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SPECIAL REPORT

Detecting BS in Health Care

By
Lawton R. Burns, PhD
Mark V. Pauly, PhD
Department of Health Care Management
The Wharton School
University of Pennsylvania

Disclosure
This presentation contains no BS. Moreover, it was not composed in any facility manufacturing BS.

The Problem

In the past several months, we have observed several notable signs of deceptive, misleading, unsubstantiated, and foolish statements—what we will call "BS" — in the health care industry. These new signs include fraudulently marketed products from Theranos[1] and IBM Watson,[2] and a recent statement by the CEO of One Medical that his firm aims to take out 10 percent of U.S. health care spending — something no one has ever done (not even the Federal Government).[3] These follow closely on the heels of other likely BS, including claims that the proposed CVS-Aetna merger will turn your local pharmacy into a neighborhood "health care hub."[4]

To be sure, BS is not just a recent phenomenon. Charles Dickens' novella, *A Christmas Carol* (1843), includes the memorable line by Ebenezer Scrooge, "Bah, Humbug," as he expressed his feelings that the holiday season was a hoax. The word "humbug" is actually older English for BS. Other great English synonyms for BS are shown to the right. Each term has an interesting origin, some going back to the late Middle Ages. "Some suggest (probably incorrectly) that the root word in BS — "bull" — began as a contemptuous reference to Papal edicts or "bulls." Most of the terms date from the 18th and 19th centuries. They all essentially mean "nonsense." We prefer BS, because it is a lot easier to say, more frank, and conveys more Scrooge-like disdain.

Moreover, BS can be found anywhere. T.S. Eliot penned an early poem entitled, "The Triumph of Bullshit." The author Ernest Hemingway was once asked, "Is there one quality needed to be a good writer, above all others?" He replied, "Yes, a built-in, shock-proof, crap detector." During the 1960s, author Neil Postman embraced Hemingway's message and developed a *taxonomy of B.S.* that included: pomposity, fanaticism, inanity, and ignorance presented in the cloak of authority. In a lively 1969 speech to the National Council of Teachers of English entitled, "Bullshit and the Art of Crap Detection,"[5] Postman said:

> "As I see it, the best thing that schools can do for kids is to help them learn how to distinguish useful talk from bullshit ... [I] would argue that helping kids to activate their crap-detectors should take precedence over any other legitimate educational aim ... Every day, in almost every way, people are exposed to more bullshit than it is healthy for them to endure ..."

And this is long before the advent of political strategists on cable news.

BS has also been called out within science. The astrophysicist Carl Sagan, host of "Cosmos" on PBS television, developed a "baloney detection kit" to root out bogus science.[6] Some of the tools in his kit included:

- seek independent confirmation of the "facts"
- encourage debate on the evidence
- "authority" carries no weight in the argument
- consider multiple working hypotheses
- insist on a complete chain of evidence

A Stanford researcher reported that the vast majority of scientific findings published in the medical literature may be suspect, since they cannot be replicated.[7] Academic research articles have been published on detecting BS.[8] Academic courses are now taught at major universities on detecting BS,[9] and there are entire books on the subject.[10]

Why is there a BS problem?

Why does this kind of behavior occur? While flat-out dishonesty for short term financial gains is an obvious answer, a more common explanation is the need to say something positive when there is nothing positive to say.

The problem is acute in health care. Suppose you are faced with the assignment of solving the ageless problem in health care — the dilemma of reducing costs while simultaneously raising quality. If you were knowledgeable to begin with or did some research, you would find that there is no easy solution. You could respond with a message of failure or a discussion of inevitable tradeoffs. But you could also pick an idea with some internal plausibility and political appeal, fashion some careful but conditional language, and announce the launch of your program. Of course you will add that it will take a number of years before success appears, but you and your experts will argue for the idea in concept, with the details to be worked out later.

At minimum, unqualified acceptance of such proposed ideas, even (and especially) by apparently qualified people, will waste resources that could have been used to make the best of what we currently have, and will lead to enormous frustration for your audience of politicians and outraged critics of the current system who want answers and want them now. The incentives to generate BS are not likely to diminish — if anything, rising spending and stagnant health outcomes strengthen them — so it is all the more important to have an accurate and fast way to detect and deter BS in health care.

