The New Healthcare

ADOCTOR'S GUIDE TO BFING + WFI I

David Z. Tusek, MD Cloud Medical www.cloudmedical.io Have you ever gone for your annual check-up and wondered, "Um...Is that it? This 'encounter' is supposed to guide me toward optimal health and wellbeing for the next 12 months?"

You feel pretty good, but wonder if it would be possible to feel even better. Maybe you're missing something. But you're at a loss as to where to go to find the answers...and this isn't it.

Or maybe you have a chronic condition that saps your energy and vitality every day, but with each healthcare visit you ponder whether you might actually be getting worse, not better.

Have you ever felt like shouting:

"Why won't **my doctor** help me get healthy?! Isn't that what they're supposed to do?"

Well, that's what this manifesto is about.

It's about a new vision of healthcare that makes sense of why so many of us feel that way-even the doctors!

It also explains exciting emerging options that are becoming available and and why its important to replace the old, worn-out paradigm of sick-care, versus true healthcare!



The Prescription: PART 1: An Explanation PART 2: A Call to Action PART 3: An Invitation

Sometimes when you go to the doctor's office, it almost feels like you've stepped backwards in time—maybe to somewhere back in the 1980s. Even the furniture seems outdated and the instruments haven't changed for 20 or 30 years. Come to think of it, neither have most of the laboratory tests that are ordered.

Well, that's because it usually takes about two decades for the most advanced, cutting-edge techniques, and technologies to trickle into the mainstream and become incorporated into your primary care physician's practice.

Sure, a few "new" drugs are always being advertised on TV, but the vast majority of brand-named pharmaceuticals developed since 2000 are "me too" drugs reformulated from old ones. A few outstanding notables exist (mainly in the category of "biologics"), but for most of us, the promise of greater health just isn't there.

Why is that? Isn't everyone supposedly talking about new frontiers in genomics and biotech and personalized medicine? So where do you go to get that? Keep reading.

"Personalized" and "Precision medicine" is generally only available for treatment of the most serious diseases.

It is also the future of Primary Care



There have never been so many useful, more healthtransforming tools available to help us become fitter, feel better, and live longer-so long as you can find and access them.

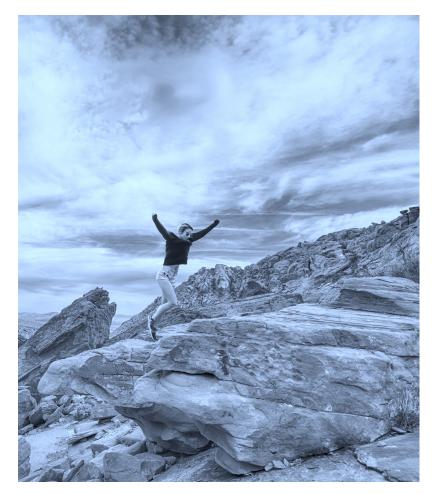


WHAT IF...

We're all familiar with the challenges people striving to lose weight face. They are on a perpetual quest from diet to diet to find one the "best one," when the truth is there is no universal "best one" for everybody.

But what if there was a test which enabled each of us to discover Our Own unique diet plan, which could help us lose weight and be healthier based upon our own specific metabolic needs, enabling each of us to select the optimal food for our own body?

Imagine if it was not only possible to find such a diet for each individual, but in addition, there were customized lifestyle modification tools available based upon each patient's personality, to not just make those changes, but help us stick to them.





SURPRISINGLY, MANY OF THESE TOOLS ARE AVAILABLE NOW-

YET FEW DOCTORS AND PATIENTS ARE EVEN AWARE OF THEM. PERSONALIZED MEDICINE +

PERSONALITY - BASED THERAPIES

OPTIMAL HEALTH



Your current healthcare

provider system model experience is already obsolete

CUMBERSOME

Connecting to your physician is a nightmare, if you're actually lucky enough to get her on the phone.

<u>SLOW</u>

"Convenience" is a word that only exists in healthcare advertising, but rarely in actual patient experiences.

