Ethical Insurance Advising

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Introduction and Overview

Our healthcare system falls somewhere between a 'mess' ¹ and 'insane' ² costing \$13,000+ per person per year, the highest in the world, but putting us about last internationally among the 17 richest countries in life expectancy and infant mortality.

This creates ethical problems for brokers. How should you respond ethically to a system that works so badly?

- Should you focus only on reducing client spending and argue 'I address a big part of the problem. That's good enough for one person.'
- Should you educate your clients about how poorly the system works and argue 'I
 provide a good system overview plus I design specific plans. That's good enough
 for one person.'
- Should you also intervene at a more granular level and provide treatment advice and argue 'I need to do this because otherwise people will often pay too much for unnecessary or inappropriate treatments.'
- Or should you follow some other program?

Our ethical point of departure

In this course, we will adopt the classic utilitarian definition of ethics as the greatest good for the greatest number of people. This comes from the English utilitarian school of philosophy led by John Stuart Mill and Jeremy Bentham.

Utilitarians call for maximizing the overall amount of wellbeing in a community. Actions are ethical if they generate more wellbeing and unethical if they generate less or the counterpart, more suffering and pain.

Utilitarian ethics is particularly poignant in health insurance. The entire community (more or less) pays into the system via insurance premiums. The government, another word for 'the overall community', funds or subsidizes healthcare in several ways including:

- Tax deductible commercial health insurance premiums.
- Direct payment of medical care for Medicare, Medicaid and some other patients.
 The money for those payments comes from taxes, paid by the entire community, and
- Favorable real estate tax treatment of hospitals.

¹ See Richmond and Fein, The Healthcare Mess, 2005. Both gentlemen were Harvard Medical School professors, with Richmond the US Surgeon General under President Carter.

² Regina Herzlinger of Harvard Business School, speaking at the Massachusetts Association of Health Plans convention in Boston, December 2014. My notes are unclear if she said 'crazy' or 'insane'. Apologies for any error here.

The utilitarian ethical lens thus places particular ethical responsibilities on system participants including brokers. Ethical broker practices according to this viewpoint, can include:

- Maximizing the amount of medical benefit received from health insurance policies,
- Minimizing the amount of medical harm produced by or associated with those policies, and
- Minimizing the cost of those policies.

Unethical practices are the opposite, including things like

- Ignoring the amount of medical benefit received by policy holders,
- Ignoring the amount of medical harm received by policy holders,
- Failing to implement programs to maximize the amount of benefit received by policy holders and minimize harm.

In this text, we'll provide education first and ethical suggestions later. We'll start by explaining why our healthcare system works as it does, a brief history lesson focused on the concept of vertical integration. Vertical integration means housing finance and medical service provision in the same corporate entity. We'll argue that vertically integrated systems are the most ethical form of private healthcare system according to the Utilitarian definition above.

With that as background, we'll discuss some fundamental healthcare system problems that flow from our lack of vertical integration. We'll then, in Chapter 3, suggest how a broker can work ethically within this system. We'll propose a novel approach to client education as an example of high quality, ethical broker practices.

This course will focus primarily on ethical problems inherent in our commercial health insurance system. A future course, tentatively entitled 'Ethical Insurance Advising II – Public Insurance' will perform the same service for our public health insurance markets.

Nothing in this text is not intended as, nor should be construed as, medical advice.

The author is not qualified or licensed to provide medical advice.

Chapter 2: How We Got Here The Origins of our Ethical Problem

Our healthcare system exists, I would argue, for two main reasons, the less important of which is to get people healthy. Instead, the primary reason it exists is to pay participants in it – doctors, nurses, hospital administrators, insurance professionals, brokers, tort attorneys, and the like. American healthcare is fundamentally a jobs program, not a medical care one. This, according to our Utilitarian friends, is unethical; it takes resources / money from the many and gives to / benefits the few. It does not, unfortunately, produce the greatest good for the greatest number of people / patients / policy holders / payers.

The prima facie evidence here: we're not terribly healthy despite paying more for medical care than any country in the world. We don't live as long as other populations, we have higher infant mortality rates than most developed countries, higher disease morbidity rates, and a utilization waste factor north of 20%.³ That includes services and processes that are either harmful, do not deliver benefits, and / or excess costs that could be avoided by replacing services or products with cheaper alternatives that have identical or better benefits.

This situation simply would not exist if our system was primarily designed to get people healthy efficiently and effectively. We have too many smart and caring people working in healthcare. A country that can put a man on the moon, as they say, can fix these problems if it wants to.

That we haven't fixed them and haven't improved on them enough over the past decades, results from the primary reason our healthcare system exists: to pay participants. American healthcare is more a jobs program than a medical improvement one and it actually performs this function remarkably well.

Doctors get paid to perform their tasks, as do hospitals, X-ray technicians and MRI operators, orthopedists and chiropractors, psychiatrists and podiatrists, nutritionists and pharmacists, acupuncturists, art therapists and even lowly continuing education teachers, all extremely busy, most fighting with carriers and Medicare over codes and payments, none tying patient range-of-motion increases, life expectancy increases, obesity rates, diabetes rates, infant mortality rates, or pain reduction rates to their compensation.

Financiers loan money for medical equipment and hospital construction, lawyers draw up financing and leasing contracts and sue when doctors screw up and sometimes even

³ Almost 25% of Healthcare Spending is Considered Wasteful, Peter G. Peterson Foundation, April 3, 2023 https://www.pgpf.org/blog/2023/04/almost-25-percent-of-healthcare-spending-is-considered-wasteful-heres-

why#:~:text=Approximately%2025%20percent%20of%20healthcare,interventions%20that%20address%20such%20waste.

when they don't. For-profit insurance carriers provide confusing policies that generated over \$41 billion in 2022 profits⁴, with the highest gross profits in the Medicare Advantage arena.⁵ Brokers shop for policies and benefits administrators explain them to employees who generally don't understand them. Patient advocates help people navigate our system that promotes quantity over quality while aiming to reduce utilization.

Pharmaceutical companies earn money making the drugs that lawyers sue over and advertising companies develop ads for those drugs that underwrite network TV news and sports, but few of us know how well those drugs work or even if they work at all. See, for example, the 2023 studies on Vitamin D testing and supplements to prevent bone fractures and over-the-counter decongestants, both billion-dollar industries, neither of which generated patient benefit. ⁶ Both case studies appear in Chapter 2 of this text.

Compliance experts comply with mind-numbing paperwork and regulations designed to avoid the moral hazard related systemic abuse that runs rampant throughout our system. Software engineers write the codes that track all this stuff, administrators administer, managers manage, practitioners practice, consultants consult and so on and so forth for about \$4.2 trillion annually, double or triple what other countries pay for better results.

'Necessary' care in America *always* means that someone gets paid for it and only *sometimes* that patients benefit from it.

As evidence of the jobs program nature of our healthcare system, consider these statistics provided by Jonathan Bush, founder and former CEO of Athenahealth, a huge health information company: ⁷

In 1990 there were 10 hospital employees per physician

⁴ https://www.penncapital-star.com/uncategorized/americans-suffer-when-health-insurers-place-profits-over-

 $[\]underline{people/\#:\sim:text=In\%202022\%2C\%20UnitedHealth\%20Group\%20made,billion\%20of\%20profits\%20in\%202022.}$

⁵ Medicare Advantage Insurers Report Much Higher Gross Margins Per Enrollee Than Insurers in Other Markets, Kaiser Family Foundation news release https://www.kff.org/medicare/press-release/medicare-advantage-insurers-report-much-higher-gross-margins-per-enrollee-than-insurers-in-other-markets/

⁶ Szabo, Selling American on Vitamin D, Kaiser Health News, August 20, 2018, https://www.nbcnews.com/health/health-news/selling-america-vitamin-d-reaping-profits-n902276 and Berkeley Lovelace Jr, FDA Panel Says Common Over-The-Counter Decongestant Doesn't Work, NBC News, September 12, 2023

⁷ Bush, Where Does It Hurt, page 91. Jonathan is a 'Bush': his uncle and first cousin were presidents of the US.

 Twenty-five years later, <u>after</u> a hospital consolidation boom justified by greater hospital efficiency and <u>after</u> the computer revolution increased office efficiency throughout the developed world and <u>after</u> outsourcing took millions of jobs overseas, there were 16 hospital employees per physician, half administrators.

All these people working in our healthcare jobs program share one common perception: they're all overworked and think we need more of them for the system to work efficiently and create value.

If you don't believe me, just ask anyone in the industry. You'll get the same answer from brokers and lawyers, chiropractors and psychologists, primary care physicians and specialists, hospital bookkeepers and patient advocates: 'I provide really great services that save the system a ton of money. We need more people like me, doing what I do' which is another way of saving 'pay other people less because they provide less value than I do' unless, of course, we want to hire more of *everyone* which is probably the real goal of healthcare anyway.

How can everyone save the system money, given that healthcare inflation already outpaces gdp growth every year and we pay twice as much as other countries for poorer outcomes?

The answer is that our healthcare system today exists – and is primarily structured - to hire and pay people and all these various groups jockey and lobby for compensation to perform more of their tasks rather than competing over patient outcomes. This is a far cry from a healthcare system focused on getting as many people healthy as possible, and as guickly and inexpensively.

An ethical, reasonable, rational healthcare system would compensate participants more for getting patients healthier more quickly and less expensively. Our system instead compensates people for lobbying better, negotiating harder and intervening more even when participants should know better.⁸

This is the healthcare mess within which brokers are supposed to act ethically. Good luck!

Let's switch gears now and learn how our system developed so we can better understand why it works today as it does.

How our healthcare system developed and why it presents today's ethical imperative

⁸ US hospitals performed about 229,000 unnecessary coronary stent procedures between 2019 and 2021. That's about 1 every 7 minutes. https://lownhospitalsindex.org/avoiding-coronary-stent-overuse/

Our healthcare financing system evolved from a vertically integrated 'financing + care provision' system to a non-vertically integrated one. This theme runs throughout today's course.

 Vertical integration means that medical care and medical financing are the same entity, with physicians on salary. Both the financing arm and medical care arm work together to generate the best patient outcomes at the lowest cost. This is the basic concept of a Managed Care Organization or a Health Maintenance Organization (HMO).

'Managed competition' is competition among vertically integrated healthcare providers. Those generating the best outcomes at the lowest costs will gain customers; those operating at higher costs and generating poorer outcomes will lose. ⁹

Vertically integrated healthcare entities compete with each other on <u>value</u>: outcomes per dollar spent. This incentivizes Managed Care Organizations to improve patient outcomes (life expectancy, diabetes control, post-surgical functionality and similar) without unduly raising prices. It <u>disincentivizes Managed Care Organizations from providing excessive</u>, unnecessary or low quality care, or raising prices too aggressively. Vertically integrated entities are, therefore, more ethically structured than the alternatives.

The better a Managed Care Organization improves patient outcomes without raising prices, the more value it creates, the greater the company's market share and the bigger its business. This fits the Utilitarian view of an ethical healthcare system; it provides the greatest good for the greatest number. Good ethics, from this point of view, equals good business. So goes the theory at least.

 A 'non-vertically integrated system' has separate companies handling financing and medical care. Today we call financing companies 'insurance carriers' and medical care provision companies like hospitals and physician groups 'providers.'

In this non-vertically integrated system, financiers want to pay service providers less and service providers want to bill more. The relationship between the two is 'war' according to Atul Gawande, professor at Harvard Medical School and staff writer for the New Yorker, 'every step of the way'.¹⁰

⁹ Alain Enthoven of Stanford University, perhaps our greatest managed care theorist and proponent, has written widely about this which is somewhat outside the scope of this particular chapter. See his seminal article The History and Principles of Managed Competition for more. http://elsa.berkeley.edu/pub/users/webfac/held/157 VC2.pdf

¹⁰ See Gawande's second book 'Better', chapter entitled Piecework

In a non-vertically integrated system, carriers and hospitals argue over payment amounts and formulas. A very different focus from the vertically integrated model above where the entity's singular goal is outstanding patient outcomes at a reasonable price.

Non-vertically integrated systems, as I suggested above, are designed to generate jobs, incomes, and benefits for participants in it, like doctors, financiers and all the rest.

The more our healthcare system resembles a vertically integrated one, the more ethical it is because it serves the medical needs of patients, creating the greatest health good for the greatest number of patients. The less vertically integrated it is, the less ethical it is because it is designed to serve the needs of relatively few participants.

Ethical brokers, according to the Utilitarians, should help clients emulate the benefits of a vertically integrated system despite the current structure of our healthcare system. This is a heavy lift. We'll address some ways to do this in Chapter 3.

