2021 Health Care Program



Health Care Market Economics and Pricing

Economic Trends Facing Healthcare Delivery

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Disclaimer

 All comments, observations, and forecasts are my own and in no way reflect the views of Vanderbilt University or any firm with which I am associated as a director or officer.

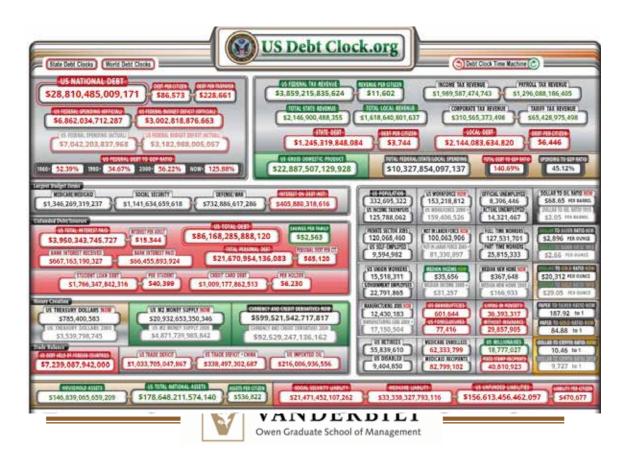


Today's Rundown

- US Economic challenge and relationship to healthcare's future
- The move to consumerism in healthcare
- Future opportunities for consumers

My goal: Leave you with some framing and perspectives that will help you understand the economic realities facing the health care industry on a go forward





Medicare Financial Challenge

\$495.5 Billion	Medicare's Annual Cash Shortfall in 2020 In 2020, Medicare spent \$925.8 billion on medical services for America's seniors but only collected \$430.3 billion in payroll taxes and monthly premiums. This cash shortfall represented almost 16 percent of the federal deficit in 2020.
\$5.95 Trillion	Medicare's Cumulative Cash Shortfall Since 1965 Medicare has had a cash shortfall every year since its creation except two: 1966 and 1974. Medicare covers these cash shortfalls by "borrowing" unrelated tax revenues from other programs.
28.8 Percent	Medicare's True Contribution to the National Debt America's fiscal trajectory is unsustainable, and Medicare is the primary source of red ink. Medicare's cash shortfall is responsible for one-third of the federal debt.



Options to balance Medicare

32.6 Percent Increase	Annual Payroll-Tax Increase Needed to Balance Medicare Part A In 2020, the Medicare Part A (hospitals) cash deficit was \$98.9 billion. To balance, payroll taxes would need to increase from 1.45 percent to 1.9 percent.
\$4,797 Increase	Annual Premium Increase Needed to Balance Medicare Part B In 2020, the Medicare Part B (physicians) cash deficit was \$307.4 billion. To balance, seniors' premiums for physicians would need to increase by 276 percent, meaning the typical annual physician premium cost to seniors would rise from \$1,782 to \$6,531.97 – an increase of \$4,796.77.
\$2,218 Increase	Annual Premium Increase Needed to Balance Medicare Part D In 2020, the Part D (prescription drugs) cash deficit was \$89.2 billion. To balance, seniors' premiums for prescription drugs would need to increase by 565 percent, meaning the annual drug premium cost to seniors would rise from \$392.88 to \$2,610.91 – an increase of \$2,218.03.



CONSUMERISM & PRICE TRANSPARENCY

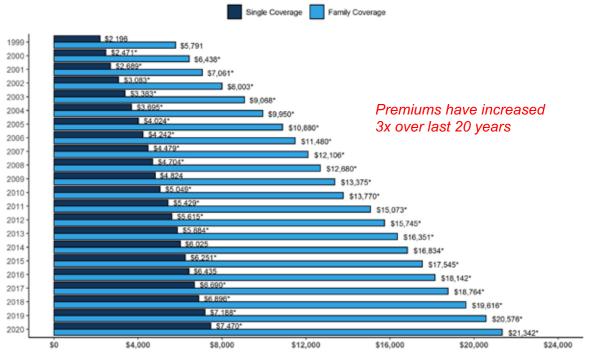


High Level Perspective

- Two factors are shaping private sector US health care delivery
 - Changing Structure of Insurance
 - Pricing of Health Care Services
- It has driven the supply side in ways that are not necessarily aligned with patient preferences.
- Patients are responding, changing how much, where and when they are consuming medical care today and likely in the future the demand side