UNAFFORDABLE

Costs are not just out of control-they're nearly impossible to calculate-until *after* the horrendous bills arrive.

OUT-DATED

Since all that most doctors seem to do is write prescriptions and order old fashioned tests–why even bother when that's not what you want.



How did we get here?

Does it have to be like this?

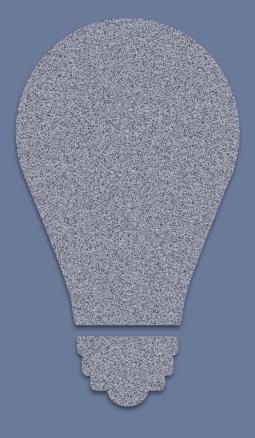
In what way, exactly, are the so-called "reforms" helping to make things better?

In order to begin to answer these questions, we have to take a brief view of the current healthcare system from the 30,000 ft level and figure out "who has the power to control the system? Despite what the commercials seem to suggest

we do not suffer from GENETIC DEFICIENCIES of PHARMACEUTICAL DRUGS.

Our current society, and the healthcare system at large, would have you believe that for any ailment and any minor or major symptom, there is a pharmaceutical "cure" awaiting you at your doctor's office. Just stop in and get your prescription and all will be well.

we suffer from GENETIC DISEASES *activated by* our LIFESTYLES





There are 7 players in the current healthcare system who hold most of the Power:

- 1. Insurance Companies
- 2. Hospitals
- 3. Pharmaceutical Companies
- 4. The Government
- 5. Medical Device, Lab, and Technology Companies
- 6. Physicians and other Health Care Workers
- 7. Patients

Yep, You get the picture.

(Basically only the Top 4 or 5 matter)

The truth is that patients (definitely) and physicians (for the most part) don't really pull much comparative weight when it comes to making impactful decisions about healthcare policy.



While this is an oversimplification in order to make a point, here is how we got what we have now:

Insurance Companies: Make money when they charge high premiums and deny as many claims as possible **Hospitals:** Make money by "doing expensive stuff" to patients (which may or may not be in their best interests)

Pharmaceutical Companies: Make money by developing patentable (i.e. synthetic) drugs and helping the "prescribers" (doctors) find as many "indications" (ICD-10 labels) for which to prescribe them as possibleGovernment: OK, that one you can decide for yourself. How do *you* think the Government stands to gain?

(Note: Health care spending in 2014 topped \$3 Trillion in the US, about 45% more, as a percentage of GDP, than the average of the other developed nations of the world, despite the fact that the World Health Organization and Commonwealth Fund rank our system among the worst among developed nations in terms of efficiency, outcomes, and other measures.)

The consequence is what we might refer to as "Perverse Incentives"—which is to say the stakeholders in the system are rewarded for achieving precisely the determinants leading to exactly the system we have now:

Very expensive, extreme lack of transparency, not very nimble, unimpressive efficiency, lots of harm.

Wait a second.

Did that say "lots of harm"?

What is that supposed to mean?

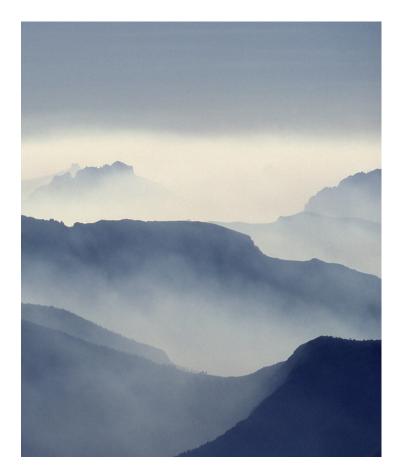


Before we answer that question, its important to point out the many things we do well within our current system.

Our system is the envy of the world

when it comes to treatment of acute illness, major trauma, and various life-threatening emergencies. If you ever do suffer a life-threatening medical emergency, you will be very fortunate indeed to be near a **Level I Trauma Center** at a US hospital in a major city. The care you will receive is virtually guaranteed to be first-rate–world class.