But first, we'll discuss how our healthcare system developed around this vertically / non-vertically integrated idea below. Then, in Chapter 2, we'll discuss various problems that arise from our systemic development.

How Commercial Healthcare Started

As commonly accepted among health insurance historians, commercial health insurance started in Dallas around 1929 as a reaction to the stock market crash and financial meltdown.¹¹ Baylor University Hospital in Dallas faced a cash crunch and designed a creative solution to pay its bills.

Prior to the stock market cash, hospitals raised funds in two ways. First, they had customers who paid for services rendered - a fairly modest percentage of the population because most people didn't have a lot of money. Second, the community chest, the charitable organizations - the wealthy would donate to the hospital because it was a good place to donate your extra money. Charity made you feel good and was good for the community.

But after the 1929 stock market crash, unemployment reduced the number of patients able to pay, the wealthy didn't have as much money to donate, and the hospital faced a difficult financial landscape. So, Baylor University Hospital made a deal with the Dallas School System. They said, "School system, you always have money; you raise money from taxes. Pay us \$.50 per employee per month and when they get sick, they can come to us and we'll take care of them." Commercial health insurance arrived.

A few comments about this.

¹¹ This suggestion comes from Richmond and Fein, The Healthcare Mess, page 30.

First, it's a nice deal. It's a nice deal for the hospital because they stay in business. They don't have to worry about going out of business. They didn't have to worry about turning people away as long as they got the numbers right, which apparently they did at \$.50 per employee per month. The school system payments protected the hospital's cash flow so the hospital stayed in business.

Second, this was very efficient. The hospital signed one contract with one employer group and received back enough money to stay in business. That was a pretty good incentive to look for other large employer groups.

Third, there was no prevention or provider choice, but theoretically the teachers and other employees of the school system were happy because they got medical care essentially for free.

Fourth, this was for hospitalization only; no outpatient or physician office coverage.

Fifth, community rating. The Dallas School System paid \$.50 per person per month, regardless of individual medical status. No medical underwriting.

Sixth, there were no quality controls, no outcome-based incentives, no holdbacks for poor hospital performance. Health insurance began simply to save the financial health of the hospital.

This was a vertically integrated system, almost textbook variety. And it exhibited the classic flaw of vertically integrated healthcare systems: lack of consumer choice. As initially developed with Baylor University Hospital, the Dallas school system employees could only go to one hospital. This has advantages and disadvantages.

Advantages:

- 1. Lower Costs
- 2. Reasonable medical care from a small number of in-network providers

Disadvantage:

1. Little provider choice as few hospitals are 'in-network'

The Baylor Hospital / Dallas School System deal worked so well that other hospitals copied it. Different hospitals looked for different large employers, offering the same kind of deal. Large manufacturers, the Dallas Morning News, and others. What problem begins to arise?

The Choice Problem

Consumers - school system employees or manufacturing workers, for example - wanted to choose among various hospitals. 'What do I know about Baylor University Hospital? I only know one thing. I know someone who went there and didn't get good care

(whatever 'didn't get good care' means), so I want to go somewhere else.' Someone always knows of someone else who had a negative experience there. So you want to go somewhere else - consumers want choice.

A different way to understand our demand for choice in healthcare: we don't *really* trust our own doctor or, indeed, the overall medical system. We somehow think that we – patients – have better medical care insights than the various trained professionals in our network. This uninformed demand for choice has plagued our system since inception.

The way out of this problem, according to Michael Porter and Elizabeth Olmsted Teisberg in their massive tome Redefining Health Care, is for the government to require results reporting, things like 30-day readmission rates for coronary procedures, 3-6-and-9 month follow-up data on orthopedic patient range of motion and pain, infant and maternal mortality rates and similar. As Porter and Teisberg put it back in 2006: *Mandatory measurement and reporting of results is perhaps the single most important step in reforming the healthcare system.*¹²

We still haven't made sufficient progress along these lines. That, it seems to me, is a fertile arena for ethical broker interventions. Indeed, that will be our focus in Chapter 3, below.

Remember vertical integration, where finance and service provision are the same company? Once you introduce choice, then you have one group handling finance and another handling service provision. You have a split and you lose vertical integration.

That split happened shortly after the Baylor – Dallas School System deal. A clever entrepreneurial company offered to provide financing for lots of Dallas hospitals. 'Dallas teachers' they might have said, 'you can sign up with Baylor University Hospital only, or, for just a little more money, sign up with us and we'll give you the choice of many hospitals in Dallas. We contract with lots of hospitals. We have a large network.'

These new companies competed with vertically integrated hospitals, like Baylor University Hospital and the Dallas School System.

The insurance entrepreneurs developed a couple of clever ideas in the 1930s. First, from a marketing point of view, they offered this very attractive provider choice option.

Second, they began searching for the healthiest subscribers. If they could find the healthiest people, they could offer lower priced policies and gain a competitive edge vs. their vertically integrated competitors signing up large employers at a fixed price per person.

Underwriting vs. Community Rating

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¹² Porter and Teisberg, Redefining Health Care page 7

The entrepreneurs – we'll call them 'insurance carriers' - figured that they would underwrite better than the competition so people would join them because their premiums would be a little bit lower. The community rating folks faced higher premiums because they took all employees. In a very real sense, underwriting is a form of rationing: people unable to pass the underwriting standard don't get covered. Or they pay a lot more.

Underwriting serves the economic interests of the carriers. It doesn't improve healthcare outcomes. It doesn't improve the healthcare system. It doesn't differentiate medical quality. It doesn't create patient value. It only makes one carrier lower cost than another carrier by having sick people pay more. It's a zero—sum exercise — healthy pay less, sick pay more - since total community medical costs remain the same.

Our private healthcare financing system had little to do with getting people healthy or creating value. That was not its intention. It was designed to protect physician and hospital income, the original Baylor idea. Then carriers came along to make a profit from consumer demand for choice. The demand for choice led to the Split.

The Split and the Provider Payment Problem

Once you split finance from service provision, you have a wider consumer choice and you have to figure out how to pay doctors and hospitals. We're still, today, trying to get this one right.

The original and still most popular payment mechanism is fee-for-service. The doctor gets paid \$100 for treating each broken arm and \$350 for each rotator cuff surgery, or whatever.

As soon as you split finance and service provision, service providers have an incentive to do more. The more they do, the more they earn.

The insurance carrier, on the other hand, wants to limit the number of treatments only to those necessary to control costs. They ask service providers if they absolutely need to do that procedure. Insurers and providers fight all the time. It's a fight between

- provider clinical judgment, influenced, perhaps, at least psychologically, by the fee-for-service payment formula, and
- carrier financial judgment, influenced, perhaps, at least psychologically, by the same fee-for-service formula. Insurers don't really trust provider clinical judgment, at least not without discussion and justification.

That's the conflict between healthcare payers and medical service providers.

Fee-for-service / component financing is inflationary and expensive and not designed to improve patient health. It's designed to reward providers, which it did quite well historically. We, in the US, have traditionally performed more procedures / 1000 of population than similar developed countries around the world. Things today like spinal

fusion surgery, hip replacements, knee replacements, coronary bypass surgeries. The Split between finance and service provision led us down this road. It continues to this day.

The Impact of World War II

World War II plays an important role in our story for three main reasons.

First, the soldiers who received health coverage while in the military wanted to continue with it afterward. They saw the advantages of having health coverage. They married and wanted their families to receive coverage also. This created <u>demand</u> for health insurance.

Second, our wartime economy devoted significant resources to medical technology improvements. Perhaps most significant was the introduction of sulfa drugs to combat infections and ultrasound, originally used to determine tank structural integrity after battles. Sulfa drugs helped turn hospitals from infection breeding institutions into patient treatment and improvement centers. Ultrasound ultimately became a routine pregnancy evaluation tool. These and other new technologies improved the quality of medical care, or the *supply*.

Third, the Federal wartime wage and price freezes fostered the development of 'fringe benefits' and the entire benefits industry. That's the financing arm and it's a pretty interesting story.

The government implemented wage and price freezes during the War to avoid domestic economic difficulties and help focus our economy on war production. Employers, in other words, could not raise wages to attract new workers or to reward their best employees. But they could offer 'fringe benefits' such as health insurance. This allowed employers to attract new talent and retain their current employees without raising wages. The concept of 'fringe' meant 'outside the normal compensation' and 'benefits' meant 'advantages of working here'. Employers couldn't simply raise wages, the traditional way of attracting labor, since that was illegal during the war. Fringe benefits were a mechanism to get around the wartime wage freeze.

These 3 factors – increased demand, improved supply, and creative financing - led to a tremendous increase in our insured population. Some coverage data points:

1942: 10 million hospital insurance / health insurance subscribers

1946: 32 million

1951: 77 million¹³ out of a total US population of 150 million.

The health insurance industry arrived, grew and gained political power.

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¹³ Richmond and Fein, The Health Care Mess pages 30 - 38

The Hill Burton Act and an IRS decision strengthens hospitals

Congress, just after World War II, passed the Hill Burton Act to fund hospital expansion. This increased the number of hospital beds in this country by about 40%, from 3.2 per 1000 people to 4.5. It also made hospitals the centerpiece of our medical care system; the travelling doctor who made house calls began to disappear.

Shortly thereafter, in 1953, the IRS decided that fringe benefits were exempt from federal income tax: those became *tax deductible to the employer* but *not income taxable to the employee*. This was essentially a government subsidy for hospital care since that's where most medical care took place. The government stimulated sales of commercial health insurance by subsidizing the price through the tax exemption.

This subsidy for health insurance was so effective that by 1963, 77% of us had hospital coverage, and about 50% had some form of physician coverage.¹⁴

- Employees liked the system because it appeared free to them.
- Carriers liked the system because the government subsidized their product, tax deductible health insurance policies.
- Hospitals loved the system because they received patients and insurance payments – a wonderful recipe for making money.
- Employers objected somewhat to this system, but not terribly strenuously. After all, the government subsidized their health insurance payments, so they felt the pain only partially.

Through this period, roughly 1930 - 1965, healthcare discussions generally focused on insurance coverage, medical technology, hospital capacity and access. Indeed, access issues took center stage in the mid-1960s because of the potential political power of the elderly and the poor, both of which were left out of the employer based financing system.

Medicare and Medicaid Remove Potential Political Threats to Employer Based Insurance

One potential political threat to our employer based health insurance system could have come from the unemployed – that significant percent of the population that was too old to work or unable to find full time work with benefits. This was potentially a very potent political force that could have lobbied in favor of single payer healthcare, universal coverage or similar, like in other countries.

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¹⁴ Enthoven and Fuchs, 'Employment Based Health Insurance: Past, Present and Future' Health Affairs, Nov/Dec 2006

By introducing Medicare and Medicaid in the 1960s, this political force went away. Elderly folks were happy. They didn't demand or need universal coverage because they had Medicare. Ditto the poor with Medicaid. No large, identifiable voting block favored a single payer, universal healthcare system post-Medicare and Medicaid. M & M took that potential voting block off the table.

Here is an estimate of the population size that these two entitlement programs satisfied. I'll use Medicare, because this covers the elderly who vote in particularly high numbers and in particularly important electoral states like Florida.

Medicare Enrollment 1970 – 2020

<u>Year</u>	Number Medicare Enrollees	% of US population
1970	20 million	10%
1980	28 million	12%
1990	34 million	13.5%
2000	39 million	13.8%
2010	47 million	15%
2020	58 million	18%

Medicaid covers about the same population size.

The argument is that Medicare and Medicaid are key supporters of our employer based, commercial health insurance system. They allowed the system to grow and become entrenched nationally in the second half of the last century.

Post passage of Medicare and Medicaid, i.e. by the late 1960s, healthcare costs and cost increases became an issue. Indeed, in 1969 Robert Finch, then Secretary of Health, Education and Welfare warned Congress that "the nation is faced with a breakdown in the delivery of health care unless immediate concerted action is taken by government and the private sector". Both costs and the very structure of our healthcare delivery system became a topic of national debate, leading to a reconsideration of vertical integration.

Nixon's HMO Act of 1973

Nixon had to do something to address the rising costs of healthcare, but felt politically wedged-in. He couldn't support a Democratic healthcare plan sponsored by one of his chief rivals, Ted Kennedy. Nor could support a Republican plan sponsored by another political rival, Nelson Rockefeller – especially a plan that potentially harmed the physicians, hospitals and insurance carriers that supported Nixon politically.

He chose, instead, to pursue Health Maintenance Organizations, then conceived as a prepaid healthcare system that would motivate doctors and hospitals to control costs

and keep patients healthy. Many conservative politicians and organizations agreed with the HMO idea because it was flexible, inexpensive, encouraged private investment in profit-making organizations and imposed few mandates or regulations. It sorta, kinda, almost resembled Baylor's original plan with the Dallas School System.