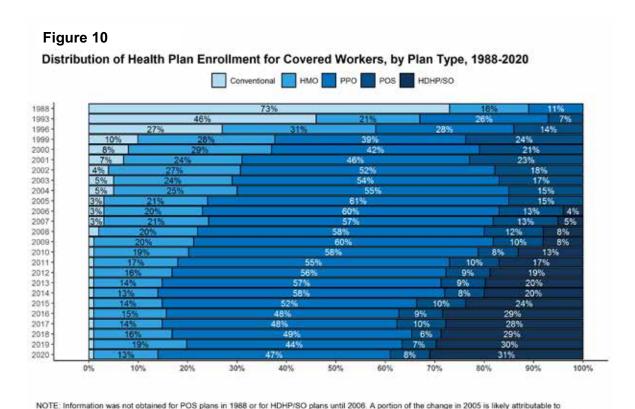
Figure 9
Average Annual Premiums for Single and Family Coverage, 1999-2020



^{*} Estimate is statistically different from estimate for the previous year shown (p < .05).

SOURCE: KFF Employer Health Benefits Survey, 2018-2020; Kaiser/HRET Survey of Employer-Sponsored Health Benefits, 1999-2017





incorporating more recent Census Bureau estimates of the number of state and local government workers and removing federal workers from the weights.

SOURCE: KFF Employer Health Benefits Survey, 2018-2020; Kaiser/HRET Survey of Employer-Sponsored Health Benefits, 1999-2017; KPMG Survey

See the Survey Design and Methods section from the 2005 Kaiser/HRET Survey of Employer-Sponsored Health Benefits.

Employer-Sponsored Health Benefits, 1993 and 1996; The Health Insurance Association of America (HIAA), 1988.

Economic Realities

- 1. Workers pay for all health insurance premiums through reduced wages
 - 1. The rapid growth of health insurance has reduced real wage growth for the last 40 years
- 2. Insurance is for high consequence, low probability events only.
 - 1. It is a very costly and inefficient way to finance expenditures if not for the above.
 - 2. The payment apparatus for health care costs more than \$400B year



THE PROBLEM



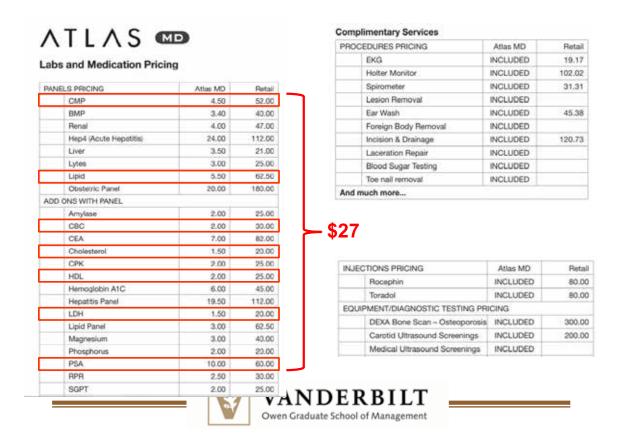
Where things stand

- Patient's are fearful of the financial consequences of getting health care and are searching for alternatives
- Providers lack the information on how their treatment decisions will impact their patients.
- Providers are frustrated and overwhelmed by dealing with the bureaucracy and complexity of getting paid.

