



AMBULATORY DESIGN FOR THE NEW MARKET

October 20, 2017

speakers



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ambulatory design for the new market

A G E N D A

Where are we?

How did we get here?

Where are we going?

Influencers

Government Policy changes

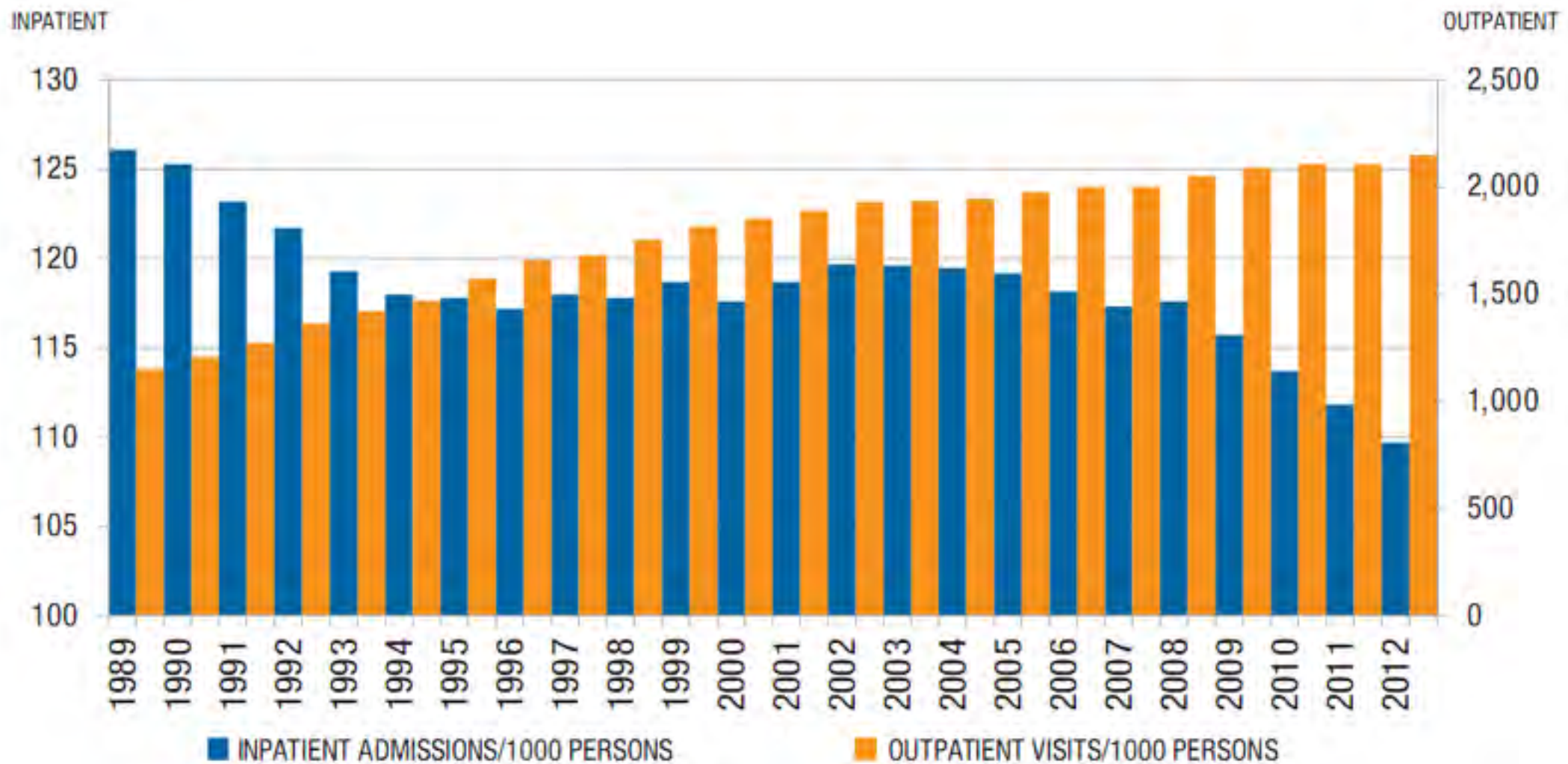
Insurance

Patients / Clients

Physicians

Discussion

where are we?

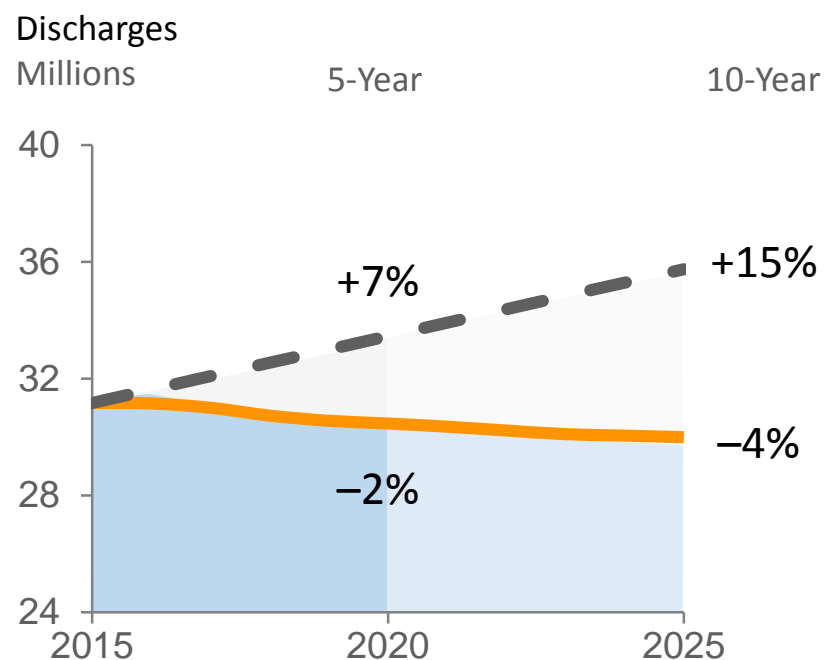


Source: American Hospital Association as found on: <https://www.primehealthcareinvestors.com/emerging-trends/>