Nixon's plan faced opposition from both the left and right between 1970 – 1973. Kennedy and the Left consistently fought for higher levels of guaranteed benefits, community rating, open enrollment periods and significant Federal grants and loans to help HMOs proliferate. The American Medical Association and the Right wanted only basic levels of guaranteed benefits, less government funding and individual underwriting.

As a result of these competing pressures and Nixon's determination to implement his own plan (i.e. not Kennedy's or Rockefeller's), the HMO Act of 1973 deviated from our ideal vertically integrated model in three main ways:

First, under Nixon's law, HMO meant simply 'prepayment'. Healthcare delivery and healthcare finance were separate functions handled by separate companies. This satisfied independent insurance carriers, physician groups and general hospitals - all parts of Nixon's political base. But it lacked the key integration feature that made real managed care organizations like Kaiser-Permanente so successful.

Why did carriers, physician groups and general hospitals dislike vertical integration? The short answer: they wanted to compete for revenues with each other.

Carriers hoped to dominate the marketplace and dictate economic terms to providers. The American Medical Association wanted its members to remain free from carrier or hospital meddling so they could protect their incomes. Hospitals wanted to determine patient lengths of stay to protect their own cash flow.

None of these groups trusted the others or the government to protect their interests.

Second, Nixon's law called for a loose physician structure, in which practitioners could opt in or out of any HMO. Again, this satisfied the insurance, physician and hospital groups. But it was the opposite of vertical integration's tight structure in which physicians were fully integrated into both the hospital and financial system. The loose physician structure meant that providers lacked loyalty to any specific HMO.

Third, Nixon's law allowed providers to bill insurance carriers on a fee-for-service basis, not on a capitation basis.

In a capitated system, the vertically integrated HMO only received a specified amount of money per patient per year. The old Baylor – Dallas school system model charged \$6 per employee per year. As long as Baylor University Hospital kept its costs below \$6 per employee, it made money. But if Baylor's costs exceeded \$6, it lost money and potentially went out of business.

Capitation, in other words, forced HMOs to control costs and use their resources efficiently. Absent capitation as in Nixon's Act, much of the underlying financial discipline disappeared.

These three factors – separate companies for finance and service provision, loose relationships between physicians and HMO entities and little-to-no capitation - drastically altered the original vertical integration model. Stanford Medical School Professor Alain Enthoven, for example, a key managed care theorist, argued in 1993, 'Some say that managed care has failed. I say that managed care has not yet been tried' since Nixon's HMO Act so perverted the vertical integration model.¹⁵

By the early 2000s, American healthcare had given up on the vertical integration / managed care approach in fact, if not in name, in favor of the fee-for-service based billing platform. Stanford's Enthoven articulated the fee-for-service flaws in his 2004 book 'Toward a 21st Century Health System' page xxix. Consider this list in light of the Utilitarian definition of ethics as creating the greatest good for the greatest number:

- 1. Fee-for-service creates an adversarial relationship between doctors and payers;
- 2. Fee-for-service has little accountability poor data collection and provider motivations for economy;
- 3. Fee-for-service 'free choice of provider' leaves patients to make remarkably poorly informed choices;
- 4. Fee-for-service generates excess hospital capacity, high tech equipment and open-heart surgeries;
- 5. Fee-for-service generated an excess supply of specialists;
- 6. Fee-for-service misallocates resources, as no incentive to use the least costly settings for treatment;
- 7. Fee-for-service has no capacity to plan care processes from diagnosis to treatment to rehabilitation;
- 8. Fee-for-service has led to a dangerous proliferation of facilities for complex and costly procedures without the volumes necessary to maintain good outcomes;
- 9. Fee-for-service cannot practice total quality management due to lack of service integration;
- 10. Fee-for-service cannot organize the rational use of technology.

We created, in other words, an unethical healthcare structural mess in our quest for patient choice, profits and jobs.¹⁶

¹⁵ Enthoven, Why Managed Care Has Failed to Contain Health Costs, Health Affairs, 1993, paraphrased for context here.

¹⁶ 'Mess' comes from the title of Richmond and Fein's 2005 book, The Healthcare Mess, op cit.

Consumer Driven Healthcare to the rescue (or not)

With the failure of the HMO movement, our commercial healthcare industry needed a new paradigm. One attempt was CDHC or Consumer Driven Health Care. The term 'consumer driven health care' arose from the Medicare Modernization Act of 2003 which established Health Savings Accounts.

'Consumer driven products' are high deductible health insurance policies with certain tax benefits. Each consumer spends the deductible as he/she sees fit, for physician visits, medications, tests, therapies etc. Only after satisfying the deductible does insurance pay. Then, depending on the specific plan design, insurance pays all or part of additional medical expenses.

CDHC policies embrace the notion of consumer sovereignty. Consumer sovereignty means each individual consumer makes decisions in ways he or she deems best for themselves; individual patient decision making for themselves, not physician decision making for patients would now drive our healthcare system.

Consumer driven healthcare implicitly accepts The Split between healthcare finance and service delivery as a given. Effectively, HSAs and the entire CDHC movement says 'The Split exists and we can't figure out how to fix the problems it causes, so we'll turf the whole thing onto patients. Maybe they can rationalize our otherwise irrational system'. Maybe, in other words, they can make the system operate more ethically.

It didn't go well.

Problems equating high deductibles with consumerism in healthcare

Consumer driven healthcare as practiced using Health Savings Accounts, similar taxdeductible programs, and medical care price lists fail in healthcare for two main reasons.

First, an annual \$1000 deductible (or even \$3000) is too small to act as a real medical spending brake. Once satisfied, and depending on the specific plan design, all other medical care is free.

A patient might satisfy that deductible hurdle in January and then enjoy lots of excessive and unnecessary medical care for free during the next 12 months. Patients could even 'play' the system by scheduling all their expensive medical treatments during the same calendar year.

Or the deductible has little impact on a patient facing an expensive procedure. What's the difference to the patient if the procedure costs \$45,000 \$50,000....\$60,000 or \$100,000? Once the deductible is satisfied, the rest is free. 'Consumerism' fails to affect patient behavior in these expensive cases.

This fundamental flaw in the 'high deductible = consumer driven healthcare' thesis exists because the vast majority of healthcare spending goes to a very small group of

high cost patients. Here's spending by percentage of the population. These numbers have remained remarkably constant for years.

Healthcare Consumption by % of Our Population ¹⁷

1% of our population accounts for about 24% of medical spending 5% of our population accounts for about 49% of medical spending 10% of our population accounts for about 64% of medical spending 50% of our population accounts for about 97% of medical spending 50% of our population also accounts for 3% of medical spending.

The healthiest half of our population costs very little medically. These are typically the folks who purchase CDHC products and who often spend less than \$1000 annually. Cutting their spending by 20 or 30% would have virtually no impact on *overall* medical spending or trend.

Here's the same chart using 2022 spending amounts, not percentages. In 2022, total US healthcare costs reached about \$4.4 trillion for the approximately 333 million of us. Though the <u>average</u> annual healthcare spending per person that year was about \$13,400,

The 1% heaviest users (3.3 million people) averaged about \$320,000 each; The 5% heaviest users (16.7 million people) averaged about \$129,000 each; The 10% heaviest users (33 million people) averaged about \$85,000 each; The 50% lightest users (167 million people) averaged about \$790 each.

Very few of the 10% of users who account for about 2/3 of all medical spending will change their medical choices based on a \$1000 (or even \$2500 or \$5000) deductible. *Whatever* the deductible, their medical care needs far exceed it.

Second, medical consumers have little meaningful quality information, and even if they have it, they rarely know how to use it. This makes medical decisions different from, say, car purchasing decisions. The car buyer can compare the quality of various cars before deciding which to purchase. Large or small, good gas mileage or poor, lots of luxuries or few, high resale value or low, etc.

But the medical purchaser generally has very little similar information. Which doctor has the best outcomes? Which hospital? How effective is this medication compared to that one? We generally lack detailed answers to these questions.

¹⁷ Yu, et al, 'Medical Expenditure Panel Survey Statistical Brief #81', May 2005, Agency for Healthcare Research and Quality

For these two reasons – unequal healthcare spending and lack of medical quality information / well educated medical consumers - so-called Consumer Driven Health Care had only a small impact on medical trend which has run at our gdp growth rate plus 3 – 5% annually for years. CDH policies became the vogue in the early 2000s. They pretty much ran their course within about a dozen years.

Americans continue to spend about twice as much on healthcare as other developed countries without getting any value for the excess spending, just as we did prior to CDHC policy introduction. Here are estimates for 2019, the last year before Covid hit and altered these statistics with a unique set of circumstances. (I don't know if or how Covid is representative of 'normal' healthcare trends, so I'll leave that out of this analysis.) ¹⁸ I could have included more countries but you get the idea from this limited comparison.

2019	Annual spending / capita	Life expectancy at birth
US	\$10,855	78.8
Canada	\$6,730	82.3
France	\$4,014	83
Spain	\$2,412	84
UK	\$3,334	81.4

These other countries live 4 - 5% longer than us while spending about half as much on healthcare. We clearly haven't figured out how to generate good value for our healthcare system investment. We haven't figured out how to generate the greatest good for the greatest number.

The Affordable Care Act gives up on vertical integration in favor of wider coverage

The 2010 Affordable Care Act, a massive piece of legislation, is more-or-less a business plan for our entire healthcare economy.

Vast in scope and complexity, it's far too big to summarize quickly here. Instead, I'll focus only on 2 components: coverage expansion and patient decision-making assistance.

Why healthcare reform in 2009

¹⁸ OECD Health Data statistic updated annually https://stats.oecd.org/Index.aspx?ThemeTreeId=9

President Obama decided to move aggressively on healthcare because of several disturbing trends. From 2000 - 2006

- Health insurance premiums rose by about 80% while
- Overall inflation only rose by 20%, but
- Median household income was actually down 3% in real (after inflation) terms.

Obama and his aides worried about two different health insurance death spirals especially affecting the individual and small group markets.

The **first** would occur when healthy people decide not to purchase health insurance, thus leaving only sick people in the insurance pool. Premiums would rise quickly forcing 'healthier' sick people opt out, leaving only the sickest of the sick still in. Health insurance then would become a payment program for sick people. It wouldn't, under these conditions, play its traditional role of protection against catastrophic financial calamity due to an unexpected illness for the vast majority of Americans.

The **second**, separate though somewhat related death spiral would occur when young people decide that health insurance is too expensive to purchase. Young 'Invincibles' – so called because they don't think they'll get sick – exit the market, leaving only older and more expensive participants in the pool. Again premiums rise, causing more and more young, healthy people to leave the pool and thus depriving the insurance pool of this healthy, inexpensive population.

Obama worried that continued economic stagnation - as began with the stock market crash in 2007 - would exacerbate both situations. Indeed, the number of uninsured had risen by about a million people per year from under 44 million in 2002 to over 50 million in 2009.

Among the reasons for this huge uninsured problem was our change in national economic circumstances. Our post-World War II economic dominance had lessened and along with it, businesses' ability to generate sufficient margin to cover all employee benefits. Employers responded to the changed economy by shifting benefit costs to their employees and outsourcing. That's why the percent of Americans covered by commercial / employer based health insurance shrunk from 59% to 48% between 2000 and 2020. Meanwhile, the number of Medicaid recipients and uninsured Americans grew. ¹⁹ (I included the 2020 numbers to show trend and the ACA impact.)

¹⁹ Medicaid data from stasta.com https://www.statista.com/statistics/245347/total-medicaid-enrollment-since-1966/. Uninsured data from the CDC including <a href="https://www.cdc.gov/nchs/data/nhis/earlyrelease/insur201106.htm#:~:text=Results-,Lack%20of%20health%20insurance%20coverage,(Tables%201%20and%202) and https://www.google.com/search?q=number+uninsured+americans+2020&rlz=1C1ONGR enUS1065US1

Year	Number of Medicaid Beneficiaries
2000	34 million
2010	54 million
2020	76 million

Year	Number Uninsured Americans
2000	39 million
2010	49 million
2020	32 million

Thus, the prime focus and effect of the Affordable Care Act was coverage expansion, perhaps somewhat ethical in that it provided a greater good – health insurance – to a greater number of Americans. I'm underwhelmed by the ethical achievement of giving more people financial access to our otherwise unethical system. Our overall life expectancy numbers – flat since 2010 - support this skepticism. See below pages 25 – 26.