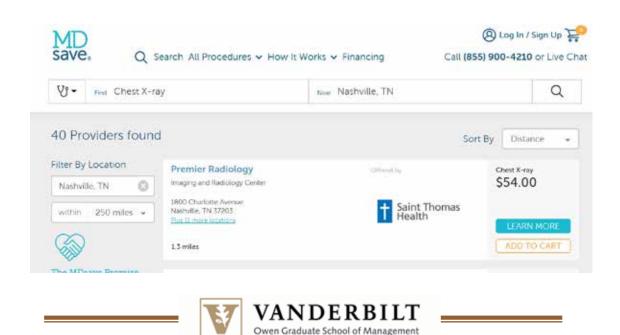


Larry's bill for care





Cash price for a Chest Xray - Nashville



May 2019 the first meeting



Increasing cash pay

The Cash Advantage

Patients who pay cash upfront for medical services can sometimes make out better than they would by using their insurance, especially if they have high-deductible plans and pay the insured rate in full. Some examples:

PROCEDURE	FACILITY CITY	SELF-PAY RATE	INSURANCE RATE	INSURANCE COMPANY
MRI of the foot	Regional Medical Imaging Flint, Mich.	\$379	\$445	Aetna
Tonsillectomy	Banner Desert Medical Center Mesa, Ariz.	\$2,858*	\$5,442	Arizona Blue Cross Blue Shield
MRI of the knee	Boulder Community Hospital Boulder, Colo.	\$600	\$1,100	Arizona Blue Cross Blue Shield

Note: Insurers' rates may vary by plan. *Not including physicians' fees, typically \$1,000 to \$1,400.

Sources: the providers; insurers' cost-estimator tools

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Commercial Paid Amount Condition Analysis

	Place of					min Percent	avg cms	max cms	
Region	Service	Service	in_cost	verage	ax_cost	Of CMS	rate	rate	variance
Midwest Region	Hospital	Colonoscopy Diagnostic with Biopsy	\$ 720	\$ 2,464	\$ 7,040	58%	197%	563%	877%
Northeast Region	Hospital	Colonoscopy Diagnostic with Biopsy	\$ 712	\$ 2,274	\$ 7,456	57%	182%	597%	948%
South Region	Hospital	Colonoscopy Diagnostic with Biopsy	\$ 886	\$ 2,045	\$ 5,105	71%	164%	409%	476%
West Region	Hospital	Colonoscopy Diagnostic with Biopsy	\$ 1,282	\$ 2,674	\$ 5,964	103%	214%	477%	365%
Midwest Region	Hospital	CT Angiography, Abdomen	\$ 549	\$ 1,159	\$ 2,005	186%	393%	680%	266%
Northeast Region	Hospital	CT Angiography, Abdomen	\$ 576	\$ 1,306	\$ 2,151	195%	443%	729%	274%
South Region	Hospital	CT Angiography, Abdomen	\$ 678	\$ 1,063	\$ 1,497	230%	360%	508%	121%
West Region	Hospital	CT Angiography, Abdomen	\$ 1,212	\$ 1,667	\$ 2,333	411%	565%	791%	92%
Midwest Region	Hospital	Mammogram of One Breast	\$ 85	\$ 244	\$ 509	69%	198%	412%	497%
Northeast Region	Hospital	Mammogram of One Breast	\$ 92	\$ 252	\$ 653	74%	204%	529%	612%
South Region	Hospital	Mammogram of One Breast	\$ 83	\$ 241	\$ 801	67%	195%	649%	869%
West Region	Hospital	Mammogram of One Breast	\$ 92	\$ 203	\$ 480	74%	165%	389%	423%
Midwest Region	Hospital	Mohs Surgery for Tumor Removal	\$ 2,360	\$ 2,711	\$ 3,622	270%	311%	415%	53%
Northeast Region	Hospital	Mohs Surgery for Tumor Removal	\$ 2,379	\$ 2,648	\$ 3,596	273%	303%	412%	51%
South Region	Hospital	Mohs Surgery for Tumor Removal	\$ 2,362	\$ 2,503	\$ 3,669	271%	287%	420%	55%
West Region	Hospital	Mohs Surgery for Tumor Removal	\$ 2,432	\$ 2,739	\$ 3,498	279%	314%	401%	44%