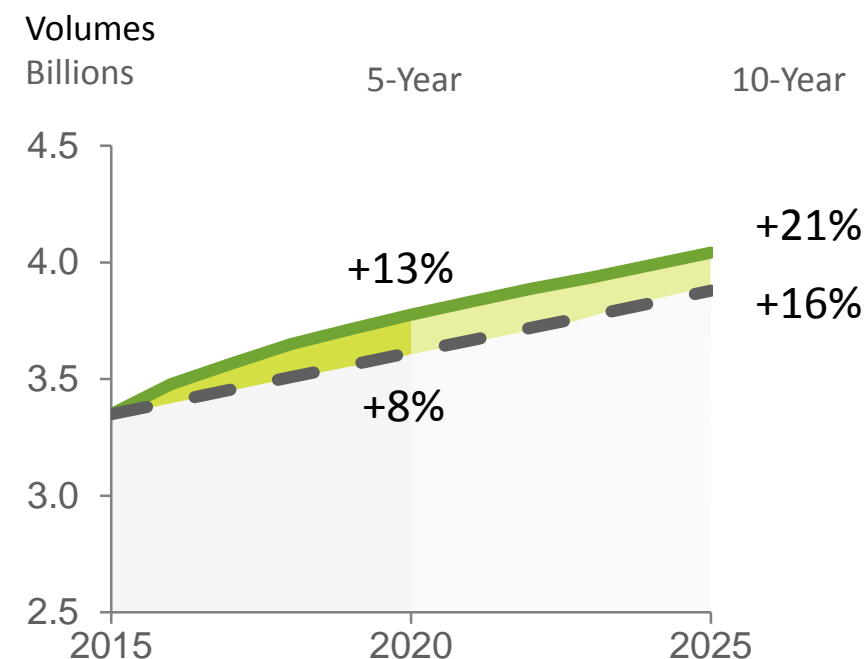
where are we?

Utilization Shifts Redefine Growth Opportunities

Adult Inpatient Forecast
US Market, 2015–2025



Adult Outpatient Forecast
US Market, 2015–2025



■ Sg2 IP Forecast ■ Population-Based Forecast ■ Sg2 OP Forecast

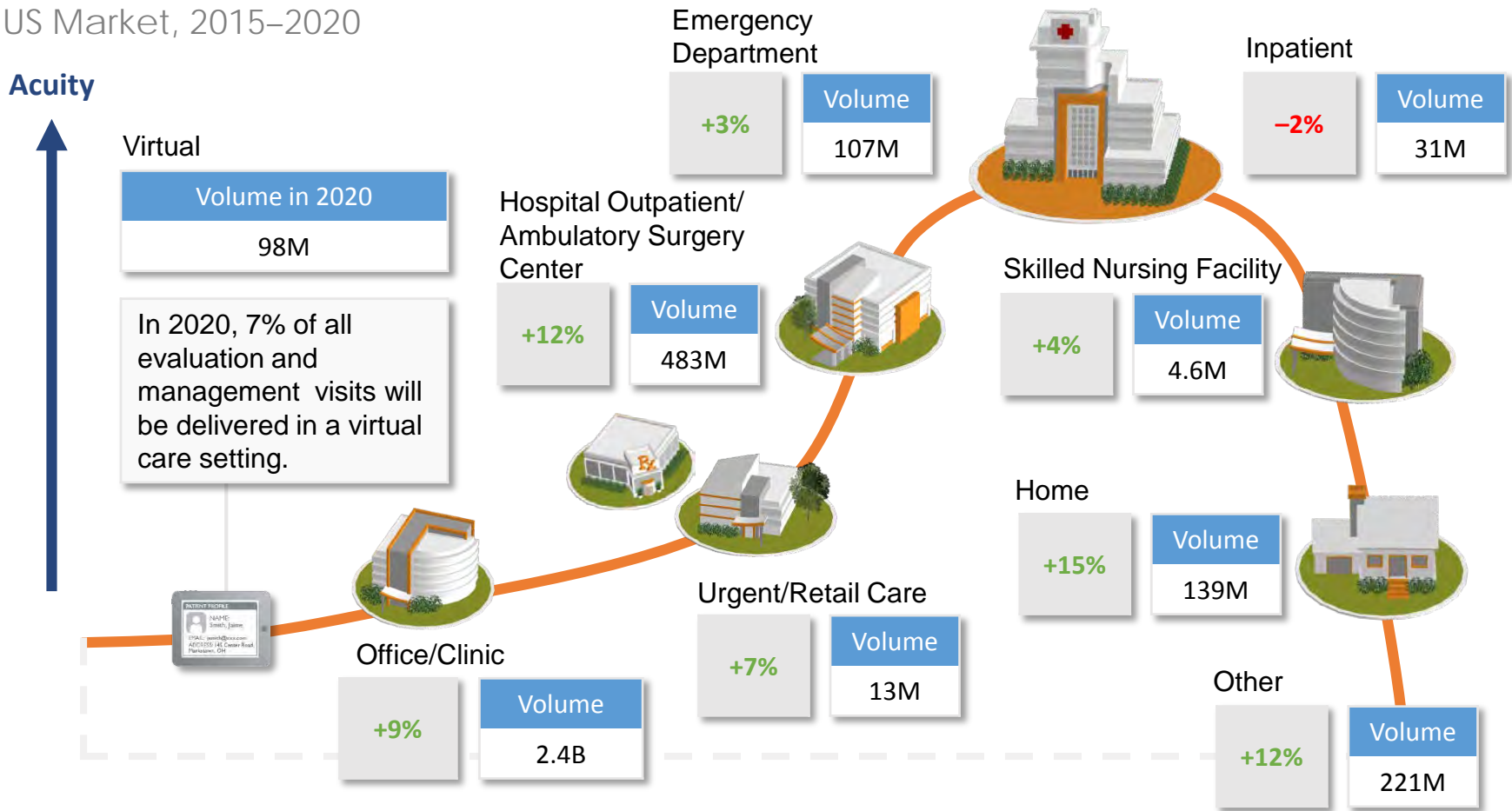
Note: Forecast excludes 0–17 age group.