One way the ACA addresses vertical integration and The Split

The ACA also, in a relatively hidden and small way, addressed problems cause by The Split between healthcare finance and service delivery. We have already discussed how this grew out of the Baylor – Dallas School System's initial commercial insurance venture, how Nixon attempted to put this genie back into the bottle, and how the introduction of Health Savings Accounts and similar products cemented The Split into our healthcare system architecture.

Section 3506 of the Affordable Care Act discusses Shared Decision Making. Here is the legislative summary:

The purpose of this section is to facilitate collaborative processes between patients, caregivers or authorized representatives, and clinicians that engages the patient, caregiver or authorized representative in decision making, provides patients, caregivers or authorized representatives with information about trade-

 $[\]underline{066\&oq=number+uninsured+americans+2020\&gs_lcrp=EgZjaHJvbWUyBggAEEUYOdIBCDYwMzdqMG}\\\underline{o3qAIAsAIA\&sourceid=chrome\&ie=UTF-8}$

offs among treatment options, and facilitates the incorporation of patient preferences and values into the medical plan.

We can read this as an attempt to circumvent The Split by helping patients make wise decisions in conjunction with but not entirely based on, their physician's recommendations. It harkens back to Porter and Teisberg's position on the importance of publicly available outcome measurement and results reporting. The ACA in this section recommends that patients not rely blindly on their physician's advice for two main reasons:

First, the ACA recognizes the economic reality of physicians providing excessive care – sometimes – in response to the economic incentives they face.

Second, the ACA understands that preference-sensitive care exists.

Preference-sensitive simply means that various treatment alternatives often exist. Some patients might reasonably prefer orthopedic surgery while others, equally reasonably, might prefer physical therapy. Or medication vs. surgery. Or other options.

Section 3506 implicitly accepts The Split as reality and legislates a mechanism to ameliorate its most negative consequences.

Where We Are Today Post HMO, post ACA, post Split

Managed care as vertical integration has disappeared from our healthcare landscape. Today, post-Consumer Driven Healthcare and post-ACA, we live in a fee-for-service based medical billing environment. Each individual actor in our healthcare system faces various economic incentives either to provide or control care severity; each individual patient is supposed to make wise healthcare decisions while relying on the advice of financially compromised actors.

We don't do this very well. At \$4.4 trillion – our 2022 healthcare spending - our *healthcare* economy was larger than France's total gdp (about \$2.8 trillion) or Britain's (\$3.0 trillion) and about twice as big as Russia's (\$2.2 trillion).²⁰

We have the highest healthcare expenditures per capita or as a percentage of our GDP in the world. See below, a list of per capita healthcare spending in countries that live longer than the US national average or any individual US state average:²¹

²⁰ World Bank, Gross Domestic Products 2022 https://data.worldbank.org/indicator/NY.GDP.MKTP.CD

²¹ Data from Statistica https://www.statista.com/statistics/236541/per-capita-health-expenditure-by-country/#:~:text=In%202022%2C%20the%20United%20States,highest%20per%20capita%20health%20expenditure.

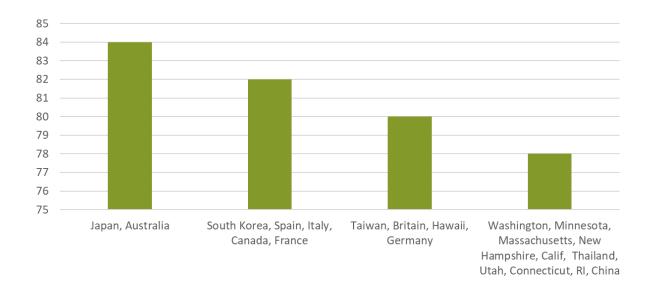
Country

2022 per capita health spending

US	\$12,555
Australia	\$ 6,569
France	\$ 6,516
Canada	\$ 6,319
Japan	\$ 5,250
South Korea	\$ 4,569
Spain	\$ 4,461
Italy	\$ 4,290

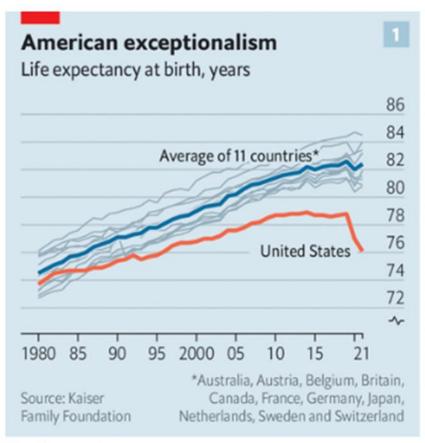
One way to see the magnitude of our healthcare system inefficiency is to see how those various countries compare to US state longevity at birth averages. These data were originally developed by the National Center for Health Statistics at the United Nations and presented by Nicholas Kristof in the New York Times, August 17, 2023. As you review these charts, consider this question: if private, commercial health insurance is as beneficial a system as its proponents claim, then why do we see such mediocre outcomes?

Average Longevity at Birth
Various countries compared to US States
Life expectancy in 2 year age bands on the left
'82' means '82 – 84 years'; '78' means '78 – 80 years'





Equally or perhaps more upsettingly, we have experienced <u>no</u> national life expectancy gains since about 2009, despite spending more each year on medical care. This differs from other advanced, industrialized countries. See the chart below published in The Economist, July 13, 2023. Note first that Americans, while spending more on medical care than the others, enjoyed shorter life expectancies. Equally interesting (upsetting), see the 2009 – 2020 period, before Covid, when our life expectancy was flat – despite spending more on medical care each year - while the others improved. Finally, note the relative impact of Covid on American and other life expectancies.



The Economist

All this looks to me like a living, working, breathing definition of an unethical healthcare system as described by the Utilitarians. It <u>always</u> rewards the relatively few participants in it but only *sometimes* benefits the huge number of patients who need it.

Why do we have this spending-to-outcome discrepancy? Why does our largely private sector, commercial healthcare system perform so poorly?

We'll address those questions in our next section.

Chapter 3: Some Problems for Ethical Insurance Brokers to Address in the commercial health insurance arena

Brokers know many of the specific problems that afflict our healthcare system. These range from complicated insurance rules that differ by carrier to complicated billing rules that differ by provider to complicated access rules that differ by policy, to many others. Additional system problems also include high overheads caused by having so many different insurance carriers, providers, treatments, medications and options. I originally thought about simply listing a bunch of problems that brokers face regularly and discussing some ethical issues that arise from dealing with them.

But let's go in a different direction. Instead of simply listing a bunch of problems, let's try to identify a core structural issue caused by The Split that underlies many – maybe even most – of these specific issues. This helps us address our ethical problem and understand why our commercial healthcare system fails to produce the greatest good for the greatest number.

We'll do all this by introducing an economic concept alternately called The Tyranny of Small Decisions or The Tragedy of the Commons. The first – the Tyranny of Small Decisions – often leads to the second, the Tragedy of the Commons.

Consider the visual image of a paradigm old English village to introduce these ideas. In this little village, a bunch of farmers lived in small houses around a central public open space called 'the Common' in which cows grazed. Each farmer had a cow or two and the Common provided sufficient room and grass for them all to graze and grow.²²

Now imagine that our old English village prospered and grew. Families bought a second, third, fourth or fifth cow. New families moved in, each with a few cows. After a while the Commons became too small to support all these cows. Each individual cow lost weight and produced less milk. Villagers' incomes fell. The Commons became overgrazed. Its topsoil began to erode after each rain and eventually the grass disappeared. It ultimately became useless for grazing. We might call this the Tragedy of the Commons v1, in which everyone uses too many resources so there are not enough for all. ²³

In v1, each individual's small decision, made in each individual's own interest, diminished the overall good. The Tyranny of Small Decisions led to overgrazing and, in turn, to the Tragedy of the Commons in which everyone ended up worse off.

²² Many New England towns have a Common today. Think of Boston Common or Cambridge Common in Massachusetts, places where cows grazed in colonial times but today are nice public parks.

²³ Apparently this happened to the Mayans in Central American centuries ago and the environmental degradation led to their civilization's destruction, though I'm not a Mayan historian. I did, however, enjoy a fascinating trip to Belize and Guatamela in 2020.

As an alternate version of this story, instead of each villager buying an extra cow, a new person moves to town with 30 cows. The Commons couldn't support this increase and the tragedy unfolded. In the Tragedy of the Commons v2, one person consuming too much destroys the benefit that everyone enjoyed from their shared resource.

In either case, the Tyranny of Small Decisions, in which people individually made decisions to maximize their own welfare, led to overgrazing and, in turn, to the Tragedy of the Commons.

Another way to phrase this: the Tragedy of the Commons decreases the amount of good for the great number of people.

Let's update this to a real situation in Pomfret Vermont, 2023. Pomfret, a small town, apparently enjoys spectacular foliage each fall. ²⁴ A relative handful of tourists annually enjoyed it. In 2021 or 2022 though, a Tic Tok influencer, apparently one of those tourists, broadcast descriptions of Pomfret's beauty to his or her audience. A few local inns also advertised the town's beauty. Thousands of tourists arrived. The town became overwhelmed. Among the problems:

- Tourists blocked Margarete Pierce's driveway, parked illegally on her land, and used her garden house as a toilet,
- Cathy Emmons watched tourists stroll onto her farm and steal tomatoes from her vine,
- Mike Doten got tired of pulling tourists out of ditches with his tractor.

According to the Boston Globe's description, 'The town's selectboard ... voted to block the road to anyone except residents for three weeks at the height of the foliage season, from Sept. 23 to Oct. 15...Windsor County deputy sheriffs will staff checkpoints at the bottom of Cloudland Road in neighboring Woodstock and at the top of the road here in Pomfret." (I don't know how this is legal but that's a separate issue.)

The Tyranny of Small Decisions – individual publicity for individual interests - led to the Tragedy of the Commons, so now no tourists can enjoy Pomfret's beauty during foliage season.

The Tyranny of Small Decisions and the Tragedy of the Commons can provide a framework to understand many of our healthcare system problems. Let's explore some of them.

²⁴ This story comes from the Boston Globe, Sept 18, 2023 https://edition.pagesuite.com/popovers/dynamic_article_popover.aspx?artguid=04b5fe08-f5ff-489d-acbe-ae0c5035891e

Medical Care Rationing. Rationing or 'the limiting of goods or services that are in high demand and short supply' per Investopedia, is a classic unintended, indirect consequence of the Tyranny of Small Decisions. We'll consider two case studies.

First, pediatric bed rationing in Boston. Tufts Medical Center, Boston, closed its 41 bed inpatient pediatric unit in July 2022, then repurposed them as adult inpatient beds.²⁵ The justification, according to Dr. Daniel Rauch, Tufts Chief of Pediatric Medicine: "Should we take care of kids we don't make any money off of, or use the bed for an adult who needs a bunch of expensive tests?...If you're a hospital, that's a no-brainer."²⁶ Tufts could bill more for adults than kids. A small decision that clearly benefited Tufts' bottom line. Pretty simple to understand.

But a local Tragedy of the Commons followed, documented with Boston Globe headlines like:

October 21, 2022:

Hospitals scramble to find beds as pediatric admissions rise

By Jessica Bartlett Globe Staff, Updated October 21, 2022, 8:08 p.m.



November 10, 2022

Hospitals postpone pediatric surgeries as capacity crunch escalates

By Jessica Bartlett Globe Staff, Updated November 10, 2022, 5:37 a.m.



Hospital executives said pediatric intensive care unit beds at Massachusetts General for Children were operating at 150 percent capacity, and there were few signs the surge was nearing an end.

December 11, 2022

²⁵ Boston Globe 'Who will care for our sickest children', Oct 26, 2022

²⁶ NY Times As Hospitals Close Children's Units..., Baumgaetner, Oct 11, 2022

Hospital finances play a major role in the critical shortage of pediatric beds for RSV patients

Health Dec 11, 2022 10:33 AM EDT

This Commons Tragedy continued with higher prices. According to the Massachusetts Health Policy Commission report in September 2023, Children's Hospital and Mass General Brigham, representing about 73% of pediatric discharges in Massachusetts, have the highest commercial prices in Massachusetts. Among the data points in that report, the average commercial price per pediatric discharge at Boston Children's was 47 percent higher than at other state hospitals with significant inpatient volume, even after adjusting for the illness of the patient.²⁷

Here, the few service providers benefit financially while the rest of us pay higher prices for the same care ... if we can find it. Our national total number of inpatient pediatric beds fell by 19% from 2008 to 2018. The Tufts closing followed this trend. Pediatric hospitals have recently closed or partially closed in Richmond Virginia, Colorado Springs Colorado, Raleigh North Carolina, Doylestown Pennsylvania and Shriners New England because 'kids are not lucrative'. ²⁸

The Tyranny of Small Decisions – each hospital followed its own economic self-interest and closed less profitable beds in favor of more profitable ones to earn more money – led to a tragedy for the rest of us. A few service providers and investors made more money while many sick kids and their families suffered longer waits for care, longer ambulance or med flights to hospitals, higher prices and perhaps ended up medically much worse as a result.