Following both Peter Pronovost[11] and Atul Gawande,[12] we call for a "BS Checklist Manifesto" to highlight the major forms of BS in health care today. Here we present our Top 10 BS candidates, in both pictures and words. First we present each picture, untitled and without text, thereby inviting readers to discern what the BS message is and engage them in the BS detection process. Then we offer an explanation of what the picture conveys. This will help the reader become a more skilled "BS Hunter." We reserve the option to expound further as we step in more BS in the future. Here's #1 of our top 10 forms of BS in health care:

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Detecting BS in Health Care
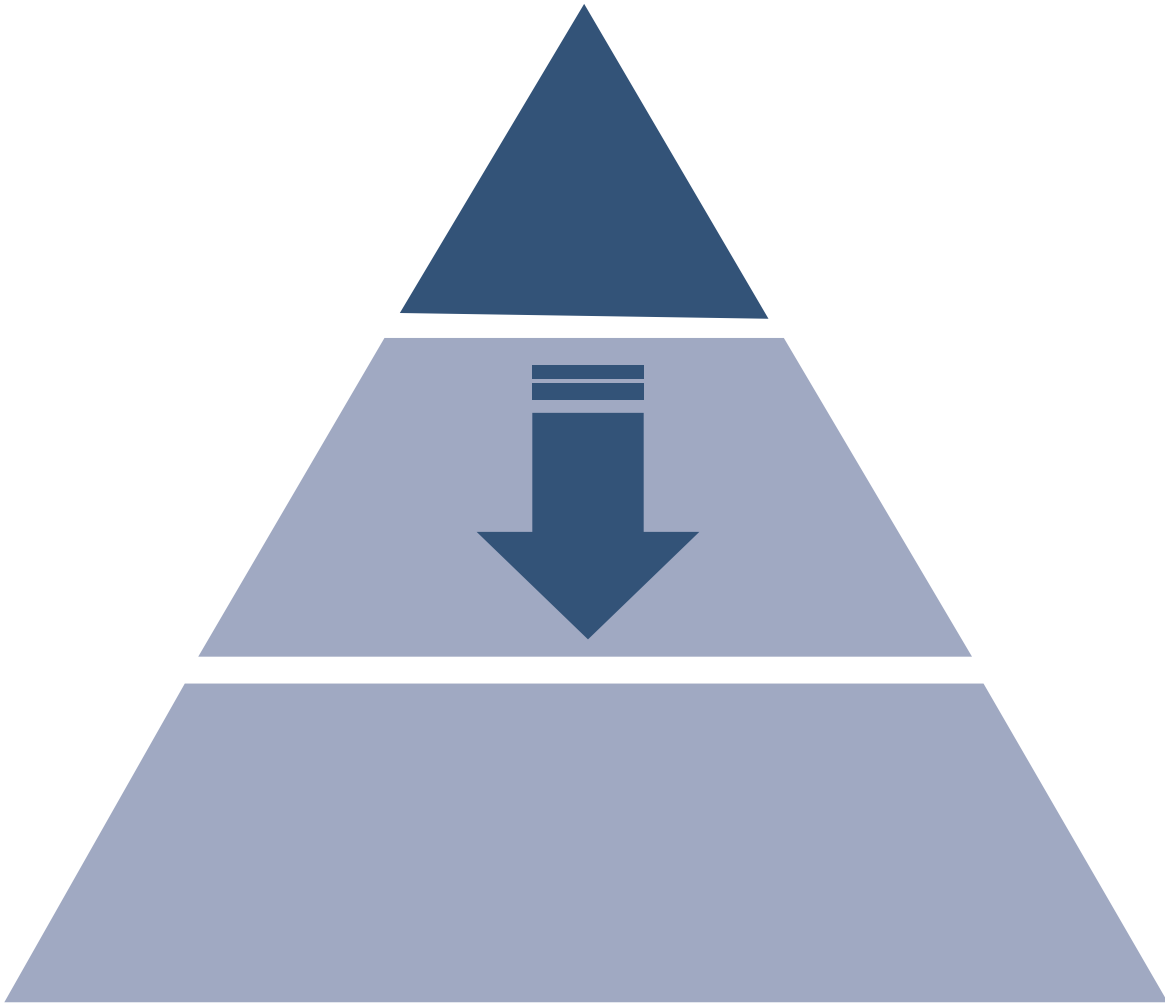
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## Top-Down Solutions

Top-down
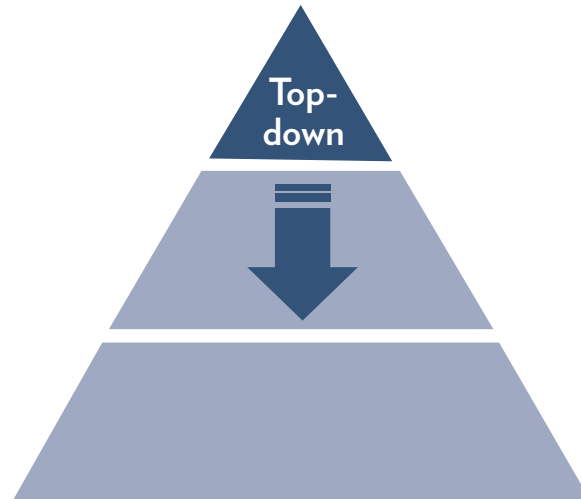
Most proposed solutions to organizational problems are formulated by the CEO or VP of Strategic Planning, or someone else delegated to provide a vision, and then pushed down the hierarchy for others to implement – often with minimal input, guidance, or revision by those responsible for carrying out the solution. For years, we have known that such an approach usually fails.