Sources: Impact of Change® v15.0; NIS; PharMetrics; CMS; Sg2 Analysis, 2015.

where are we?

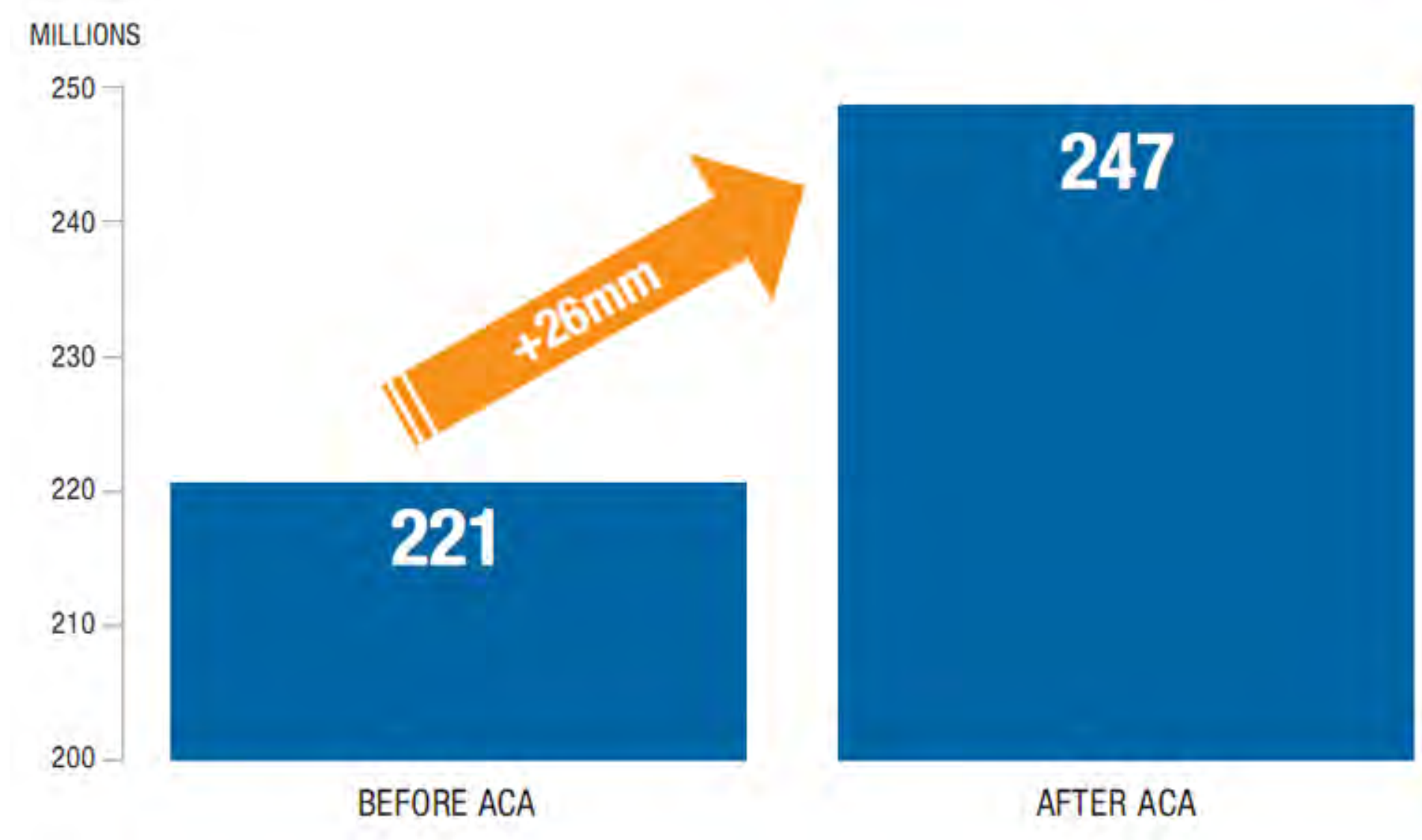
Sg2 Sites of Care Highlight Growth Opportunities Across the Continuum