Greatest good for the greatest number? I think not.

Second, maternity ward rationing in central Massachusetts and nationally. Leominster Hospital closed it maternity ward in 2023. Their justification: "reimbursement rates paid to hospitals for treating maternity unit patients on Medicaid are far lower than what private insurance plans pay" particularly harming Gateway cities like Leominster according to the Boston Globe's June 25, 2023 analysis.

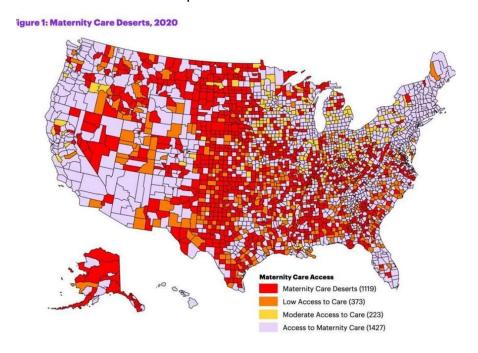
²⁷ Jessica Bartlett, Boston Globe, Sept 10, 2023

²⁸ Boston Globe 'Who will care for our sickest children', Oct 26, 2022

Maternity beds in Gateway Cities were, in other words, unprofitable or at least less profitable than other types of hospital wards or other types of patients.

Leominster's closure also followed a state trend. Holyoke Medical Center closed its maternity center in 2020. Harrington Hospital in Southbridge closed its center in 2017.

And all this follows a national trend. According to the March of Dimes, the number of maternity deserts in this country – counties with no hospital providing maternity care, no birth center, OB/GYN, and no certified nurse midwife – has increased over time, mainly in rural areas.²⁹ Here's their 2020 map



Pregnant women had to drive farther for their appointments and to give birth. This negatively affects them. Health Affairs reported that, after controlling for socioeconomic factors and clinical conditions, "rural residents had a 9 percent greater probability of severe maternal morbidity and mortality, compared with urban residents."³⁰

Hospitals made more money – Tyranny of Small Decisions. Patients ended up worse off – Tragedy of the Commons. The same story unfolds time and time again, in specialty after specialty and treatment arena after treatment arena.

Let's switch focus now away from rationing and explore other clinical and ethical implications of the Tyranny and Tragedy.

²⁹ March of Dimes maternity desert report https://www.marchofdimes.org/maternity-care-deserts-report

³⁰ Rural-Urban Differences In Severe Maternal Morbidity And Mortality In The US, 2007–15, Health Affairs, December 2019

Excessive care. Excessive care incentives so permeate our post-Split, commercially based healthcare system that Andrew Dreyfus, former CEO of Blue Cross Blue Shield of Massachusetts, claims healthcare today 'is designed around the needs of institutions and health professionals and not around the needs of patients'. ³¹

Excessive care through disease mongering. Disease mongering means hyping treatments for little known diseases, more or less advertising diseases for which your company has a treatment. This instills fear among patients, expands markets and positions your product as a solution. Pfizer appears to engage in disease mongering about RSV with this ad, published in the Boston Globe, August 24, 2023, page 5.



We know this is disease mongering and not a public service announcement because Pfizer is not a public education organization; it's a private sector pharmaceutical that makes money by selling medications. This ad helps that process.

Other disease mongering examples exist too – look for them on TV and in your local newspapers - but I want to move on and discuss two other, related concepts: overdiagnosis and overtreatment. Overdiagnosis means broadening disease definitions so more people quality for medical care. Overtreatment means providing more care than necessary to patients. Both overdiagnosis and overtreatment can cause patients to

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³¹ Boston Globe, June 22, 2018

experience higher care treatment risks and side effects without also enjoying higher chances of treatment benefit.

Excessive care through overdiagnosis. Overdiagnosis means broadening disease definitions so more people quality for medical care. According to H. Gilbert Welch, the overdiagnosis guru, it occurs "when individuals are diagnosed with conditions that will never cause symptoms or death." Overdiagnosed patients, in other words, *can't* benefit from care because they weren't sick to begin with. But medical care providers, testers, drug manufacturers and similar *can* benefit financially by treating these patients. We'll consider just one example, overdiagnosis of hypertension. 33

In 1997, the definition of hypertension (high blood pressure) changed from diastolic blood pressure of 160 over systolic blood pressure of 100 to 140 / 90. That immediately switched about 13 million people from having normal blood pressure to having high blood pressure, or, in our terms, increased the market for blood pressure lowering medications by 13 million people.

The definition of hypertension changed more times, always increasing the number of people so-diagnosed. In 2017, for example, the American College of Cardiology and American Heart Association redefined hypertension as greater than 130 / 80, again increasing the number of hypertension patients and the market for hypertensive medications. I don't know how many people this affected.

During this time period, sales of ACE inhibitors, medications to treat hypertension, grew at an annual compound growth rate of 5%, hitting \$6.9 billion in 2023. Ditto for various other anti-hypertensive medications. The hypertension redefinition appears to have stimulated these medication's sales (or, at least, didn't hurt) and again, benefited a few participants in our healthcare system.

Did the redefinition help the Commons? First, some data. The age adjusted heart disease mortality rate fell in this country from 170.5 per 100,000 in 2012 to 161.5 in 2019 or, using my back-of-the envelope calculation, by about 30,000 people annually nationally.³⁴ 30,000 fewer deaths divided by 13 million new patients = about 0.2% benefit. That's two tenths of one percent. About 99.8% of the newly diagnosed patients did not benefit from the new hypertension definition while 0.2% did. Maybe. That's the most optimistic reading of these data.

This interpretation assumes the redefinition itself led directly to the 30,000 fewer deaths. We don't know that to be the case. The entire mortality decrease could have been caused by other factors – less smoking, better diets, better overall physician advice or

33 This case study comes largely from Welch, Overdiagnosis pages 20 - 23

³² H. Gilbert Welch, Overdiagnosed, page xiv

³⁴ Mortality rate data from the National Center for Health Statics, part of the US Centers for Disease Control and Prevention https://www.cdc.gov/nchs/hus/topics/heart-disease-deaths.htm

something else. We just don't know. At best 0.2% of the newly redefined-as-sick folks benefited from the redefinition. Perhaps none did.

All this raises some troubling questions, including

- How impactful were the redefinitions in preventing heart disease deaths?
- How impactful were ACE inhibitors in reducing heart disease mortality?
- How important were other medications?
- How many people were harmed either physically, emotionally, or financially by taking these medications after they were redefined as 'sick', not 'normal'?
- Could we have reduced heart disease mortality by a similar amount in less expensive ways than redefining at-risk folks and prescribing medications for them?
- Did the increase in hypertension medication sales and associated corporate profits affect the new hypertension definition?

A disturbing consideration of this last point comes from Otis Brawley, former Chief Medical and Scientific Officer of the American Cancer Society in his book How We Do Harm. He suggests that of our 555 guidelines (555!) for treating hypertension, "some are self-interested and harmful. Many are commercial documents" meaning they're designed to sell products, more-or-less a form of disease mongering. No one, according to Brawley, promulgates good practices for guideline composition or hypertension redefinitions. Might the 1997 and other redefinitions reflect commercial pressures? Might this simply be the Tyranny of Small, Self-Interested Decisions on the part of hypertension treaters?

All we know for sure is that more Americans are now diagnosed with hypertension and that a very small percent of them benefit from redefinition as measured by age adjusted mortality rates per year. Medical statisticians could parse this analysis far better than I – this is simply an introductory overview – but at first cut, a 2/10s of 1% benefit rate appears underwhelming or, in our terms, like overdiagnosis.

But the drug makers, labs and related folks made more money.

We could expand this analysis, as Welch did in Overdiagnosed, to include hyperlipidemia (high cholesterol), diabetes, osteoporosis in women and many more. I hope, though, this one example can suggest what overdiagnosis is, why it's a systemic problem and, more directly for our purposes today, why it's an ethical one for brokers.

Excessive Care Through Overtreatment. Overtreatment means providing more care than necessary to patients. Patients can't benefit from overtreatment by definition; overtreatment is care that does not provide benefit. But patients can be harmed by it because all medical treatments involve some element of risk. The more care someone

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³⁵ Brawley, How We Do Harm, page 243

receives, the higher the chance of risk. An overtreated patient gets all the risks without the possibility of benefit.

But the overtreatment *providers* still get paid.

Consider coronary stents as one overtreatment example. According to research from the Lown Institute, between 2019 – 2021, US hospitals performed over 229,000 unnecessary coronary stent procedures, or about 1 every 7 minutes. ³⁶ That's about 22% of all coronary stents and the unnecessary care cost Medicare alone up to \$2.4 million. Rates of overuse varied widely by hospital: at some, more than 50 percent of all stents met criteria for overuse, while at others, fewer than 5 percent were unnecessary.

In all cases, the providers got paid – an economic incentive-based Tyranny of Small Decisions. But 229,000 people undertook the procedure risks without much or any likelihood of benefit because the stent was unnecessary, and everyone's health insurance premiums increased. An economic cost and tragedy for the rest of us.

Let's move from a specific to the general case and estimate the size of the overtreatment problem from a 2017 physician survey published by PLOS, an online medical journal. ³⁷ According to physicians themselves, 20% of all medical care is unnecessary, including 22% of prescription drugs, 25% of tests and 11% of procedures. Among the most common excuses for this by the physicians were fear of malpractice and patient pressure or demands. In other words, in our post-Split healthcare system, no one pushes back sufficiently aggressively when patients want unnecessary treatment. That opens the door to our Tyranny and Tragedy.

By contrast, in a vertically integrated system where healthcare finance and service delivery are the same company, there is a brake on overtreatment; the finance arm, in its desire to keep premiums competitive, won't allow it. Unfortunately, though, today in much of America, one large hospital system typically controls 50-75% of the beds in a region, while the largest insurance carriers in a region – organizations potentially able to push back on overtreatment – typically only have about a 15 – 30% market share. This unequal playing field contributes to our unnecessary care problem; organizations incentivized to provide more care dominate.

One personal experience with overtreatment. I had a sore ankle in September 2023 that felt tight early in the morning, then loosened up during the day. I felt under time

³⁶ Lown Institute Hospital Index 2023, Avoiding Overuse: Coronary Stents. https://lownhospitalsindex.org/avoiding-coronary-stent-overuse/ Lown defines overuse as inserting stents in patients with a diagnosis of ischemic heart disease at least six months prior to the procedure, excluding patients with a diagnosis of unstable angina or heart attack within the past two weeks, and excluding patients who visited the emergency department over the past two weeks.

³⁷ https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0181970

pressure to resolve the issue as I was going hiking with my kids in November, about 6 weeks in the future. I first tried rest but that didn't work. I then considered my treatment options:

- Option 1, see an orthopedist. That would take a couple months as orthopedists typically book weeks or months in advance. I suspected there was insufficient time to pursue this option. The orthopedist would probably (my uninformed guess here) want to run some tests, then have me return for a second visit and maybe prescribe therapy or medications (my guess again). I expected that the orthopedist would resolve my ankle pain problem but, most likely, after I returned from my hiking vacation.
- Option 2, see a physical therapist. My limited experience with PT suggested that I would visit once or twice a week for a few weeks. My experience also suggested that the therapy would work. I decided to keep this option on hold.
- Option 3, see my local chiropractor. Note here that I am not a shill for the chiropractic industry and do not understand anatomy; I'm just a commentator here. However, I like chiropractic primarily for one, virtually overwhelming reason: I can get an appointment in a day. Plus it's cheap. I had no idea if chiropractic would resolve my ankle pain problem, but I figured 'why not?'. Very low risk. I could learn quickly in one afternoon since my chiropractor is about 15 minutes from my house if chiropractic could help and it only cost \$8.80 for a copayment. I figured it was worth the time to find out.

My chiropractor felt my ankle, gave me a couple stretches, and sent me home with 'come back if you still feel pain next week'. I did the stretches a couple times and, astonishingly to me, the pain disappeared. Problem solved. In one day. For \$8.80.

Would the physical therapist or orthopedist have overtreated my problem? It certainly seems likely to me though I can't know for sure. But I feel like I maneuvered around the tyranny of their own small, incentive based decisions for my own benefit.