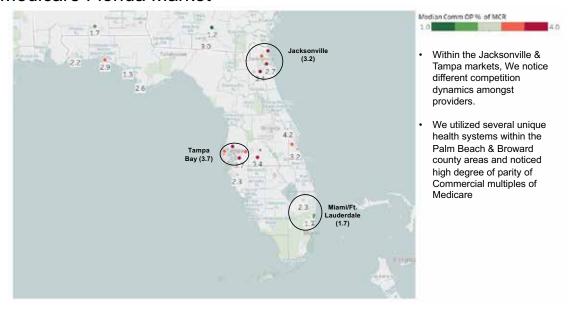
Variation Matters!! - Variation is consumer risk exposure

	(asl	h Prices	;		Insurance Paid							
						Ì					Cash (Q3 -	Ins (Q3 -	Spread over
Insurance Bundle	Q1		Q3	S	pread		Q1	Q3	5	pread	Q1)/Q1	Q1)/Q1	Spread
MRI of Head (Orbit/Face/Neck)	\$ 646	\$	781	\$	135	\$	750	\$ 3,549	\$	2,799	21%	373%	20.7
Echocardiogram - Trans-Thoracic	\$ 619	\$	709	\$	90	\$	451	\$ 1,547	\$	1,096	15%	243%	12.2
Chest X-Ray	\$ 94	\$	111	\$	17	\$	37	\$ 126	\$	89	18%	241%	5.2
CT Scan of Chest	\$ 424	\$	504	\$	80	\$	462	\$ 1,317	\$	855	19%	185%	10.7
Mammogram of Two Breasts	\$ 227	\$	267	\$	40	\$	113	\$ 284	\$	171	18%	151%	4.3
Comprehensive Metabolic Test	\$ 20	\$	31	\$	11	\$	11	\$ 27	\$	16	55%	145%	1.5
Colonoscopy Screening	\$ 1,968	\$	2,310	\$	342	\$	969	\$ 2,176	\$	1,207	17%	125%	3.5
ACL or MCL Repair	\$ 9,192	\$	11,312	\$	2,120	\$	6,121	\$ 11,665	\$	5,544	23%	91%	2.6
Vasectomy	\$ 573	\$	636	\$	63	\$	1,538	\$ 2,898	\$	1,360	11%	88%	21.6
Angioplasty for Vein Blockage						\$	13,496	\$ 23,871	\$	10,375		77%	
Laparoscopic Gall Bladder Removal	\$ 7,230	\$	8,815	\$	1,585	\$	7,319	\$ 12,901	\$	5,582	22%	76%	3.5
C-Section Delivery	\$ 8,177	\$	9,462	\$	1,285	\$	9,454	\$ 15,792	\$	6,338	16%	67%	4.9
Tonsillectomy and Adenoidectomy, Over Age 12	\$ 3,166	\$	4,385	\$	1,219	\$	3,258	\$ 5,361	\$	2,103	39%	65%	1.7
Repair of Ventral Hernia	\$ 5,079	\$	5,903	\$	824	\$	3,810	\$ 5,948	\$	2,138	16%	56%	2.6
Knee Replacement	\$ 21,568	\$	25,166	\$	3,598	\$	22,822	\$ 35,019	\$	12,197	17%	53%	3.4
Vaginal Delivery	\$ 6,739	\$	8,053	\$	1,314	\$	6,784	\$ 10,121	\$	3,337	19%	49%	2.5
Back Surgery - Laminectomy	\$ 29,838	\$	32,722	\$	2,884	\$	44,848	\$ 59,843	\$	14,995	10%	33%	5.2
										Mean	21%	125%	664%
									1	Median	18%	89%	428%