Furthermore, we would not even *have* a healthcare system if we didn't have all 7 Players. We need all of them. In our critique we must remain fair and balanced, and clearly recognize what a *blessing it is* to have a powerful engine of research & development of new technologies and therapies, well-organized modern hospitals, a government which provides a functional safety net for those of our citizens who are disadvantaged, as well as insurance companies whose policies we utilize to shield ourselves and our families from catastrophes (the "floods, fires, and tornadoes" of health).





It isn't that we need *different* Players on the field, it's that we just need to do a better job of aligning each Player's incentives in favor of the only thing that matters: The Best Interests of Patients*

(*Both as Individuals, as well as Populations)



It was the Best of Times, It was the Worst of Times.

The first line of the Dickens classic <u>A Tale of Two Cities</u> summarizes the status of our system. We do so many things extremely well and there is much to be proud of and optimistic about–while, on the other hand, there is the general perception that our healthcare system is broken.

The **COStS** are unsustainable.

The Service is unacceptable.

The harm is undeniable.

The actual health benefits of much of what we do are dubious.



A Tale of Two Studies

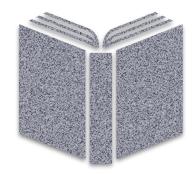
While we can trot out all kinds of evidence to justify almost any position these days, there are two studies which highlight the overall problem better than most.

STARFIELD, 2000

This study showed that if we add up all of the medical errors, adverse reactions to prescription medications, infections transmitted in hospitals to other patients, and all of the other "latrogenic" causes of death, then *our healthcare system itself* amounts to the THIRD leading CAUSE of DEATH in the US.

IONNIDIS, 2012

This researcher investigated "bias" in pharmaceutical studies. He showed that up to 80% of medical research about drugs and medications is significantly flawed or only reveal partial truths. In many cases, only data that shows a benefit of a drug is published, while those that don't are hidden from the public by drug companies.





The Doctors' Dilemma

As physicians, we know deep down that an increasing number our patients are gradually losing faith in our system, and we are losing faith in it as well.

There are also many books and magazine articles published each year describing the "disillusionment" of doctors.



I recently asked a newly-minted young physician graduating from a top family medicine residency program who she thought (if there was only one option) would be better suited to improve the overall health of an average American–a *family physician* or a *health coach*. To which she promptly replied without hesitation: *"Health coach. No question."*



Our Pill-Based model revolutionized healthcare 150 years ago when the major causes of death were infections and trauma–but it isn't designed to address the major healthcare issue of our time: Chronic Disease.

Illnesses related to Obesity and Diabetes are ravaging our nation (and many other parts of the world) with an astronomical cost to not only our financial resources, but also to the quality of life for those affected.

And yet the more money we spend to tackle this problem with the same kind of thinking, the less we seem to be able to address these issues.

We need to pivot. We need to re-calibrate. We must innovate and present new ideas with which to tackle these problems. "A different kind of thinking must be used to solve a problem than that which was used to create it in the first place."

Albert Einstein



A NEW (OPTIMIZED) HEALTHCARE SYSTEM IS WITHIN (Y)OUR GRASP

Part 2

The good news is that we are not lacking in meaningful innovations which are already underway in transforming the current outdated paradigm.

The path forward can be summarized by the **4** P's:



We must start with **Primary Care**, beginning with **Payment** reform, then addressing how we **Practice**, and how we design the IT **Platforms** that we use.



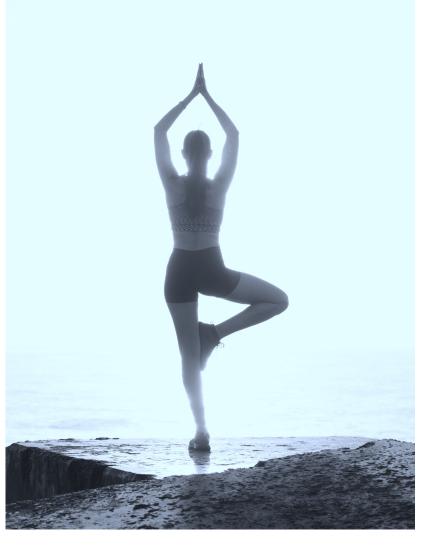
1. PRIMARY CARE

If we are to move to the next level, evolve to an improved model, and create real solutions to the problems inherent to our current system, it must begin with a transformation of Primary Care.