2015 Site of Care Volumes and 5-Year Forecast, Adults
US Market, 2015–2020



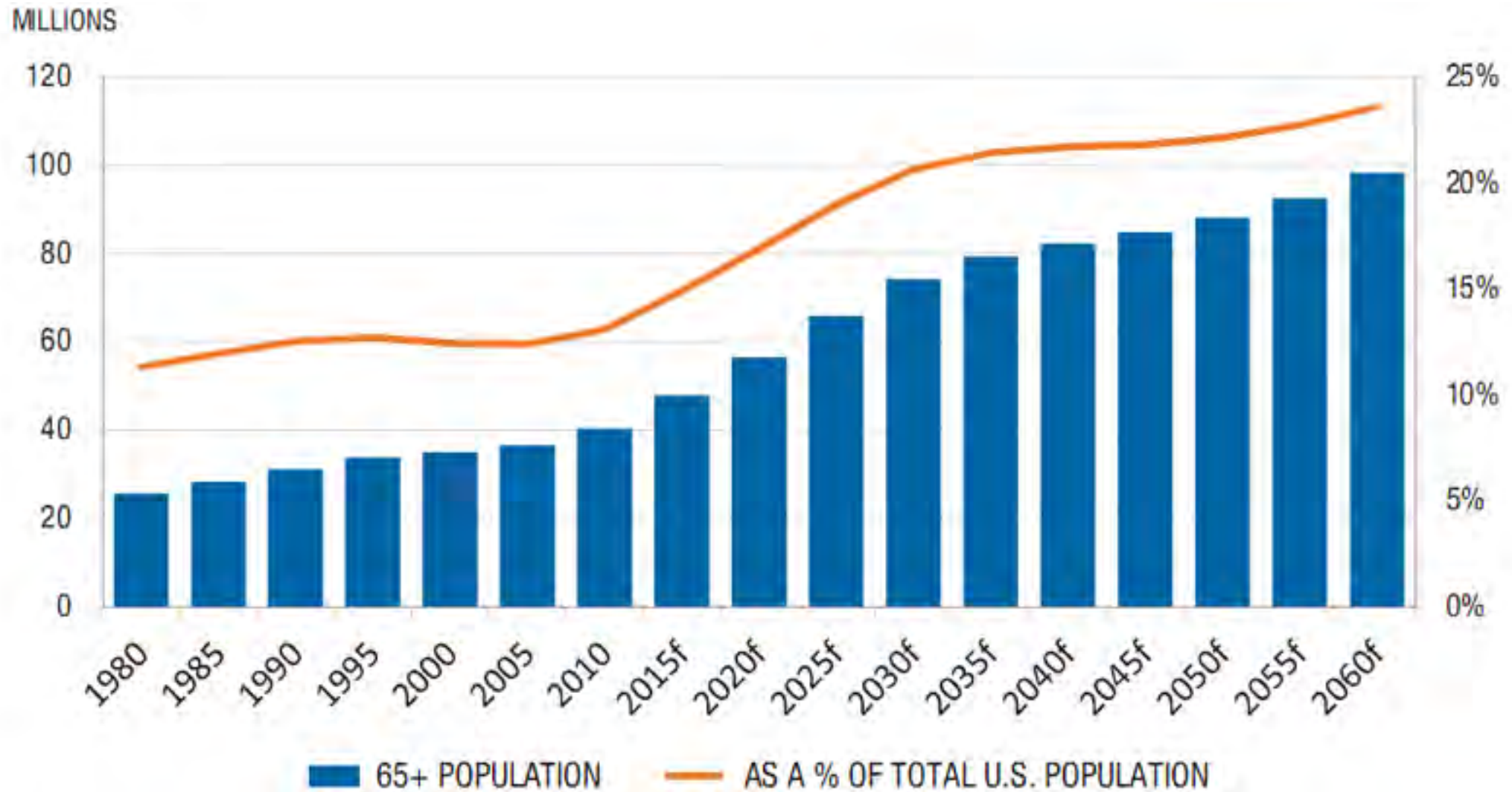
Note: The analysis excludes 0–17 age group. Other includes nonhospital locations such as OP rehab facilities, psychiatric centers, hospice centers, federally qualified health centers and assisted living facilities. Sources: Impact of Change® v15.0; NIS; PharMetrics; CMS; Sg2 Analysis, 2015.

how did we get here?



Source: American Hospital Association as found on: <https://www.primehealthcareinvestors.com/emerging-trends/>

how did we get here?