And yet this approach is pursued widely in health care. We have typically described it in terms of the disconnect between the "Front Office" (C-suite), which decides what to do and what to change, and the "Front Line" (doctors and nurses) who are supposed to carry out the plans. We know that if clinicians are not engaged, the effort is likely to fail. And yet popular efforts to foster capitation and other alternative payment models are part of the transformation top management is supposed to engineer. Plans to engage physicians have stalled as (a) most physicians do not want these payment methods, and (b) their organizations prefer to still pay them fee-for-service, however the payment to the system is calculated. Links, either logical or social, between the new incentives at the top and the needed behavior changes in those down the chain, have not yet been invented, and are left to befuddled lower-level managers and provider committees to work out as best they can.

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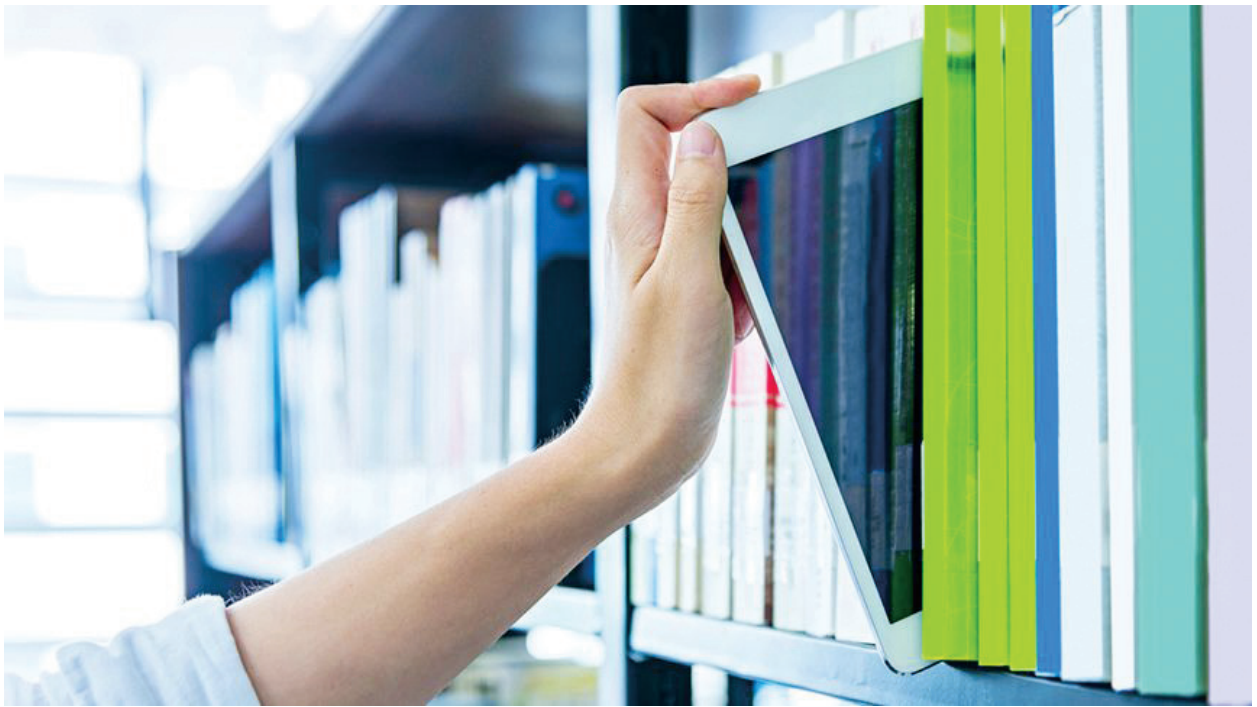
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One-size-fits-all, off-the-shelf

Many of the "solutions" offered to health care providers are developed by consulting firms who use a "one size fits all," "off the shelf" design (and slide show) that requires little customization (not all consulting firms do this, thankfully). Of course, the consultants often developed the solution in another industry and, having saturated that, look for another vertical to sell it to. Modification for any special features of the health care sector, like the need to give authority to physicians and nurses and the special risks of errors, would require specialized knowledge consultants often do not have and so are not made. Health care is often the next hapless victim of the latest model which, at best, has been found to work in some entirely different industry and sometimes has not been tested at all. Of course, consultants rarely bother to consider the maxim that "health care is different" or that "all health care is local," so why bother to customize? And how would you make good adaptations if you tried to customize? Needless to say, if health care is different (e.g., due to the well-noted maxim of market failure), then the solutions imported from elsewhere are likely to fail.

