takes a system to support that involvement.



Electronic physician support

When you understand the importance of this tool, then its easy to finally explain the NCQA “plateau phenomenon.”



It won't be cheap or easy to fully automate these key aspects of care.

Kaiser Permanente is investing nearly \$2 billion to put these systems in place in the next three years.

Just about every other world class, multi-specialty group practice in America is heading down a similar path, albeit with “patients,” not “members,” as their key database.

Market forces will drive quality

When the results are all in and improved health is the obvious outcome, the rest of health care will be forced to follow by using computers and physician support tools.

How? Some will follow our lead. For most caregivers, “virtual” systems will emerge – anchored by hospitals, hub clinics, health plans, systems vendors, and maybe even government agencies.

Health care is on the verge of a whole new level of accountability and performance.

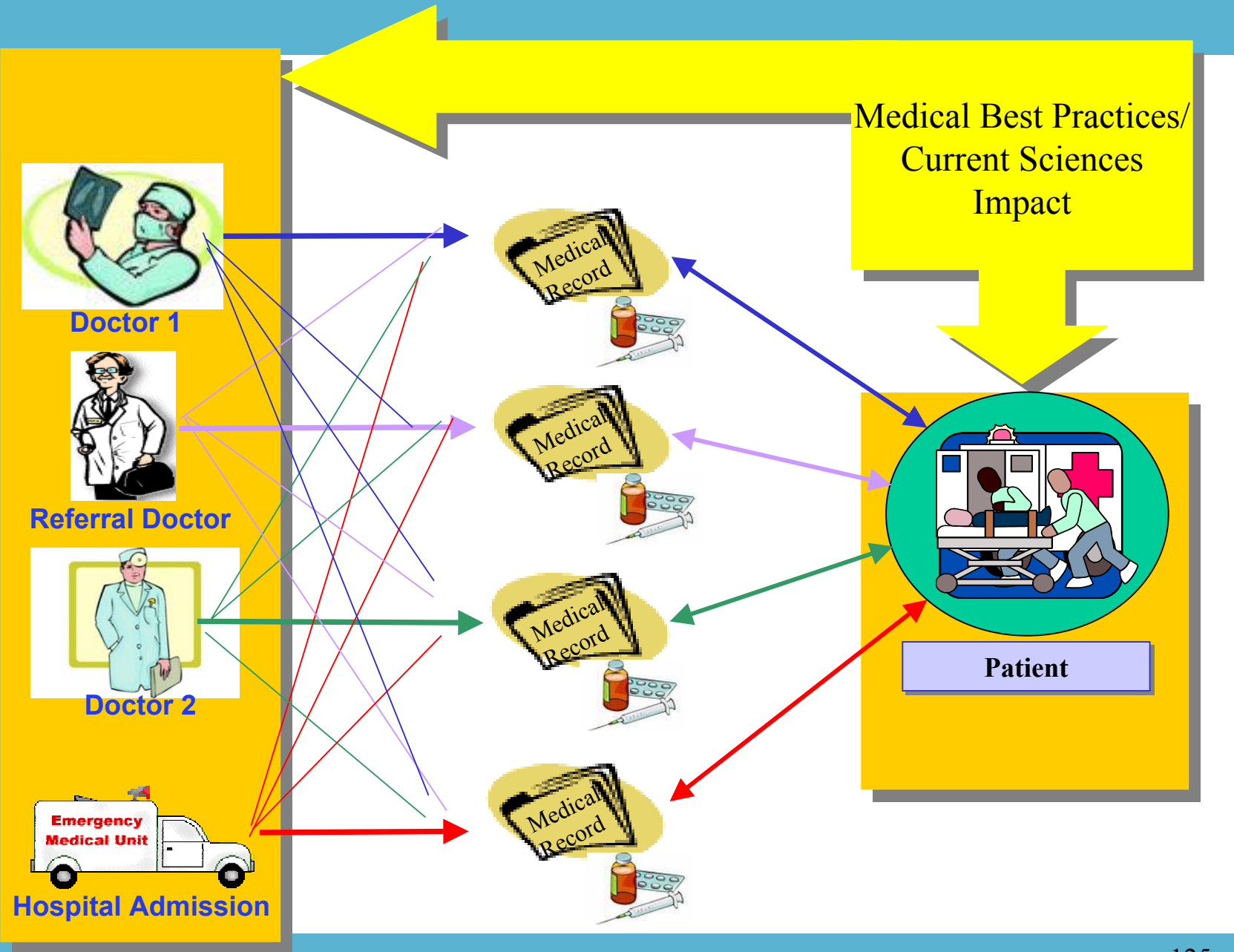
Rewards for actual outcomes will finally be possible
(because true outcomes will finally be measurable).

Practical focus

The economics will trail the mechanics – but both will need to be there in order to optimize care, cost and value.

Without this tool, the wobbly parts of health care will continue to produce the results documented by Dr. Wennberg, the IOM and RAND.

It's time to re-engineer care, with the computer as the key enabler.



The opportunities are obvious



The results are clear