Point: Mean and Medians are meaningless in light of underlying price variation

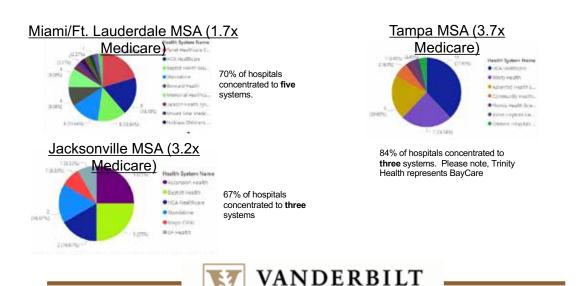


OP Commercial Allowance Multiples of Wage-Adjusted Medicare Florida Market



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Jacksonville, Tampa Bay, & Miami/Ft. Lauderdale Market Assessment



Owen Graduate School of Management

Findings

- Commercial paid amounts average 290% of Medicare
 This finding corroborates RAND study
- There is meaningful price variation across region.
- There is an average 446% price variation for like services.
- A market basket of cash prices are 39% cheaper than a like basket of services paid for by third party payors.

The prices are all wrong



Executive Order -June 24th 2019



Why industry pushback?

- **Providers** are concerned that they will lose their ability to get high rate from the payers who don't have negotiating leverage
- Payers are concerned that they will lose their ability to get exclusive low rate where they have leverage

Rate negotiation should not be the primary source of value creation for consumers



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POLITICS | HEALTH-POOCY

Hospital Groups Sue to Block Price-Transparency Rule

Health-care providers say disclosure requirement pushed by Trump violates First Amendment

By Stephanie Armour

Vodated Dec. 4, 2019 10-03 am ET

Hospital groups sued to block a Trump administration rule forcing them to disclose secret rates, for the first time laying out the industry's legal strategy for defeating the president's central health-policy initiative.

The hospitals, including the American Hospital Association, <u>argued in a lawsuit</u> filed in United States District Court in Washington that the new rule "is unlawful, several times over."

They argued that the administration exceeded its legal authority in <u>issuing the rule last month</u> as part of its efforts to make the health care system much more transparent to patients. The lawsuit contends the requirement to disclose their private negotiations with insurers violates their First Amendment rights.

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June 25, 2020

Federal Court Rejects American Hospital Association Challenge to Trump Price Transparency Rule

- A federal judge <u>ruled against</u> the American Hospital Association on Tuesday in its lawsuit attempting to block an HHS rule pushing for price transparency. The judge ruled in favor of the department, which requires hospitals to reveal private, negotiated rates with insurers beginning Jan. 1.
- U.S. District Court Judge Carl Nichols, an appointee of President Donald Trump, was swayed neither by AHA's argument that forcing hospitals to publicly disclose rates violates their First Amendment rights by forcing them to reveal proprietary information nor by the claim that it would chill negotiations between providers and payers. The judge characterized the First Amendment argument as "halfhearted."
- Nichols seem convinced that the requirement will empower patients, noting in Tuesday's summary judgment in favor of the administration that "all of the information required to be published by the Final Rule can allow patients to make pricing comparisons between hospitals."
- The ruling is a blow for hospitals, which have been adamantly opposed to disclosing their privately
 negotiated rates since HHS first unveiled its proposal in July 2019. AHA did not immediately reply to a
 request for comment on whether it planned to appeal.





February 26, 2021 01:43 PM

Most Tennessee hospitals struggle to comply with CMS price transparency rule, Vanderbilt study finds

Austin Triana, MD/MBA Candidate, Vanderbilt University

R. Lawrence Van Horn Ph.D, Executive Director for Health Affairs, Owen Graduate School of Management

Less than 20% of hospitals in Tennessee are fully compliant with the CMS price transparency rule that went into effect on January 1, 2021. The rule mandates hospitals to publicly list negotiated rates for 300 shoppable services online in a consumer-friendly format.