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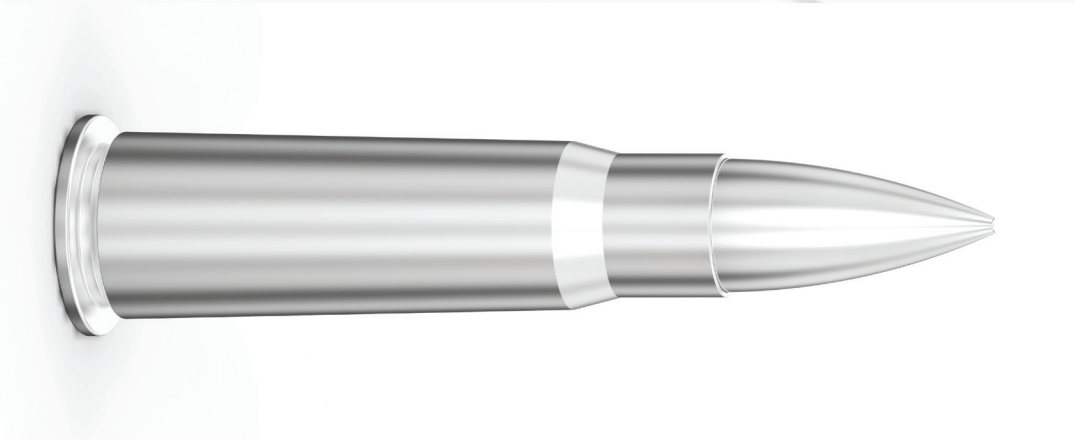
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Silver Bullet Prescription

The "solutions" that get placed on those below to carry out often have two characteristics. First, they are told that this solution is the "silver bullet" that will cure all of your ills. Second, they are told it has already been decided that it is good for you: you should be compliant and take your medicine.

Recent illustrations abound in health care. The electronic medical record (EMR) was pushed by the government in 2009 legislation. The EMR was supposed to cut costs and improve quality; it actually raised costs and only mildly touched a few quality dimensions. Other silver bullets include "integration" and, more recently, "coordination." Edward Lehman published an interesting text, *Coordinating Health Care*, in 1975; not much progress has been made since then. Care coordination is widely considered the leading strategy for achieving savings under new payment models, but it still lacks an evidence base. Let the BS roll.

Rather than a silver bullet, perhaps the best we can hope for is a lot of "bronze buckshot." each of which tackles a smaller piece of the problem. There are no magic bullets in national health care reform; instead, incrementalism rules, based on bottom-up improvement in services.

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Follow the Guru

Top-down solutions are also abetted by the presence of a visionary Guru with a mystical revelation about what needs to be done. In overall corporate America, Michael Hammer ("restructuring and reengineering") comes to mind. Perhaps he comes to mind to all the employees who got downsized in restructuring efforts. In health care, it may be Michael Porter or Don Berwick (although there are other aspirants for the mantle).

In past years, Porter has championed value-based competition, while Berwick has popularized the Triple Aim. "Value" (quality divided by cost) is hard to compute; as the late Uwe Reinhardt observed, we don't know what health care really costs and then we divide it into a broad "vector" of quality statistics, which either individually or taken together do not measure what patients value or how much they value it. Compounding the BS is that the workers in charge of numerator and denominator in the value equation may not naturally cooperate. This means that any effort to "improve value" requires two different solutions by different teams of people. But why worry about these details?

Berwick's Triple Aim has been endorsed by the American Hospital Association, many private insurers, and baked into the metrics for assessing ACOs. It really doesn't matter that most people in the industry cannot accurately define what they mean by the numerator, the denominator, or the ratio, let alone identify the three aims. Most people still confuse "health" (really health status, which is what the population health angle of the Triple Aim examines) with "health care." But according to Obi-wan, the "force is strong," as is the lure of a Guru.