Primary Care Medicine is comprised of:

Adult Medicine, General Pediatrics and Gynecology, Minor office-based Surgery, and Urgent Care (which is the treatment of non-life threatening emergencies).

As such, primary care providers manage 80-90% of all of the healthcare encounters of our patients.





Primary Care stands at the crossroads of health: the place where our lifestyle and our genomics intersect.

The days of the family doctor as a glorified healer of sniffles and prescriber of "cook-book" medications is coming to an end. Primary Care is the field where your overall lifestyle factors must be carefully assessed in the context of your unique genomic code. Personalized and Precision medicine is already being integrated into modern medicine, and has also begun to change how we help prevent and treat just about every condition. (Yet the dissemination of scientific advancements is painfully slow in conventional healthcare. The leading-edge physicians are practicing medicine which is about 20 - 30 years ahead of the "mainstream".)

WHAT IS LIFESTYLE? hydration, nutrition, exercise, sleep, stress reduction, sexuality, money environmental factors, mental health, relationships, work/life balance, creativity, spirituality.

WHAT IS GENOMICS? the living blueprint for your individual body–coding for all of molecular biology which is continuously in the *dynamic process of becoming You*, and which includes all of the variations and mutations that make you unique and determine both your personal risk and resilience to various ailments.

For more information about where Primary Care is heading in the future, download the E-book "The New Rules for Modern Healthcare"



2. PAYMENT

THE FIRST STEP IS TO TRANSFORM OUR **PAYMENT MODEL** FOR PRIMARY CARE

The current insurance-based system works well for catastrophic medical problems (heart attacks, major surgery, hospitalizations, etc.) but is poorly suited, unnecessary, and unwelcome in primary care.

We should protect ourselves against the risk of medical catastrophes, just like house fires, and this may require complex claim-processing systems administered by insurance companies. But primary care comprises the equivalent of window cleaning and minor repairs in your home or tire-rotation and oil changes for your car. Anyone would agree that using insurance to pay for such items would be nonsensical– so why would we need it for our healthcare?

But what can we do? Wouldn't that be extremely difficult to change?



Not at all. It's already happening. Welcome to Direct Primary Care.

There have been very few innovations proposed in the past decade which have decreased healthcare costs by more that 1-2%. In fact, healthcare costs have been steadily increasing.

But DPC decreases overall systemic healthcare costs by 20-30%.

If widely adopted, A 20% savings of our \$3 Trillion healthcare bill would amount to:

\$600BILLION per year

(That's real money)

DPC patients are also significantly more likely to be "satisfied" or "extremely satisfied" with their primary care than those within the traditional system.



DIRECT PRIMARY CARE

DPC is the future of primary care. It solves many of the most pressing problems in healthcare simultaneously.

Rather than contracting with insurance companies, patients contract directly with their own, personal physician.

DPC physicians offer 24/7 service with unlimited visits, no copays, and virtual connectivity with cellphone, email, and webcam–as well as face to face visits.

They offer the vast majority of the healthcare needed by you and your family for a small monthly fee (typically \$50-\$100 per month).

- DPC has been shown to decrease overall healthcare costs by 20-30%
- Unnecessary ER visits are eliminated because your own doctor is always there for you
- Lab and Imaging costs are reduced by 50-90%
- If you wish, you can keep your doctor even if you change jobs
- Convenience and connectivity are dramatically enhanced
- Physician practice efficiency improves and overhead decreases



3. PRACTICE

As crucial as it is for us to find ways to improve costs, convenience, and patient satisfaction to care-that's still not enough. We also need to improve outcomes. So our "Paradigm of Practice" must evolve as well. (And it must do so dramatically and quickly.)