Sources: U.S. Census Bureau, Rosen Consulting Group as found on: <https://www.primehealthcareinvestors.com/emerging-trends/>

[illegible]

HyperSpace - FAMILY MEDICINE Training - PAT L

Home | Schedule | In House | Chart | Patient Lists | Send Labels | Remind Me

Northstar, Jan
Male, 9 y.o., 01/31/2003

MRN: 202417
PCP: None

Code: None
Allergies: No Known Allergies

Override Health Maintenance...
Primary Ins.: None
Secondary Payer: None

02/27/2012 visit with Pat Limestone, MD for OFFICE VISIT - ear ache

Images | References | Media Manager | Preview A/V | Print A/V | Outside Records

Charting

Visit Info
Visit Topic

Detailed Vitals

Allergies

Vital for Benefits

Outpatient Meds

History

Progress Notes

Problems / ICD

Goals

Visit Navigator

Visit Order

Medications

Smear/Spec

Vital Diagnoses

Meds & Orders

Discharge

LOD

HT Instructions

Follow-up

Change Discharge

Close Encounter

More Activities

BP Location: Right arm, Left arm, Right leg, Left leg, Other (Comment)

BP Method: Machine, Manual, Uppier, Other (Comment)

BP Cuff & Size: Neonate, Infant, Child, Child Long, Small Adult

Patient Position: Lying, Sitting, Standing

Heart Rate

Heart Rate Source: Monitor, Apical, Right, Left, Drachial, Dorsalis pedis, Femoral, Radial

Resp

Temp

Temp Source: Oral, Tympanic, Rectal, Axillary, Temporal

SpO2

Weight

Height

Waist

Circumference

Chest

Circumference

Arm

Circumference

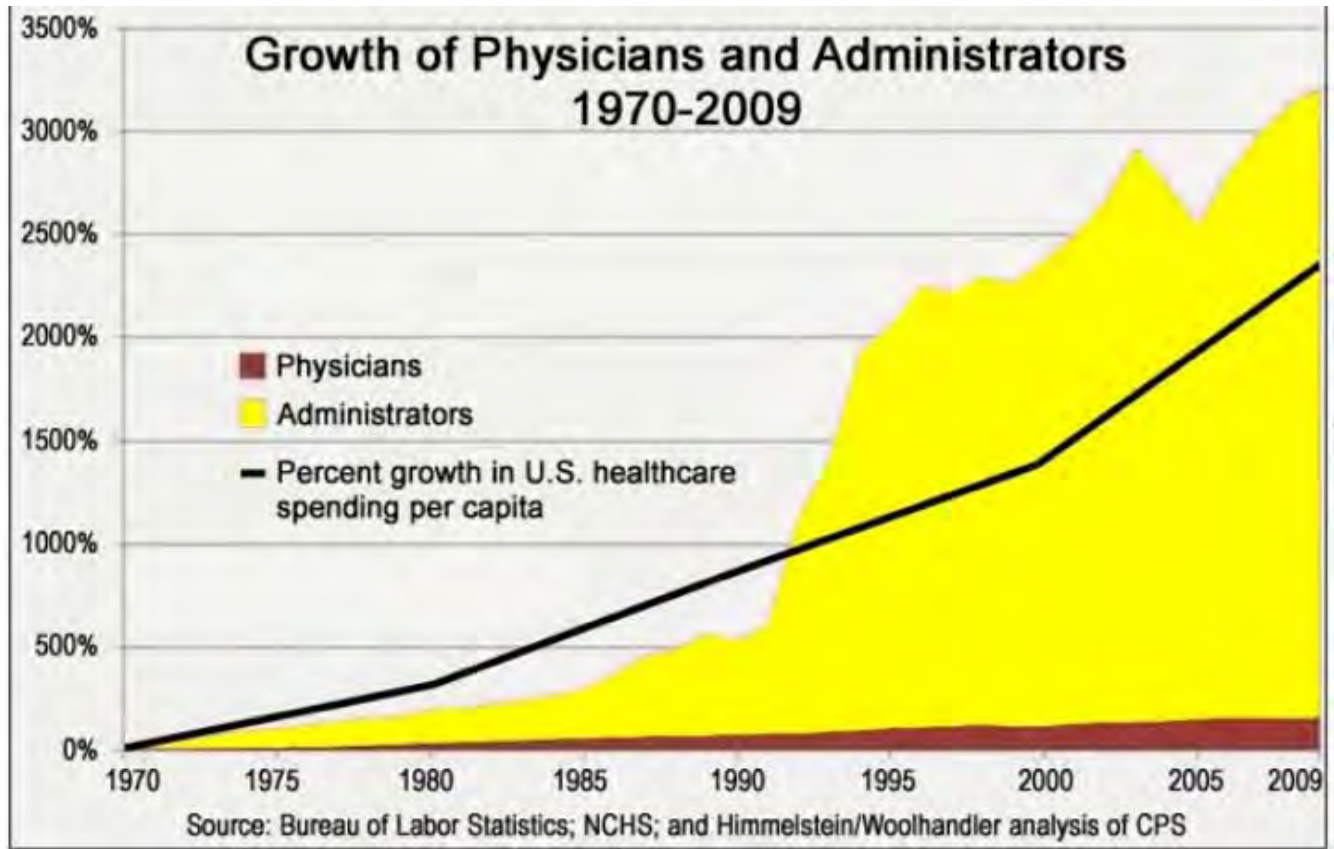
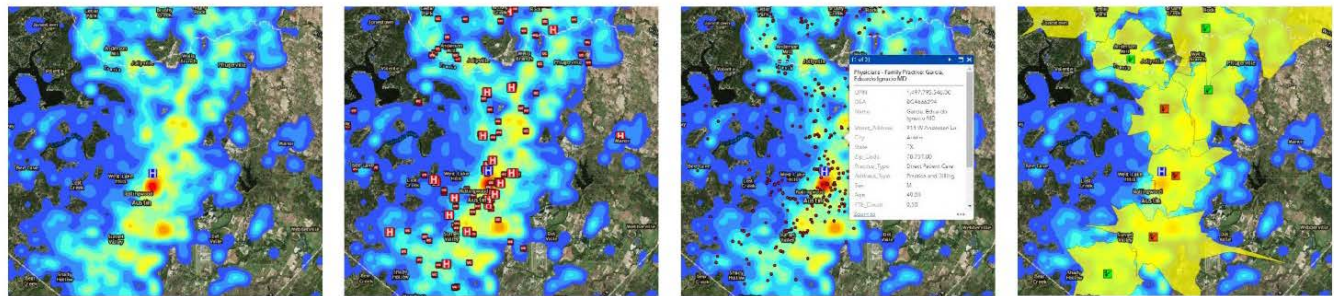
Peak Flow