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Disruption

Everyone's favorite Guru, Clayton Christensen, popularized the term "disruptive innovation." Such innovation involves lower-cost and lower-quality products/services that permeate the underserved (or non-served) market and then migrate upstream to take share away from incumbents who ignore the upstarts. This is a legitimate and important story of how some industries evolved, and sometimes to the apparent benefit of consumers (copiers) but sometimes not (airline travel). But how does it apply to health care? Christensen himself is not even sure, even after writing about it for roughly two decades. In 2017, he issued a report titled, "How Disruptive Innovation Can *Finally* Revolutionize Healthcare" [emphasis added].

Lots of things were supposed to have disrupted the health care industry. Christensen identified retail clinics, ambulatory surgery centers (ASCs), and single specialty hospitals as key exemplars. Unfortunately, retail clinic growth has stalled, physicians have increasingly sold their ASCs to hospitals (who also developed their own), and the Government outlawed the single specialty hospitals in 2010. Maybe the Federal Government is the single biggest disruptor to the health care industry, though not necessarily in a good way.

And that is the heart of the issue. So far no model offering "much cheaper, almost-but-not-quite-as-good quality" care has taken over in this sector. Narrow network health plans are the most plausible current candidate, but buyers of them are far from satisfied and the plans themselves operate under the threat of backlash, especially for how they treat out-of-network use. Likewise, high-deductible health plans have been spreading, but not without criticism. In neither case have these innovations yet transformed the industry as a whole. The gold standard model of coordinated and kindly care does not know what to do with increasing patient cost-sharing or limits on access to the best providers in town. Time will tell.
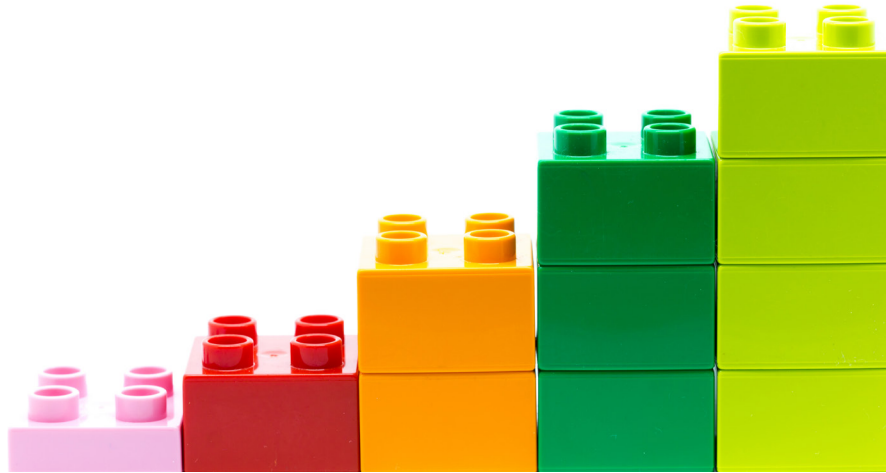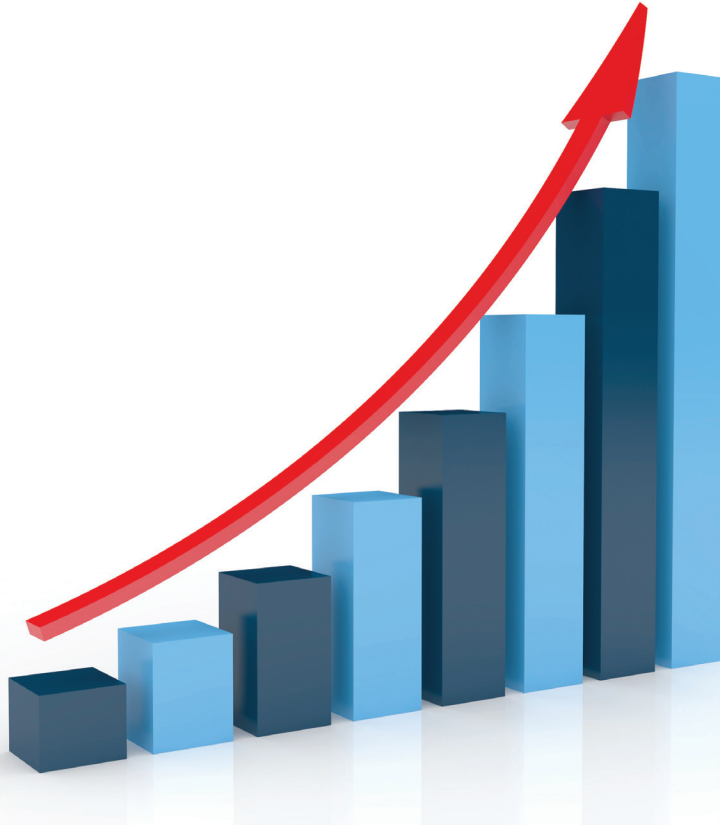
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Stage Models