Home » Newsroom » Press Releases

BIPARTISAN E&C HEALTH LEADERS URGE HHS TO ENFORCE HOSPITAL TRANSPARENCY RULE

Apr 13, 2021 | Press Release

"Given the widespread non-compliance by hospitals, we urge HHS to revisit its enforcement tools, including the amount of the civil penalty, and to conduct regular audits of hospitals for compliance."

Energy and Commerce Committee Chairman Frank Pallone, Jr. (D-NJ), Full Committee Ranking Member Cathy McMorris Rodgers (R-WA), Health Subcommittee Chairwoman Anna G. Eshoo (D-CA), and Health Subcommittee Ranking Member Brett Guthrie (R-KY) wrote to Health and Human Services (HHS) Secretary Xavier Becerra today regarding implementation of the Hospital Price Transparency Final Rule, which went into effect on January 1, 2021, and the need to ensure that hospitals are complying with the new rule.

"We are concerned about troubling reports of some hospitals either acting slowly to comply with the requirements of the final rule, or not taking any action to date to comply," the bipartisan Committee leaders wrote. "We urge you to ensure that [HHS] conducts vigorous oversight and enforces full compliance with the final rule."



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Wall Street Journal Investigation Finds Computer Code on Hospitals' Websites That Prevents Prices from Being Shown by Internet Search Engines, Circumventing Federal Price Transparency Laws

April 14, 2021

BUSINESS | HEALTH CARE | HEALTH

Coding to Hide Health Prices from Web Searches Is Barred by Regulators

The guidance regarding insurers' required posting of healthcare prices came after The Wall Street Journal revealed hospitals used such coding on their price pages

May 7, 2021

POLITICS

Hospitals Draw Warning on Price Disclosure Rule Compliance

Centers for Medicare and Medicaid Services is expected to release names of hospitals if they are penalized









Hospitals and Insurers Didn't Want You to See These Prices. Here's Why.

By Sarah Kliff and Josh Katz Produced by Rumsey Taylor

Aug. 22, 2021

This secrecy has allowed hospitals to tell patients that they are getting "steep" discounts, while still charging them many times what a public program like Medicare is willing to pay.

And it has left insurers with little incentive to negotiate well.

The peculiar economics of health insurance also help keep prices high.



The price for an M.R.I. at Mass General is ...

with a Cigna plan.

with an Aetna plan.

with a Humana plan.

The price for a colonoscopy at Beaumont Hospital-Royal Oak is ...

The price for an emergency-room foot X-ray at Baylor Medical Center, in Dallas, is

without insurance

with a United plan.

with a Blue Cross plan.

At the Hospital of the University of Pennsylvania, a pregnancy

for Blue Cross patients in Pennsylvania.

for Blue Cross HMO patients in New Jersey.

for Blue Cross PPO patients in New Jersey.

with no insurance at all.

test costs ...

At Aurora St. Luke's in Milwaukee, an M.R.I. costs United enrollees ...

if they have United's PPO plan.







Observation

- This level of price variation for the same service in the same market is evidence of market failure.
- The price variation cannot be substantiated based on quality differences.



SO where does this leave us

- Patient's and consumers are losing confidence in the delivery system – They are looking for alternatives
- They want financial certainty
- They don't want limitations on who they can see based on insurer contracts
- Insurance is a very inefficient way of funding anything.



Cross subsidies are not sustainable

- Providers use commercial to cross subsidize Medicare, Medicaid, Uninsured through high rate.
- Providers use surgical services to cross subsidize medical services.

SUBSIDY GENERATORS HAVE AN INCENTIVE TO DEFECT!



INNOVATIVE SOLUTIONS ANCHORED IN TRANSPARENT PRICES



The first example of transparent pricing!