Pain Score: Zero-0-No pain, One-1, Two-2, Three-3

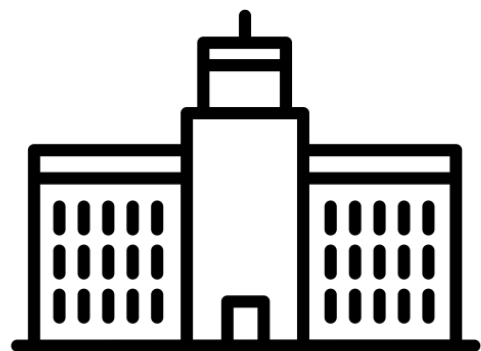
PAT | Results | Rx Request | Patient Calls | My Open Charts | Transcription | Design - Chart | Pt Advice Request

1:40 PM

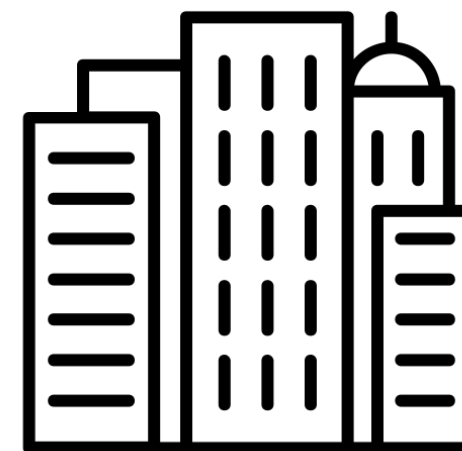
Diagram showing four boxes: Patient Demand, Competition, Physician Supply, and Opportunity.



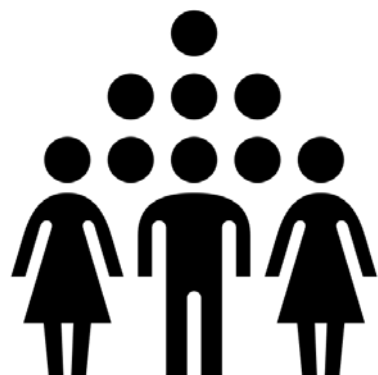
where are we going?



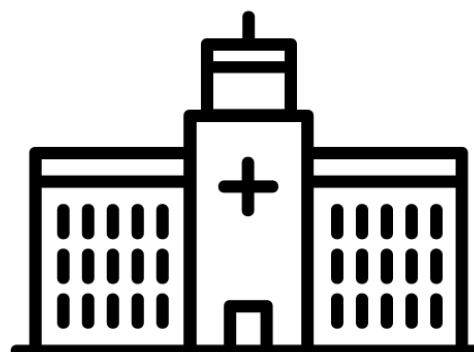
Government



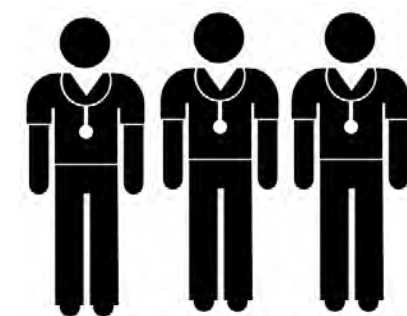
Insurance
Companies



Patients



Healthcare
Networks

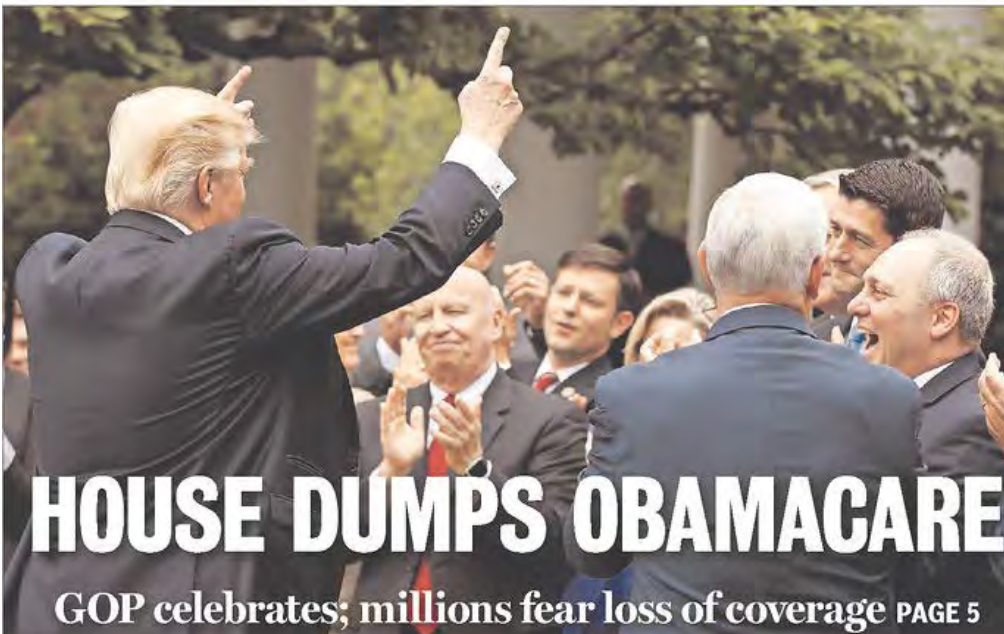
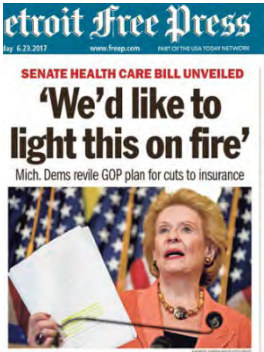