We are not sure exactly why, but health care consultants, executives, and policymakers are very fond of "stage models" — planned endeavors in which things build upon prior efforts in linear progression over time. Maybe it is because, by the time proponents move on to another opportunity, the organization will still be in the first or second stage and so the reckoning of whether goals will finally be achieved can be in the future. During the 1990s, consultants proposed four stages through which health markets would evolve from fragmented competition to consolidated delivery systems. During the last few years, we witnessed three stages of "meaningful use" for electronic medical records as well as four stages in the movement to value. Such stages are depicted as in the accompanying chart — with very orderly and linear change (all upward moving, of course).

Proponents seem undeterred by the evidence that these models are often simplistic and wrong, just as the stage-based classic models of economic development have failed to be followed by successful economies like Singapore. Moreover, change is messy, with early results going south, not north, into the "valley of despair," one thing not necessarily leading to another, the need sometimes to double back, and the key role of unpredictable jumps that bypass the planned route and find a shortcut. But how do you put all of that into a powerpoint slide that motivates people to go along with the change?

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
			Investment Project ROI								
			Valuation								
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Valuation	$108.181	$106.141	$103.682	$99.740	$94.035	$86.245	$76.291	$65.273	$53.079	$39.581	$0.000
Cum NPV Net ATax CF	($62.48)	($50.20)	($38.93)	($27.86)	($16.95)	($6.22)	$4.21	$13.63	$22.14	$29.82	$36.77
NPV Net ATax CF	($62.48)	$12.29	$11.26	$11.08	$10.90	$10.74	$10.42	$9.42	$8.51	$7.69	$6.95
Rate of Return											
NPV	$45.70										
IRR	22.23%										
Return on Capital	42.85%										
Asset Accounting											
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Book Value (Start)		$50.00	$46.00	$42.00	$38.00	$34.00	$30.00	$26.00	$22.00	$18.00	$14.00
Depreciation		$4.00	$4.00	$4.00	$4.00	$4.00	$4.00	$4.00	$4.00	$4.00	$4.00
Book Value (End)	$50.00	$46.00	$42.00	$38.00	$34.00	$30.00	$26.00	$22.00	$18.00	$14.00	$10.00
Average Capital		$48.00	$44.00	$40.00	$36.00	$32.00	$28.00	$24.00	$20.00	$16.00	$12.00
Future Tail											
Tail Discount Rate Yr											20%
Tail Growth Rate Yr											0.0%
Tail Future Value											$0.00

7

Excel Sheet Planning

		Investment Project ROI									
		Valuation									
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Valuation	$108.181	$106.141	$103.682	$99.740	$94.035	$86.245	$76.291	$65.273	$53.079	$39.581	$0.000
Cum NPV Net ATax CF	($62.48)	($50.20)	($38.93)	($27.86)	($16.95)	($6.22)	$4.21	$13.63	$22.14	$29.82	$36.77
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Rate of Return											
NPV	$45.70										
IRR	22.23%										
Return on Capital	42.85%										
Asset Accounting											
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Book Value (Start)		$50.00	$46.00	$42.00	$38.00	$34.00	$30.00	$26.00	$22.00	$18.00	$14.00
Depreciation		$4.00	$4.00	$4.00	$4.00	$4.00	$4.00	$4.00	$4.00	$4.00	$4.00
Book Value (End)	$50.00	$46.00	$42.00	$38.00	$34.00	$30.00	$26.00	$22.00	$18.00	$14.00	$10.00
Average Capital		$48.00	$44.00	$40.00	$36.00	$32.00	$28.00	$24.00	$20.00	$16.00	$12.00
Future Tail											
Tail Discount Rate Yr											20%
Tail Growth Rate Yr											0.0%
Tail Future Value											$0.00

There is a common tendency by executives and consultants to express strategic plans in terms of excel sheets — all replete with many apparently precise numbers, rosy upward-sloping growth projections, and forecasted savings into the future. This approach characterizes many government forecasts of health care spending. Recall that Medicare was only supposed to cost $12 billion by 1990 (instead of the actual $110 billion), or that ACOs were going to save us big money (instead of the small potatoes now reported). Indeed, the ACA has ended up costing less than expected, but only because some states passed on Medicaid, and enrollments in subsidized exchanges have been lower than expected.