Excessive care through lack of high quality, randomize, comparative studies. We'll first discuss Vitamin D supplements to prevent bone fractures or extend life. Millions of Americans take vitamin D supplements and labs run 10 million vitamin D level in patients tests every year.³⁸ Vitamin D sales and testing has become a billion dollar industry with about 25% of Americans over age 60 taking vitamin D supplements.³⁹

³⁸ Gina Kolata, Study Finds Another Condition that Vitamin D Pills Do Not Help, New York Times, July 27, 2022

³⁹ Szabo, Selling American on Vitamin D, Kaiser Health News, August 20, 2018, https://www.nbcnews.com/health/health-news/selling-america-vitamin-d-reaping-profits-n902276

Though use of vitamin D supplements may make biochemical sense – the body needs vitamin D to help it absorb calcium, a mineral necessary for strong bones – a 2022 comparative study of 25,000 people with half taking the supplements and half taking a placebo found little-to-no benefit to the vitamin D supplements.⁴⁰ Indeed and perhaps more interesting from our perspective, that 2022 study found that 'no large randomized, controlled trials had previously tested the effects of daily supplemental vitamin D alone (without coadministered calcium) in preventing fractures in the U.S. population.'

Why were there no studies on such a widely prescribed vitamin? One answer may be that the American Clinical Laboratory Association, the trade association for the laboratory and diagnostic health industry, spent around \$1 million on political lobbying annually since 2014 ⁴¹ though I don't know exactly where all this money went.

Another answer may be that the Endocrine Society – the leading organization in the fields of endocrinology and metabolism according to Wikipedia, that 'influences a wide range of policies' according to its website ⁴² – argues that "vitamin D deficiency is very common in all age groups" and advocated a huge expansion of vitamin D level testing in patients in the 2010s.⁴³ Though the Endocrine Society's financial lobbying is relatively small, only about \$120,000 in 2020 for example, it plays a large role in 'helping to shape healthcare and research policy in the US and around the world' according to its website.⁴⁴

A third answer maybe be that 'it's obvious' that vitamin D helps people, based on a simplistic, linear, biochemical analysis. 'Bones need calcium, vitamin D helps bones absorb calcium so vitamin D supplements will help bones remain strong'. If only the human body was so simple! We have an extensive history of *medical reversal* in this country; medical reversal means 'high quality comparative studies show that something that makes sense in theory does not provide patient benefit in real life'. See Ending Medical Reversal by Adam Cifu and Vinay Prasad for more on this.

I'll go out on a limb now and suggest that the financial lobbying impact of the American Clinical Laboratory Association, plus the intellectual clout of the Endocrine Society, combined with the 'obviousness' of vitamin D's benefit, supported an environment for continued vitamin D level testing in patients and supplement prescriptions, *always* to the economic benefit of the industry but *only sometimes*, if ever, to the medical benefit of

⁴⁰ LeBoff et al, Supplemental Vitamin D and Incident Fractures in Midlife and Older Adults, NEJM, July 28, 2022.

⁴¹ Open Secrets https://www.opensecrets.org/federal-lobbying/clients/summary?cycle=2022&id=D000023934

⁴² https://www.endocrine.org/advocacy

⁴³ Szabo op cit

⁴⁴ https://www.endocrine.org/advocacy

patients. That's one impact of our profit motivated, private sector based medical industry post-Split.

We'll switch focus now to discuss excess care and medical spending on over-the-counter-decongestants. The US over-the-counter decongestant market was worth about \$1.8 billion in 2023,⁴⁵ including common, over-the-counter medications such as Sudafed PE, Vicks Nyquil Sinex Nighttime Sinus Relief and Benadryl Allergy Plus Congestion. The problem with these and similar phenylephrine-based medications: they don't work. That's the unanimous conclusion of an FDA panel that reviewed several existing studies of phenylephrine-based medications in September 2023.

From our point of view, though – the impact of private sector medicine's lobbying for its own financial gain and not necessarily for patient benefit - the back story of how ineffective medications came to market and remained on the market so long is more compelling than the scientific analytics.

We begin in 1976 when the (then new) Food and Drug Administration adopted a 'safe and effective' standard for medications. ⁴⁶ After an initial purge of unsafe or ineffective drugs in the 1970s, the agency's approval criterion morphed, in real life, from 'safe and effective' to 'safe' with few if any drugs were removed from the market during the ensuing 50 years due to their lack of effectiveness. The agency apparently lacked the resources to police medications as rigorously as, perhaps, it would have liked, and so focused more on product safety.

We'll jump ahead 30 years, bypassing drug reformulations and FDA oversight issues, to 2007 when two University of Florida researchers, Leslie Hendeles and Randy Hatton, filed a citizen's petition for the FDA to review various phenylephrine-based medicine studies. Hendeles and Hatton had themselves reviewed dozens of original studies and determined that over-the-counter, phenylephrine-based oral decongestants performed no better than a placebo. In other words, these medications were safe but ineffective. The FDA, in response, assembled the Non-Prescription Drug Advisory Committee (NDAC), composed of petitioners, manufacturers and the Consumer Healthcare Products Association, the industry trade group. The NDAC decided that the evidence on phenylephrine was "suggestive of efficacy" so left these drugs on the market. (I'm not sure what 'suggestive of efficacy' means, especially after years of patient utilization. 'Suggestive of efficacy' is not a standard statistical, regulatory or legal concept.)

Fast forward 8 more years and several new studies, and Hendeles and Hatton again filed a citizen's petition, this time to remove phenylephrine-based oral decongestants from the market. The FDA reviewed the newest information, this time with enhanced

⁴⁵ Berkeley Lovelace Jr, FDA Panel Says Common Over-The-Counter Decongestant Doesn't Work, NBC News, September 12, 2023

⁴⁶ Much of this section comes from Haley Weiss, With the Decongestant Snafu, the FDA Tries Something New, Time, September 14, 2023

powers granted to it by the Coronavirus Aid, Relief, and Economic Security Act, passed in 2020. Post-2020, the agency could more easily revise over-the-counter approvals and recommendations.

That brings us to September 2023 when an advisory panel to the FDA concluded that phenylephrine-based oral decongestants are ineffective, more-or-less returning to the 1976 'safe and effective' standard. During those 50 years, Americans took a safe but ineffective medication thanks, in part, to weak FDA oversight (lobbying impact?) and weak regulations (lobbying impact?).

I left out the history of Schering-Plough, since bought out by Merck and the maker of Claritin D. Their internal studies showed that phenylephrine-based oral decongestants were, in fact, ineffective. That's why they continued making Claritin D, a prescription medication, and didn't switch to a phenylephrine-based over the counter formulation. The Schering-Plough story suggests that the pharmaceutical industry knew of phenylephrine-based oral decongestant ineffectiveness but still promoted the medications to patients.

The net result of that 50 year lag, according to Hendeles and Hatton:

Americans spend billions on drugs that contain ingredients that will not help them. That's not just a waste of money — it could mean they are delaying appropriate treatment, which can lead to more severe illnesses.

But the OTC drug provision industry made billions thanks, in large part, to their industry lobbyists.

Excess billing. Somewhat like the excess care problems, our post-Split healthcare system allows for excess billing. In this excess billing case, patients don't gain additional benefits – they (or their insurance carrier, which ultimately means their premiums) just pay more for the same care...at best. The excess billing problem may ultimately lead to overtreatment.

In our non-vertically integrated, post-Dallas healthcare system, providers typically bill by code. We have, in this country, thousands of codes, many subject to interpretation. The Physicians for a National Health Plan offers one example, below, showing the difference in potential billing for the same patient.

Original Coding		Enhanced Coding	
Base rate	\$3,950	Base rate	\$3,950
DM 2, uncomplicated	\$1,040	DM 2 with Diabetic CKD	\$3,180
Chronic Kidney Disease	\$0	CKD Stage 4	\$2,370
Obesity	\$0	Morbid Obesity	\$2,730
Depression	\$0	Major Depression	\$3,950
Coronary Art. Dis., Chronic	\$0	CAD with Angina	\$1,400
Total	\$4,990	Total	\$17,580

The players in our health insurance melodrama understand this, as do investors like private equity firms. Private equity firms purchased 355 physician practices between 2013 and 2016 and 578 between 2017 – 2021. Individual physician practices can have dozens or hundreds of doctors. ⁴⁷

Private equity investors seek high returns from their investments, up to 20% annually according to some estimates. Our post-Split healthcare system offers only 3 ways to accomplish this: see more patients, provide more treatments and/or bill at higher rates. PE owned firms apparently do all three, according to research published the Journal of the American Medical Association in 2022. ⁴⁸ That study noted "Following a private equity acquisition, physician practices saw a 20.2 percent increase in charges per claim...and a 37.9 percent increase in new patient visits." Additionally, PE owned firms generated a 16% increase in the total number of encounters. (Encounters = lab tests, imaging, procedures).⁴⁹

Little to none of this helps patients get healthier (personal opinion and probably an overstatement) while all benefit system participants – physicians, nurses, private equity investors, drug companies, etc - just like Andrew Dreyfus observed. This helps explain why we enjoy more healthcare spending year over year, while failing to enjoy improved outcomes as measured by increased longevity.

Medical procedure approvals. Let's turn now to a case study of spinal fusion surgery research and information dissemination to see how the Tyranny of the few can affect the well being of the Common. This comes from research published in Scientific

⁴⁷ Robert Pearl, Private Equity And The Monopolization Of Medical Care, Forbes, Feb 20, 2023

⁴⁸ Association of Private Equity Acquisition of Physician Practices With Changes in Health Care Spending and Utilization, JAMA, Sept 2, 2022.

⁴⁹ Discussion with Jane Zhu, co-author of the JAMA study and assistant professor of medicine at Oregon Health & Safety University https://www.opb.org/article/2022/09/16/what-happens-to-healthcare-spending-and-use-under-private-equity-ownership/

American⁵⁰ by two researchers, Sanjaya Kumar, Chief Medical Officer at Quantros, a healthcare analytics company, and David Nash, dean of the Jefferson School of Population Health at Thomas Jefferson University.

We'll start in the 1990s when the Federal Agency for Health Care Policy and Research (now the Agency for Healthcare Research and Quality) released findings from a five-year investigation of the effectiveness of various treatments for low back pain. Here's Kumar and Nash's summary from their Scientific American article:

Between 1989 and 1994, an interdisciplinary Back Pain Patient Outcomes Assessment Team (BOAT) at the University of Washington Medical School in Seattle set out to determine what treatment strategies work best and for whom. Led by back expert Richard A. Deyo, MD, MPH, the team included orthopedic surgeons, primary-care physicians, physical therapists, epidemiologists and economists. Together, they examined the relative value of various diagnostic tests and surgical procedures.

They conducted a comprehensive review of clinical literature on back pain. They exhaustively examined variations in the rates at which different procedures were being used to diagnose and treat back pain. Their chief finding was deeply disturbing: what physicians thought worked well for treating low back pain doesn't. The implication was that a great many standard interventions for low back pain may not be justified. And that was immensely threatening to physicians, especially surgeons who perform back operations for a living.

Among the researchers' specific findings: no evidence shows that spinal-fusion surgery is superior to other surgical procedures for common spine problems, and such surgery leads to more complications, longer hospital stays and higher hospital charges than other types of back surgery.

Disgruntled orthopedic surgeons and neurosurgeons reacted vigorously to the researchers' conclusion that not enough scientific evidence exists to support commonly performed back operations. The surgeons joined with Congressional critics of the Clinton health plan to attack federal funding for such research and for the agency that sponsored it. Consequently, the Agency for Healthcare Policy and Research had its budget for evaluative research slashed drastically.

The back panel's guidelines were published in 1994. Since then, even though there are still no rigorous, independently funded clinical trials showing that back

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⁵⁰ Kumar and Nash, 'Myth: There is a high degree of scientific certainty in modern medicine', Scientific American, March 25, 2011.

surgery is superior to less invasive treatments, surgeons continue to perform a great many spinal fusions. The number increased from about 100,000 in 1997 to 303,000 in 2006.

In 2023, twelve years after Kumar and Nash's Scientific American article, I searched for rigorous, independently funded clinical studies on back surgery. The most recent available was a 2018 summary of the evidence about spinal fusion surgery. Those researchers concluded "We found no high-quality systematic reviews and the risk of bias of the randomized controlled trials in the reviews was generally high." ⁵¹

I also googled 'number of spinal fusion surgeries per year' and learned from various sources, that we in the US experienced 500,000 in 2011 and 1.3 million in 2021, though that later number may include a wider definition. ⁵² These procedures cost about \$50,000 each for an annual national total of perhaps \$68 billion.⁵³

Since the Baylor – Dallas School System initial foray into health insurance, medical providers, suppliers, financiers and others have made Small Decisions for their own financial benefit. Many have harmed The Commons. That's unethical in the classic Utilitarian context.