Growth of Direct Primary Care - Cash Membership



MONTHLY MEMBERSHIP FEES

- Children 0-19 years old, \$10/month with at least one parent membership.
- We can now offer routine pediatric vaccines through a service called www.vaxcare.com, and we may be able to bill your insurance so that you don't have additional out of pocket expense.
- Adults 20-44 years old, \$50/month
- Adults 45-64 years old, \$75/month
- Adults 65+ years old, \$100/month

Atlas MD

- Employer groups with 5+ employees, \$50/mo/adult
- Nursing home and home-bound patients, call for details



ATLAS CO

Labs and Medication Pricing

PANELS PRICING

	Dept. C. S. STORES STORES	77,741,000 177100	7 000 1000	
	CMP	4.50	52.00	
	BMP	3.40	40.00	
	Renal	4.00	47.00	
	Hep4 (Acute Hepatitis)	24.00	112.00	
	Liver	3.50	21.00	
	Lytes	3.00	25.00	
	Lipid	5.50	62.50	1
	Obstetric Panel	20.00	180.00	
ADD C	ONS WITH PANEL			
	Amylase	2.00	25.00	
	CBC	2.00	30.00	l
	CEA	7.00	82.00	
	Cholesterol	1.50	20.00	
	CPK	2.00	25.00	
	HDL	2.00	25.00	
	Hemoglobin A1C	6.00	45.00	
	Hepatitis Panel	19.50	112.00	
	LDH	1.50	20.00	١
	Lipid Panel	3.00	62.50	
	Magnesium	3.00	40.00	Ì
	Phosphorus	2.00	20.00	
	PSA	10.00	60.00	
	RPR .	2.50	30.00	,
	SGPT	2.00	25.00	ľ
	T-3 (Uptake)	3.00	32.00)
	T-4	3.00	25.00	1

Complimentary Services

PRO	CEDURES PRICING	Atins MD	Retail
	EKG	INCLUDED	19.17
	Holter Monitor	INCLUDED	102.02
	Spirometer	INCLUDED	31.31
	Lesion Removal	INCLUDED	
	Ear Wash	INCLUDED	45.38
	Foreign Body Removal	INCLUDED	
	Incision & Drainage	INCLUDED	120.73
	Laceration Repair	INCLUDED	
	Blood Sugar Testing	INCLUDED	
	Toe nail removal	INCLUDED	

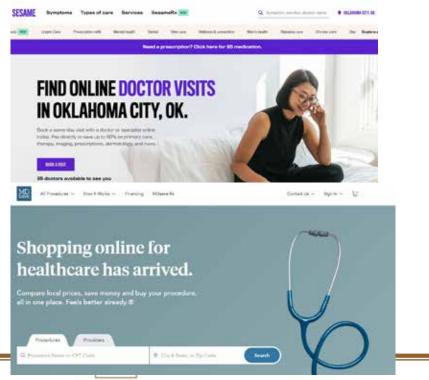
MEDICATION PHICING

PRE	Generic	Branc	Atlas NO
100	Allopurinoi 300 mg	Lapurin/Zyloprin	5.00
90	Amtodipine 10 mg	Nonesc	2.50
100	AmengryAnne HCL, 10 mg	Elect	2.00
100	Benazari 20 mg	Cotomsin .	6.00
100	Burnstanide 1 mg	Barres	11.00
60	Bupropon 150 mg SR	Wellbushin	20.00
30	Bupropien 150 mg XI.	Wellburnn	22.00
100	Buspirone HCL 16 mg	Bimpar	5.00
100	Cetinane 10 mg	Zystec	5.00
100	Citatopoins 20 mg	Celexa	3.00
100	Clonistine (I.1 mg	Castpres	3.00
100	Chlorzoxazone 500 mg	Parafon	8.00
100	Dictofenac Potsesium	Caraflam 50 mg	12.00
100	Dicyclomine 30 ing	Bentil	5.00
100	CREazers 90 ring	Cerdiadem	8.00
100	Estradiol 0.5 mg	Extrace	4.00
100	Fexaferacine 180 mg	Allegra	36.00