Unfortunately, nearly all forecasts are wrong or only randomly right, and (really) wrong the farther out the forecast. Even worse, expressing plans in terms of excel sheets leads the "advice consumers" to have a false sense of precision and the "advice suppliers" to forget the assumptions behind the forecasts and to check critical thinking at the door. Has anyone thought about how motivating an excel sheet is to the rank-and-file?

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Bandwagons

Every industry is prone to "collective movements" — i.e., everyone jumps on the fashionable bandwagon. This is often crowd behavior driven by fear and uncertainty; in such cases, people imitate what others are doing as a protective device. Health care has suffered from this behavior for decades. There have been four hospital merger waves since the 1960s, most of them bandwagon movements. There have also been fits of vertical integration, corporate diversification, and other corporate strategies tried out in health care. Such movements breed on contagion — getting the bug that has infected your competitor. No one has bothered to consider that innovations adopted for bandwagon reasons and pushed during bandwagon movements rarely improve corporate performance. Ideas do not have to be evidence-based to diffuse.
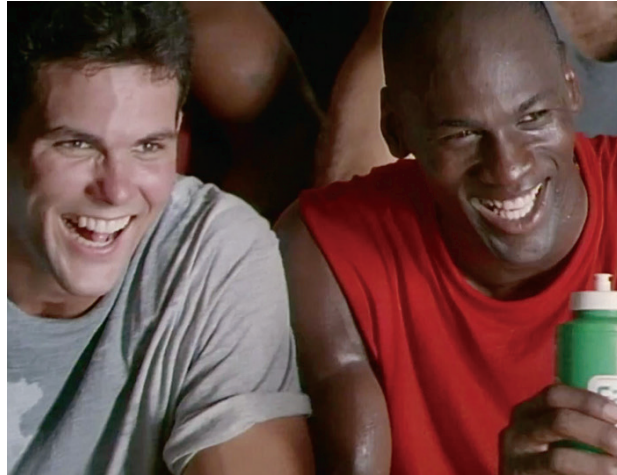
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Be Like Mike

Consultants and CEOs have long encouraged companies to adopt "best practices" allegedly demonstrated by peers. This movement began in earnest with Peters and Waterman's In Search of Excellence (1982). The belief is that if you do the same X and Y as this successful company or leader, you too can "be like Mike" (Michael Jordan).

This has shown up in health care with everyone suggesting that hospitals strive to be like Kaiser or Geisinger. In 2009, President Obama encouraged hospitals to emulate the Cleveland Clinic and Mayo Clinic. Of course, no one bothered to ask whether the success of these organizations was due to local circumstances, whether it could be bottled, and whether anyone else really had the chops to do it. They did not ask whether the apparent success extended to all the goals that matter; Kaiser has experienced the same growth rate in spending as the rest of the medical sector. Nor did they ask whether any observed success (compared to the rest of health care) by Mayo or the Cleveland Clinic was sustainable — which apparently is not always the case.
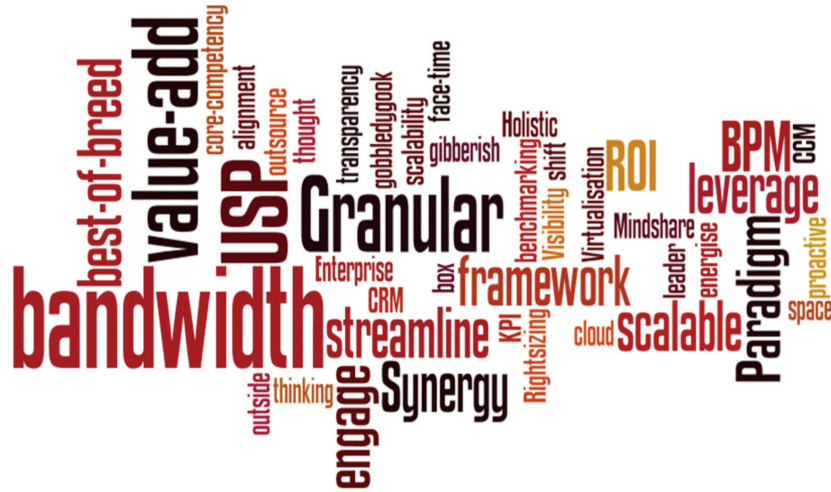
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Detecting BS in Health Care
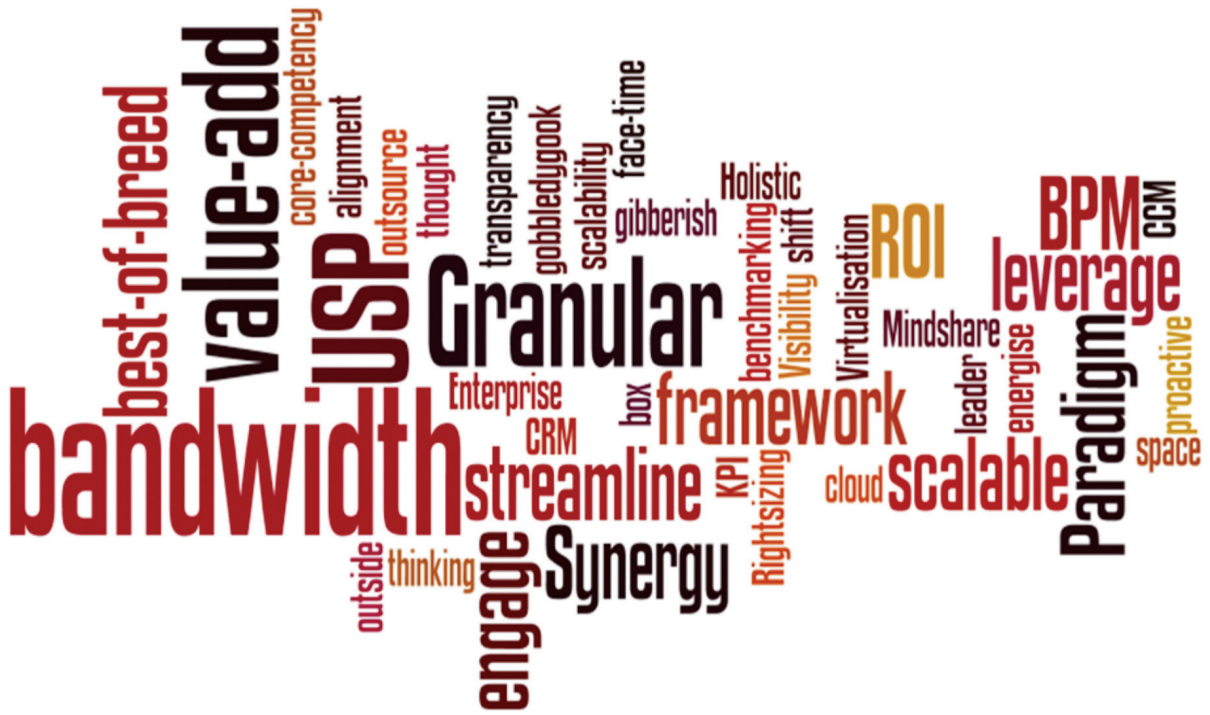
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Buzzwords