How should an ethical broker introduce and discuss these and similar issues with their clients? We'll address that in Chapter 3.

⁵¹ Harris, et al, Lumbar spine fusion, what is the evidence? Internal Medicine Journal, Dec 5, 2018

⁵² iData Research 8/16/23

⁵³ Cost of spinal fusion surgery in the 30 biggest US cities, Becker's Spine Review, Carly Behm, Feb 21, 2022 https://www.beckersspine.com/spine/53684-cost-of-lumbar-spinal-fusion-in-the-30-biggest-us-cities.html . Boston's cost was \$50,150

Chapter 3: Ethical Commercial Health Insurance Advising Today

This chapter proposes an educational program to protect patients / clients from some downside Small Decision risks. It is designed to help brokers provide the greatest good for the greatest number of their clients – ethical, per our Utilitarian friends – without providing any medical advice.

This program **doesn't provide any medical advice** or address *all* problems created by the Split between healthcare finance and service delivery. Instead, it focuses narrowly on suggesting an education program to protect people against overdiagnosis, overtreatment and low quality care.

We'll present several educational modules for brokers to use in their client education programs. These address the ethical issues initially posed in the Introduction, page 3, above. Each module makes one key point and teaches employees one key question to ask his or her own physician(s).

These modules are specifically designed to do some or all of these three things:

- First, highlight for you, the broker, some healthcare system inefficiencies. These modules review some of the information presented previously in this text.
- Second, provide you, the broker, with modules to use in your client education program.
- Third, stimulate you, the broker, about new forms of client education.

These modules are formatted as question-and-answer conservations between a somewhat skeptical patient and a narrator / teacher. Each contains an exposition or introductory statement of the problem, then a series of questions in blue to lead the reader / student through the thought process. **They do not contain any medical advice.**

I'll first provide a summary and overview of these modules with references, Then the actual modules themselves.

Module 1: Understanding Medical Claims. This module helped people know which statistics are meaningful to them when buying medications, or when considering a medical test, therapy or procedure. This is important because people often get confused about medical claims. This module helps people compare the benefits and harms of a particular medication, test, or therapy.

References:

http://www.businessweek.com/stories/2008-01-16/do-cholesterol-drugs-do-any-good

Module 2: How to Choose a Hospital. The hospital's track record of treating patients with your medical condition is the single best indicator of your likely outcome of a hospitalization. Other indicators - technology, famous surgeons, teaching hospital vs. community hospital - do not predict your outcomes as well.

References:

http://www.medicare.gov/hospitalcompare/

http://www.bloomberg.com/news/2011-02-16/doctors-need-1-600-robot-aided-prostate-surgeries-for-skills-study-finds.html

http://www.medpagetoday.com/MeetingCoverage/ASCOGU/24908

Module 3: How to Choose a Specialist. The single best indicator of a specialist's results for a particular patient is his/her track record with other, similar patients. Unfortunately, we generally have poor public information about outcomes by specialist. Some specialists, however, may keep their own records. A wise consumer can ask. Absent that information, the next best indicator of a specialist's results is the number of patients he/she has treated. In medicine, patient outcomes often (but not always!) correlate with the number of times a specialist has treated similar patients.

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http://www.amazon.com/Redefining-Health-Care-Value-Based-Competition/dp/1591397782/ref=sr 1 1?ie=UTF8&qid=1329171962&sr=8-1

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Module 4: Understanding Annual Physicals. People can use their annual physicals in one of two different fashions. Some choose to have lots of tests and to watch as their test results change over time. Others choose to spend their annual physical time primarily talking with their physician. There are advantages and disadvantages of both. The most relevant factor: how comfortable both the patient and the physician feel with the use of their annual physical time together.

References:

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http://www.nytimes.com/2003/08/12/health/annual-physical-checkup-may-be-an-empty-ritual.html?pagewanted=all&src=pm

Module 5: NNTs. The Number Needed to Treat tells how many people need to take a medication or have a test, procedure or therapy for 1 person to benefit. Patients and physicians who know NNT data can answer two key questions. First, how well does this medical treatment work? Second, which medical treatment works best? The lower the NNT, the better the medical treatment works.

References:

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http://www.nejm.org/doi/full/10.1056/NEJMoa0807646

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Module #1: Understanding Medical Claims

This module shows employees which medical claims are meaningful and which types of medical data to believe.

Employees who know this material will more likely make wise medical decisions – in other words, choose medical care that can benefit them. Employees who do not know this material will more likely based their medical decisions on the wrong information, often to their financial or health detriment.

Introductory Statement of the Problem:

Sometimes we see ads that claim 'this medication reduces your heart attack risk by 33%' or 'this test reduces breast cancer mortality by 20%'. This Module helps you understand the answers...which is harder than you may think!

An Example

About **3 in 100** folks *with* high cholesterol but *without* heart disease will have a heart attack in the next few years. Statins – cholesterol lowering medications like Lipitor and Crestor – reduce this to about **2 in 100**. **Thus statins prevent about 1 heart attack per 100 patients.**

How many heart attacks do statins prevent? (Yes, it's a trick question.)

Two answers

Answer #1: statins prevent about 1% of heart attacks. In fact, they prevent about 1 heart attack per 100 people who take them.

Answer #2: statins prevent 33% of heart attacks. In fact, they cut the number of heart attacks from about 3 to 2 in 100.

1% or 33%?

1% is based on 100 people who take statins.

3 would have had a heart attack; 2 had heart attacks; 1 benefited

1 = 1% of 100

Where does 33% come from?

33% is based on the number of people who had heart attacks.

3 would have had heart attacks without statins; 2 had heart attacks; 1 avoided it

1 is about 33% of 3!

I'm confused!

We can make up lots of different numbers. Here's an easy way to discover the most important number for *most* people. Pose this question to your doctor:

Out of 100 people like me who take this medication, how many will avoid a first heart attack? You can also ask about screening tests, other medications, surgical procedures, therapies, etc.

Ask in exactly this form!

What about the answer?

Be sure to get your answer in the same form.

For example:

1 out of 100 who take this medication will avoid a heart attack or 15 out of 100 who have this screening test will avoid dying of cancer Answers like 'about a third' or '40 – 50%' may measure other things and confuse you!

Why are there so many different numbers?

Lies, damn lies and statistics

Sometimes researchers and reporters themselves wonder how to report medical claims:

Should they quote *percentages* or *absolute numbers*? Should they show *bigger numbers* to generate more discussion or *smaller numbers* to be conservative?

Sometimes corporate marketers use numbers to promote their products. Beware!

A 33% reduction sounds bigger than a 1% reduction.

Here's an analogy to help you.

The lottery ticket analogy

Would you buy a second lottery ticket?

Consider two statements:

#1: If you buy a second lottery ticket, you double your chance of winning. Your chances of winning increase by 100%

#2: If you buy a second lottery ticket, you increase your chance of winning by about 1 in one million...or by .000001%

Both statements are **true**. But ask yourself:

If I'm *selling* lottery tickets, which would I use? or If I'm *buying* lottery tickets, which would I consider?

The same is true for medicine!

Most medical claims are true, but.....

Some may be *misleading!*

Your problem as an informed medical consumer: **Decide which numbers are meaningful.**

We've tried to simplify all this by suggesting 1 simple question to ask.

What was that question again?

The Question

Out of 100 people like me who take this medication, how many will benefit?

A Rule of Thumb about the answer

If the answer is 80 out of 100 people benefit, then you probably will also.

But if the answer is 5 or fewer, then you may want to consider other options.

Click here for The Bonus Question

Once you learn how many out of 100 benefit, you can follow up with how many out of 100 are harmed?

Then – and only then – can you determine if the medical intervention is more beneficial than harmful, or more harmful than beneficial!

Make sure your harm question is answered like this:

x out of 100 who take this medication are harmed by it.

Your Homework

The next time someone says 'this is a good medication' or 'this test reduces your risk', ask

Out of 100 people who have it, how many benefit?

You may be surprised by the answers!

Module #2: How to choose a hospital

Choosing the best hospital for your care can improve your chances of enjoying a good outcome. But choosing the wrong hospital may increase your risk of being harmed.

People choose hospitals based on many different factors: geography, reputation, referrals, friend's experiences, etc. Some of these factors are relevant to patient outcomes while others are not.

We suggest in this module one particular criterion for choosing a hospital. Consider whether or not you find it useful. And consider whether or not your clients might.

Introductory Statement of the Problem

Hospitals differ!

Choosing wisely can improve your health greatly; Choosing poorly may harm you.

This Module helps you choose your hospital wisely.

How would a wise consumer choose a hospital?

Outcomes for people like you

We suggest choosing hospitals based on outcomes for people like you.

...outcomes for people like me...

What are outcomes?

Outcomes mean 'how well patients did'.

Some good outcomes:

Successful surgery
Complete patient recovery
Timely discharge without readmission

Some bad outcomes:

Patient infections Readmission shortly after discharge Death

Who are people like you?

'People like you' are people who have your medical condition.

For example:

If you have kidney failure, 'people like you' also have kidney failure If you have liver disease, 'people like you' also have liver disease.

Who are **not** people like you?

People hospitalized for a different medical problem from you

Even if they're your age, occupation, socio-economic status or demographic group.

Why does this matter?

A hospital might be excellent at treating one kind of patient but relatively poor at treating another., great at treating orthopedic patients for example, but poor at psychiatric.

What you really care about is how well the hospital treats <u>you</u> – not how well they treat people who are *different* from you.

For example

Here are the 4 Massachusetts hospitals with the lowest *heart failure* mortality rates from 2006 - 2009:⁵⁴

#1: Southcoast Hospital, Fall River (the best)

#2: Brigham and Women's Hospital, Boston

#3: Ana Jaques Hospital, Newburyport

#4: Faulkner Hospital, Boston

But here are the 4 Massachusetts hospitals with the lowest *pneumonia* mortality rates:

#1: Norwood Hospital, Norwood (the best)

#2: Falmouth Hospital, Falmouth

#3: Boston Medical Center, Boston

#4: Mt Auburn Hospital, Cambridge

Different hospitals!

Why not just choose a hospital for its technology?

Great technologies run by poor operators may cause more harm than good.

⁵⁴ This is an historical example for educational purposes only, to avoid providing any current, specific medical advice. These are risk adjusted mortality rates, as reported by the US Dept of Health and Human Services for Medicare patients between June 1, 2006 and July 31, 2009. Risk adjustment discounts illness severity differences among patients, so avoids penalizing some hospitals for treating sicker patients.

For example, doctors who perform robotic-assisted prostate cancer surgery aren't proficient and able to remove all the malignant cells until they have done the procedure hundreds of times.

You don't want to be patient #15, or #38 or #72!

What about a famous surgeon?

The surgeon is only one member of your medical team. Other members:

Operating room nurses
Recovery nurses
Patient floor nurses
Residents
The discharge team
The post-discharge team ... and more

All need to work together for the best patient outcomes.

A **brilliant surgeon** with a **poor post-discharge team** may generate poorer outcomes than an **average surgeon** with an **excellent team**.

The only way to know how well your medical team works together: **determine outcomes for patients like you.**

Remember...

Medicine is a Team Sport

You need the entire team - people, processes, and technologies - working together on your behalf.

Choosing a hospital based only on a *component* of that team -- the surgeon, medical school affiliation, technology or other - is unwise.

It's analogous to betting on a football team only because of its quarterback; A winning football team also needs a good defense, coach, receivers, kicker etc.

A medical team with lots of experience working together may outperform a set of outstanding individual components....just like in football.

That's why we recommend choosing hospitals based on *outcomes for people like you*. That tells you how well the medical team works together.

How can I learn outcomes for people like me?

Ask your doctor!

When your doctor refers you, ask **what are their outcomes for people like me?**... and explain why you're asking.

Your doctor will probably welcome the question and opportunity to discuss with you.

But Remember:

You'll probably need to lead the discussion since your doctor's busy and most people don't ask!

Module #3: How to choose a specialist

Some 70%+ of all physicians in this country are specialists.

We have, today, specialists for virtually every body part, from brain surgeons and psychiatrists for the head to podiatrists and orthopedic surgeons for the feet. Indeed, when we have a medical problem, we can often choose among many different physicians within the same specialty. For example, if you have a coronary problem, you may have a choice of several different cardiologists.

How can a wise medical consumer decide? We offer one criterion below. As you read this, consider if you find it useful yourself. And consider whether or not your clients might also find it useful.