Clinicians

INFLUENCERS: Government



government – in flux



government – 250 yard rule



Center for Medicare and Medicaid Services (CMS) issued implementation of the “site-neutrality” provisions of the H.R. 1314 Bipartisan Budget Act of 2015 (BiBA Section 603) on November 1, 2016.

A hospital may measure **250 yards** from “any point” of the “physical facility” that serves as the **site of service of the remote location** (inpatient unit) of a hospital to “any point” in the **provider-based departments**



Microhospitals



Free Standing EDs

government – 250 yard rule

Dedicated Emergency Departments Exempted

Dedicated emergency department (DED) must be:

- licensed under state law as an ER/ED
- be held out to the public as a place that provides care for emergency medical conditions on an urgent basis, without appointment
- and/or provide at least one-third of all outpatient visits for treatment of emergency medical conditions.

Under the Final Rule, if a hospital creates a new **off-campus PBD** that qualifies as a DED and **meets the EMTALA (patient anti-dumping law)** standards of a DED, then any items and services it bills at that department will be **reimbursable under OPPS**, free of the site neutrality penalties of Section 603.







government – cms reimbursables

Relative Value Update Committee

CPT/ HCPCS	Mod	Description	Global	2016 Total Non-Facility RVUs	2017 Total Non-Facility RVUs	% Difference Total RVUs	2016 payment Amount	2017 Payment Amount	% Payment Difference
10040		Acne surgery	010	2.89	2.89	0.00%	\$103.47	\$103.39	-0.08%
10060		Drainage of skin abscess	010	3.32	3.32	0.00%	\$118.87	\$118.77	-0.08%
11100		Biopsy skin lesion	000	2.93	2.92	-0.34%	\$104.91	\$104.46	-0.42%
11200		Removal of skin tags <w/15	010	2.49	2.49	0.00%	\$89.15	\$89.08	-0.08%
11301		Shave skin lesion 0.6-1.0 cm	000	3.38	3.40	0.59%	\$121.02	\$121.64	0.51%
11420		Exc h-f-nk-sp b9+marg 0.5/<	010	3.46	3.45	-0.29%	\$123.88	\$123.42	-0.37%
12031		Intmd rpr s/a/t/ext 2.5 cm/<	010	6.72	6.70	-0.30%	\$240.60	\$239.69	-0.38%
13132		Cmplx rpr f/c/c/m/n/ax/g/h/f	010	13.55	13.49	-0.44%	\$485.15	\$482.61	-0.52%
14040		Tis trnfr f/c/c/m/n/a/g/h/f	090	21.78	21.65	-0.60%	\$779.82	\$774.53	-0.68%
17000		Destruct premalg lesion	010	1.89	1.88	-0.53%	\$67.67	\$67.26	-0.61%
17311		Mohs 1 stage h/n/hf/g	000	18.80	18.75	-0.27%	\$673.12	\$670.78	-0.35%
88305		Tissue exam by pathologist	XXX	2.07	1.93	-6.76%	\$74.11	\$69.05	-6.84%
88305	TC	Tissue exam by pathologist	XXX	0.96	0.82	-14.58%	\$34.37	\$29.34	-14.65%
88305	26	Tissue exam by pathologist	XXX	1.11	1.11	0.00%	\$39.74	\$39.71	-0.08%
88321		Microslide consultation	XXX	2.89	2.90	0.35%	\$103.47	\$103.75	0.26%
96567		Photodynamic tx skin	XXX	3.82	3.80	-0.52%	\$136.77	\$135.95	-0.60%
96910		Photochemotherapy with uv-b	XXX	2.02	2.00	-0.99%	\$72.32	\$71.55	-1.07%
96920		Laser tx skin < 250 sq cm	000	4.39	4.39	0.00%	\$157.18	\$157.05	-0.08%
96931		Rcm celulr subcelulr img skn	XXX	0.00	4.40	NA	\$0.00	\$157.41	NA
99212		Office/outpatient visit est	XXX	1.23	1.22	-0.81%	\$44.04	\$43.65	-0.89%
99213		Office/outpatient visit est	XXX	2.05	2.05	0.00%	\$73.40	\$73.34	-0.08%
99214		Office/outpatient visit est	XXX	3.02	3.03	0.33%	\$108.13	\$108.40	0.25%

CPT codes and descriptors only are copyright 2016 American Medical Association. All Rights Reserved. Applicable FARS/DFARS apply. Found Via. Mark Kaufmann Proposed CMS fee schedule: How will it impact the specialty? American Academy of Dermatology