If a new strategy is described in terms of buzzwords, head for the exit. These buzzwords get repeated so often that everyone thinks they mean something true. They become a shorthand for concepts that most people do not articulate, let alone understand. As a result, they become mindless babble that can never substitute for critical thinking. Beyond that, many of the concepts here — such as "scale" and "synergy" — are really difficult to achieve in health care. Health care has its own buzzwords that pervade the landscape and conversation: value, population health, accountable care, etc. Not that there is anything wrong with that. But most people cannot define population health and mistakenly believe it is largely driven by the health care system. Another sure sign of BS is when the buzzword is a "TLA" (three-letter acronym), like ACO, P4P, EMR, etc. We marvel at people in this industry who can string many of these together in the same sentence.

For fun, the remaining slides are pictures that depict ten buzzword concepts. See if you can name them all.
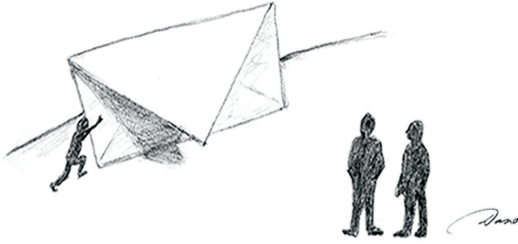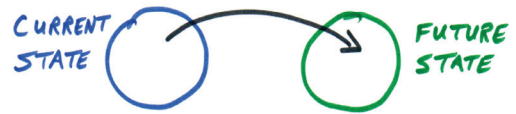
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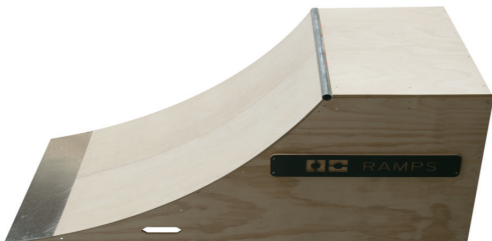
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LEONARD DAVIS INSTITUTE
of HEALTH ECONOMICS

COLONIAL PENN CENTER
3641 LOCUST WALK
PHILADELPHIA, PA 19104
LDI.UPENN.EDU
@PENNLDI