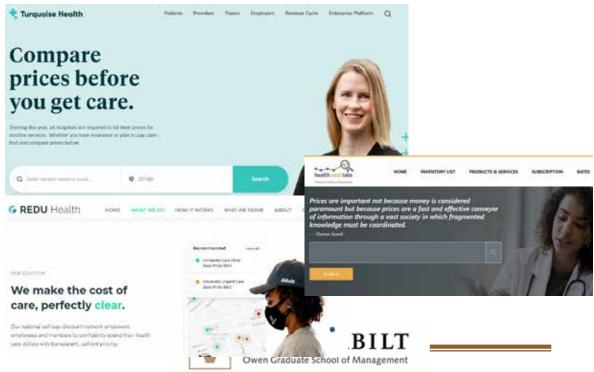
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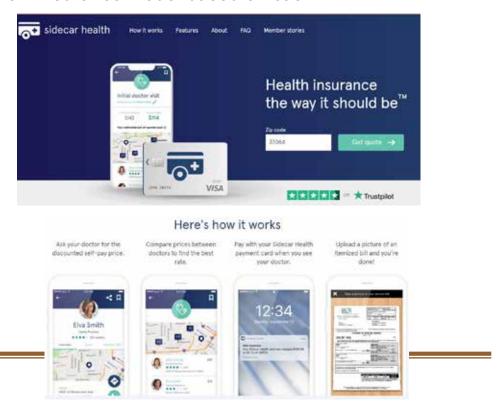
Expedia for Healthcare.....



Cars.com for health care – price comparison tools



A new insurance model based on cash



The future path

- Care is migrating away from institutional settings to the home.
- Trends toward eliminating middlemen and insurance between patient and provider
- Cash is a frictionless form of exchange that makes patients and providers better off saving more than \$400B of non-value added costs.
- Access is improved thereby improving patient choice and provider frustrations.



For more context and information.....



Faculty

Dr. Larry Van Horn, Ph.D., M.P.H., M.B.A. is an associate professor of economics & management at Vanderbilt University, executive director for Health Affairs at the Owen Graduate School of Management, associate professor of law at Vanderbilt Law School and associate professor of Health Policy at Vanderbilt School of Medicine in Nashville, Tenn. and is a leading expert and researcher on health care management and economics. His current research focus centers around the shift to consumer purchasing of health care and the impact it will have on new delivery models. Dr. Van Horn's research has appeared in such leading journals as the *Journal of Health Economics*, the *New* England Journal of Medicine and the Harvard Business Review. His commentary regarding health care economics appears frequently in mainstream media, including USA Today to Fox Business. Dr. Van Horn is responsible for the graduate health care programs at the Owen Graduate School of Management at Vanderbilt University, and he founded and directs its Center for Healthcare Market Innovation. He also holds courtesy appointments in both the medical and law schools. Dr. Van Horn has consulted with most of the largest hospital systems and insurers in the U.S. on data analysis and antitrust concerns, among other topics, and he co-created and has co-directed the Nashville Healthcare Council Fellows Program. Dr. Van Horn is the founder and CEO of Preverity Inc., founder and partner of LVH Economics LLC, and a senior professional with Berkeley Research Group. He also is on the board of directors for Community Health Care Realty Trust, Savida, Harrow and Preverity. He previously served on the boards of Quorum Health Corp. and Pierian BioSciences. Dr. Van Horn is a member of the CEO Council for Council Capital, and serves on the advisory boards for Harpeth Capital and the Mainsail Group. He received his B.A. in philosophy from the University of Rochester, his M.B.A. from the University of Rochester's William E. Simon Graduate School of Business, his M.P.H. from the University of Rochester's School of Medicine and his Ph.D. in Managerial Economics and Decision Sciences The Wharton School at the University of Pennsylvania.