Like it or not, today's Primary Care Physicians (PCPs) are experiencing an identity crisis. We are often perceived to be glorified "treaters of sniffles", and we are facing the possibility of becoming irrelevant at a time when our society needs us more than ever. Many have proposed replacing PCPs with Nurse Practitioners and Physician Assistants.

Amidst concerns surrounding the "primary care shortage", a great debate is now centering on whether PCPs are anything more than simply pill-dispensers using "cookbook medicine", whether we can be completely replaced by a cadre of less expensive providers with only a quarter of our training, and whether patients should just be treated by specialists in all of the various fields, rather than PCPs. If only we had a crystal ball so we could know what the future of Primary Care will look like.



In Primary Care, the part of our system which takes care of 90% of our healthcare needs, insurance is **unnecessary** and **doesn't work**.

EPIGENETICS- the Genome-Lifestyle interface

Currently, in most cases we are still applying "population-derived" data to individual patients, both with bioscience, as well as behavioral science. There are holes of many shapes and sizes, yet we only have a square peg to fit into each one.

The good news is that this is already beginning to change.

Genomic / Epigenomic and Regenerative Medicine is combining with Anti-Aging and Functional Medicine and radically transforming how we practice and experience healthcare. Patients are beginning to achieve health and wellness using sophisticated lifestyle transformation tools as well as with personalized genomebased diagnostic technologies specific to each individual.

While PA's and FNP's play an instrumental role in Primary Care, we will depend more and more on the expertise of physicians trained in the advanced technologies in medicine.



THE FUTURE OF PRIMARY CARE (IS NOT SO DIFFICULT TO PREDICT)

That's because we all want the same thing from our healthcare

If you want a glimpse into the future, just follow the science, **not science fiction**—and listen to what patients want. If you do, you will quickly realize that more and more people are demanding something other than a "pill for every ill".

We all want to understand the real risks of taking various medications -> PHARMACOGENOMICS We don't want to just live longer, we also want more vitality and energy -> ANTI-AGING MEDICINE We are looking for answers beyond simply masking symptoms with drugs -> FUNCTIONAL MEDICINE We want a program which is customized for us as individuals, not populations -> PERSONALIZED MEDICINE



4. PLATFORM

A COMPLETELY NEW TECHNOLOGICAL PLATFORM IS NEEDED FOR MEDICAL RECORD KEEPING AND PATIENT TRACKING

Since the leading causes of death in our society have changed from "acute" conditions like infections and trauma to "chronic" conditions like heart disease, cancer, obesity and diabetes-related illness, etc., ...and since such chronic conditions are caused by the **intersection of our lifestyle and our genomic** make-up (a phenomenon called **"EPIGENETICS"**), then it should follow that PCPs be the world's heavy-weight champions of lifestyle modification and sustainable transformation.

There are two problems:

 PCPs have very little to no training or expertise in this area,
 The companies creating information technology and software employed by PCPs *have barely even begun to think* about this issue. Current IT platforms are designed mainly for coding and billing.

THE DATA REVOLUTION:

Big Data Sensor Technology (MEMS) Healthcare CRM / PRM Whole Genome Sequencing Whole Genome SNP Tracking Specialized Metabolic Testing

THE LIFESTYLE REVOLUTION:

Personality-Based Interventions Bio-Hacking Personalized Nutrition NutriGenomics NeuroLinguistic Programming Quality of Life-Based Interventions





What is the engine of your health, and what is the fuel? And what are the tires where the rubber meets the road?

> THE ENGINE: Your **Genome**

> > THE FUEL: Your **Lifestyle**

WHERE THE RUBBER MEETS THE ROAD:

Leveraging the **best technology** to drive the **greatest positive impact** upon your health & quality of life

In order to take advantage of the most meaningful healthcare innovations available today (and there are many!), you need the right doctor-patient relationship with the right doctor so you get the right testing which is interpreted in the right context. How does one do that? Download the **"The New Rules for Modern Healthcare"** E-book.