Introductory Statement of the Problem

Specialists differ!

(and not just by specialty)

Some have warm, wonderful bedside manners; Others are quieter but excellent diagnosticians.

Some perform lots of tests;

Others test less.

Some embrace new medications and technologies quickly; Others adapt to change more slowly.

This module focuses on one simple question:

How should a wise consumer choose?

Outcomes for people like you

We suggest choosing specialists based on their *outcomes for people like you.* (Sound familiar?)

In the last Module, we suggested choosing *hospitals* based on their outcomes for people like you ...

We make the same suggestion about choosing specialists.

What are outcomes again?

Outcomes mean 'how well patients do'

Some outcome questions:

How quickly do patients like you *return to their prior health status*? How often does surgery *help* patients like you? How often does surgery *harm* patients like you?

outcomes for people like you...

Who are people like me?

People like you have your medical condition.

For example, if you have minor back pain - that only affects your tennis game - people like you also have minor back pain. But if you have major, chronic back pain that affects your ability to walk, people like you also do.

You want to choose a doctor who's really good at treating patients like you... not patients who are different from you.

How can I get outcome information?

Unfortunately... We don't have very good information about patient outcomes by physician. Harvard Business School's Michael Porter put it this way: 'In only a few isolated disease areas - notably cardiac surgery, organ transplants, cystic fibrosis and kidney dialysis - is broad-based results information available.'

Porter goes on to say

'most physicians lack any objective evidence of whether their results are average, above average, or below average.'

So what can I do?

Ask your specialist two questions

Question #1: What *outcome* information do you have about your own patients?

Be sure to use the word outcome.

Some specialists may keep detailed records and will share them with prospective patients if asked.

Beware of Porter's warning about doctor's impressions of their own competence: 'it is human nature for most people to believe that they are above average, which cannot be true' (Some specialists *must* be below average.)

The second question

Question #2

How many patients like me have you treated?

Many studies suggest that *the more experience* a doctor has treating patients like you, *the better the outcomes*.

In other words, experience treating patients like you is often the most important indicator of your likely outcome.

The Bonus question

When your PCP gives you a referral...Ask the same 2 questions!

What are this specialist's *outcomes for patients like me*? and

How many *patients like me* has this specialist treated?

Your questions may surprise your PCP but...

they may help him/her make the best referrals to you.

The moral of this story

Ask good questions

Whenever you consider a specialist for medical care, ask the *outcome* question (what are your outcomes for patients like me)

and the *quantity* question (how many patients like me have you treated?)

The answers may guide you to better care... and better health.

Module #4: Understanding Annual Physicals

Some 60 million Americans get annual physicals.

Many people – employees, patients, consumers and physicians - believe that annual physicals are necessary for good health. But recent evidence suggests that this may not be the case, and that, in fact, some aspects of the annual physical may actually cause more harm than good.

This module asks some fundamental questions about the annual physical and, in particular, discusses two very different ways that patients can use them.

As you read this, ask yourself which way works best for you and which way have you used annual physicals in the past. Consider also the impact that this discussion might have on your clients.

<u>Introductory Statement of the Problem:</u>

Lots of Americans get annual physicals.

Physicals account for about 8% of all doctor's visits and cost about \$8 billion per year.

But do physicals do any good?

Specifically...Is there any evidence that people who have physicals live longer than people who do not?

Some background

About 60 million Americans get an annual physical, typically consisting of some or all of these tests:

Blood pressure
Heart rate
Respiration rate
Lung function
Complete blood count

Cholesterol
Urinanalysis
Electrocardiogram
Chest X-ray
Stress test ... and often more.

Which are necessary?

We don't know!

In fact, there's no medical board that tells doctors which tests to perform at your annual physical!

Really?

'No major North American health-related organizations recommend the routine annual exams'

Professor Ateev Mehrotra of the University of Pittsburgh Medical School.

Why is that?

Lack of evidence about benefits

In the 1960s and 70s, two large randomized controlled trials were conducted, and both studies showed little positive impact — people who had physicals did not seem to live longer or have less illness than those who did not have physicals.

Dr. Ateev Mehrotra, assistant professor at the University of Pittsburgh School of Medicine, 2007

There's no strong evidence base for the periodic health exam The American College of Physicians, 2010

Current evidence does not support an annual screening physical examination for asymptomatic adults

The Archives of Internal Medicine, 2005

The annual physical gets a thumbs-down from public-health researchers who find no real evidence to support its effectiveness, despite tradition and widespread use.

Dr. Benjamin Brewer, Wall Street Journal, January, 2009

Why do so many physicians give annual physicals?

Because they do

It's what I was taught and it's what patients have been taught to expect
Dr. Barron Lerner, an internist and historian of medicine at Columbia University's College of Physicians and Surgeons

Why pick that fight? Why try to explain 10 years of evidence-based medicine so the patient will understand?

Dr. Stewart Rogers, an internist at Moses Cone Hospital in Greensboro, NC

Patients will think they have not gotten their money's worth if there is no laying on of hands.

Dr. Steven Woolf, professor of family practice at Virginia Commonwealth University

The coverage of the physical is something [insurance] companies do as a result of requests from our customers

Larry Akey, a spokesman for the Health Insurance Association.

But certainly there is some benefit to seeing your doctor regularly!

Yes! Time together helps you and your PCP build a good working relationship.

How you use your time together matters?

Partnering or testing

Annual meetings with your doctor can promote a true partnership between you and your doctor.

Excessive testing, however, may not enhance that partnership and may even harm you.

Testing may harm me?

Maybe...

There's an old adage in medicine: the more you test, the more you find.

Today's medical testing technologies can lead to overdiagnosis or identify 'false positives' --- *indications* that you have a medical problem when, in fact, you *do not*.

But once discovered, doctors and patients often want to *do* something ... more tests, or possibly treatment or medications for a problem that doesn't exist.

'Doing something' may be more harmful than doing nothing.

Says who?

The US Preventive Services Task Force

The USPSTF is part of the Department of Health and Human Services. It conducts scientific evidence reviews of many preventive health care services and develops clinical recommendations.

The USPSTF's recommendations are considered the "gold standard" for clinical preventive services by, among others, the Journal of Family Practice, the New York State Department of Public Health, the Annals of Internal Medicine, United Healthcare, the American Academy of Family Physicians, the Centers for Disease Control and the journal Health Affairs.

What do they recommend?

Some tests can help you...some can harm you...and some are in between. Here's a sample ⁵⁵ (These, as all comments in this text, are listed here for educational purposes only and are not intended as medical advice.)

Screening for High Blood Pressure

The USPSTF **recommends** screening for high blood pressure in people over 18 years old.

Screening for Cardiovascular Disease Risk with Electrocardiography

Recommends **against** screening with resting or exercise electrocardiography (ECG) to prevent cardiovascular disease (CVD) events in asymptomatic adults at low risk of CVD events.

Screening for Chronic Obstructive Pulmonary Disease

Recommends **against** screening for chronic obstructive pulmonary disease in asymptomatic adults.

Screening for Skin Cancer

The USPSTF concludes that the current evidence is **insufficient to assess the balance of benefits and harms** of visual skin examination by a clinician to screen for skin cancer in adolescents and adults.

⁵⁵ You can find more information on the USPSTF websitehttps://www.uspreventiveservicestaskforce.org/uspstf/.

But my doctor recommends all these tests, and more!

How you relate to your PCP matters

Do you partner with your PCP in your own medical decision-making?

If so...discuss with your PCP how best to use your annual meeting time together.

Lots of tests? Lots of discussion? Which tests? Which topics?

The answers

If you discuss these issues thoroughly...

... and you don't *automatically* do what your doctor wants after, perhaps, a short discussion...

then you probably have a good partnership.

And you'll probably make good decisions together.

But...

If you don't have a satisfying discussion...

then you may have the wrong doctor (not necessarily a bad doctor but the wrong doctor *for you*).

Whatever his / her position on testing or annual physicals...

It may not work well for you.

OK - So now give me the bottom line ... are annual physicials good or bad?

That depends on what you and your PCP partner decide together.

(Remember...we aim to *empower* you, not *tell you what to do*. Becoming a wise consumer isn't easy. Good luck)

Module 5 - Introducing NNTs

Physicians often counsel their patients with statements like this: 'this medication is very effective' or 'this test is very reliable'.

A wise patient might respond 'how much better is it than another medication or test?'

We have not, until recently, had a way to compare the effectiveness or reliability of various medications, tests or procedures. But recently some researchers developed a new scale for measuring the effectiveness of tests, medications, procedures and therapies.

The scale is called the Number Needed to Treat or NNT. This tells us how many people need to take a particular medication, or have a test, for one person to benefit.

As you read this module, ask yourself if you have ever been in a situation where you could have used this information. Or indeed, if you have ever asked your doctor which medication works best only to receive ambiguous answers like 'this one is very good, but so is that one. I suggest you try them both to see which you prefer.'

Consider whether or not you find that answer very satisfying. And consider how knowing this information can help you make wiser medical care decisions.

Introductory Statement of the Problem

Many people think that medications, screening tests, surgical procedures or other medical treatments work 100% of the time.

In other words, they think that you take a medication and you get better or

you have a screening test and know if you have cancer.

You may believe this yourself.

It's not true?

Some medical treatments work better than others

Some medications work better than others.

Some screening tests are more reliable than others.

Some therapies and surgeries are more effective than others.

You may have heard people say, for example...

Sleeping pills

'Over-the-counter sleeping pills don't put me to sleep'

In fact, sleeping pills work for some people but not for others.

Our question today:

How can you tell *how well* medications work?

Introducing the Number Needed to Treat (NNT)

The **Number Needed to Treat (NNT)** tells how many people need to take a pill (or have a medical treatment) for 1 person to benefit.

For example

Heart attack prevention

You have to give statins to about 100 people to prevent 1 heart attack.

The Number Needed to Treat with statins is about 100.

or

You have to give the Mediterranean Diet to 23 people to prevent one heart attack.

The NNT of the Mediterranean Diet is about 23.

This comparison tells us that the Mediterranean Diet is about 4x more powerful for preventing heart attacks than statin medications.

Are there Numbers Needed to Treat for lots of procedures?

Some examples

CT lung cancer screening in high-risk smokers to avoid lung cancer death: NNT = 217

High blood pressure medicine for preventing heart problems, over age 60, 1 year: NNT = 100

Lowering salt intake for preventing heart problems after a heart attack or stroke: NNT = 42

Quitting smoking for preventing death or heart attack after a heart attack or stroke: NNT = 8

Hormone replacement therapy for preventing hot flashes: NNT = 3

Vitamin D for preventing bone fractures in elderly folks: NNT = 36

Steroids for toddlers with the croup to help them breath more easily: NNT = 5

MRI compared to X-ray to evaluate chronic lower back pain: NNT = infinite (no benefit found from the MRI)

These estimates come from the website www.TheNNT.com.

What is a good Number Needed to Treat?

We don't have a consensus

Some people think that an NNT of 10 is <u>bad</u>

An NNT of 10 means that 1 out of 10 patients benefit from the treatment, and that 9 out of 10 do not.

Other people think that an NNT of 50 is good

An NNT of 50 means that 1 out of 50 patients benefit from the treatment and that 49 out of 50 do not.

One author - Professor Nortin Hadler of the University of North Carolina - suggests that insurance not pay for any treatment with an NNT of more than 20!

An NNT of 20 means that a treatment is only effective 5% of the time.

How can knowing the Number Needed to Treat help me?

First

You can decide - with your doctor - if a medication, test or therapy is **worthwhile** for you.

An NNT of 2 is probably worthwhile. An NNT of 2000 is probably not.

Second?

You can compare

You may have several treatment options, like statins or dietary changes to prevent a heart attack.

The Number Needed to Treat (NNT) tells you which work best.

The NNT sounds like basic medical literacy

The Number Needed to Treat is a way for doctors and patients to share information

Dr. David Newman, founder of the website TheNNT.com makes this suggestion:

Ask for it. In fact, demand it.

You need to know how much the health interventions you undertake have the potential to help you and which ones matter most.

Concluding thought

Knowing the Number Needed to Treat <u>defines</u> an informed medical consumer

Knowing NNTs = being an informed consumer

Various lists of NNTs exist, from a variety of sources. Discuss them with your doctor.

We hope you use them to become a wise and informed medical consumer.

We could expand on these modules and include many more. But our purpose here was simply to demonstrate the types of educational programs an ethical broker might adopt. This list is neither exhaustive or exclusive.

I hope these modules, and indeed this entire text, helps brokers understand some ethical advisory and educational options available to them. I hope it helps you become a better, more ethical, and more prosperous broker as a result.