Profit Margins in the Healthcare Industry

Healthcare Subsector	Sample Company	2016E EBITDA Margin
Global Pharmaceuticals		43%
Global Medical Devices		33%
Hospitals		20%
Health Insurance – Diversified		9%
Pharmacy Benefit Managers		7%
Health Insurance – Medicaid		3%

Capital IQ for the margins and What are the profit margins in the healthcare industry? By Sabrina Ali for the graphic

	Salary	Salary with Bonus	Income Guarantee
2010/11	428 (16%)	1,975 (74%)	239 (9%)
2009/10	339 (12%)	2,082 (74%)	367 (13%)
2008/09	460 (14%)	2,138 (65%)	526 (16%)
2007/08	694 (22%)	1,854 (59%)	598 (19%)
2006/07	362 (12%)	2,010 (67%)	644 (21%)

Merritt Hawkins report
Mha2001incentivesurvPDF.pdf

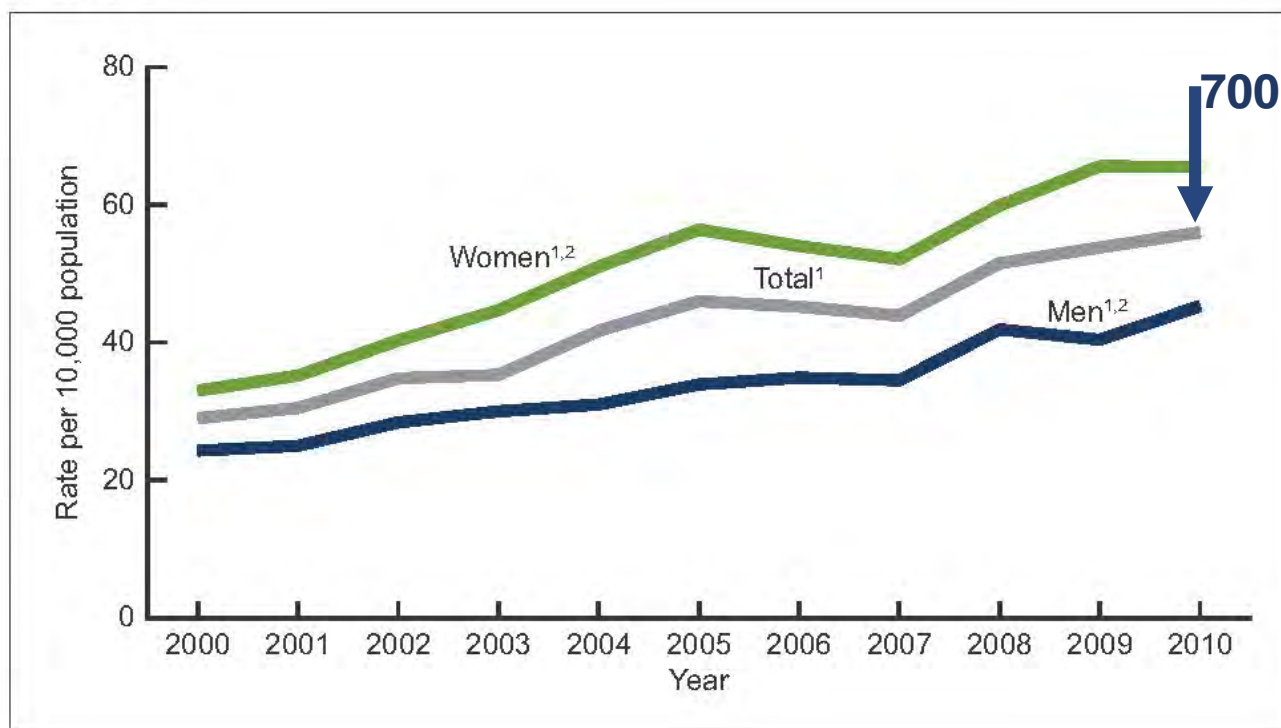
government – cms reimbursables

In the 2018 OPPIPS proposed rule, to remove the following from the inpatient-only list:

- total knee replacements (CPT code 27447)
- laparoscopic prostatectomies (CPT code 55866)

This number is projected to
grow by **673%**
An increase to **3.48 million**
procedures per year by 2030

Kurtz S, Ong K, Lau E, et al. Projections of primary and revision hip and knee arthroplasty in the United States from 2005 to 2030. J Bone Joint Surg Am 2007; 89:780.



700,000 total knee replacements/year

Between **25% and 50%** of joint replacements
could be done on an outpatient basis

$$700,000/4 = 175,000 \text{ per year}$$

$$700,000/2 = 350,000 \text{ per year}$$

-The Ambulatory Surgery Center Association

¹Significant linear trend from 2000 through 2010 ($p < 0.05$).

²Significant difference in rates between men and women in each year.

NOTES: Total knee replacement is defined as code 81.54 of the *International Classification of Diseases, Ninth Revision, Clinical Modification* (ICD-9-CM) for any of four collected procedures. Rates were calculated using U.S. Census Bureau 2000-based postcensal civilian population estimates.

SOURCE: CDC/NCHS, National Hospital Discharge Survey, 2000–2010.

NORTH DALLAS, TX



OAKMONT, TX



MANSFIELD, TX



government – cms reimbursables

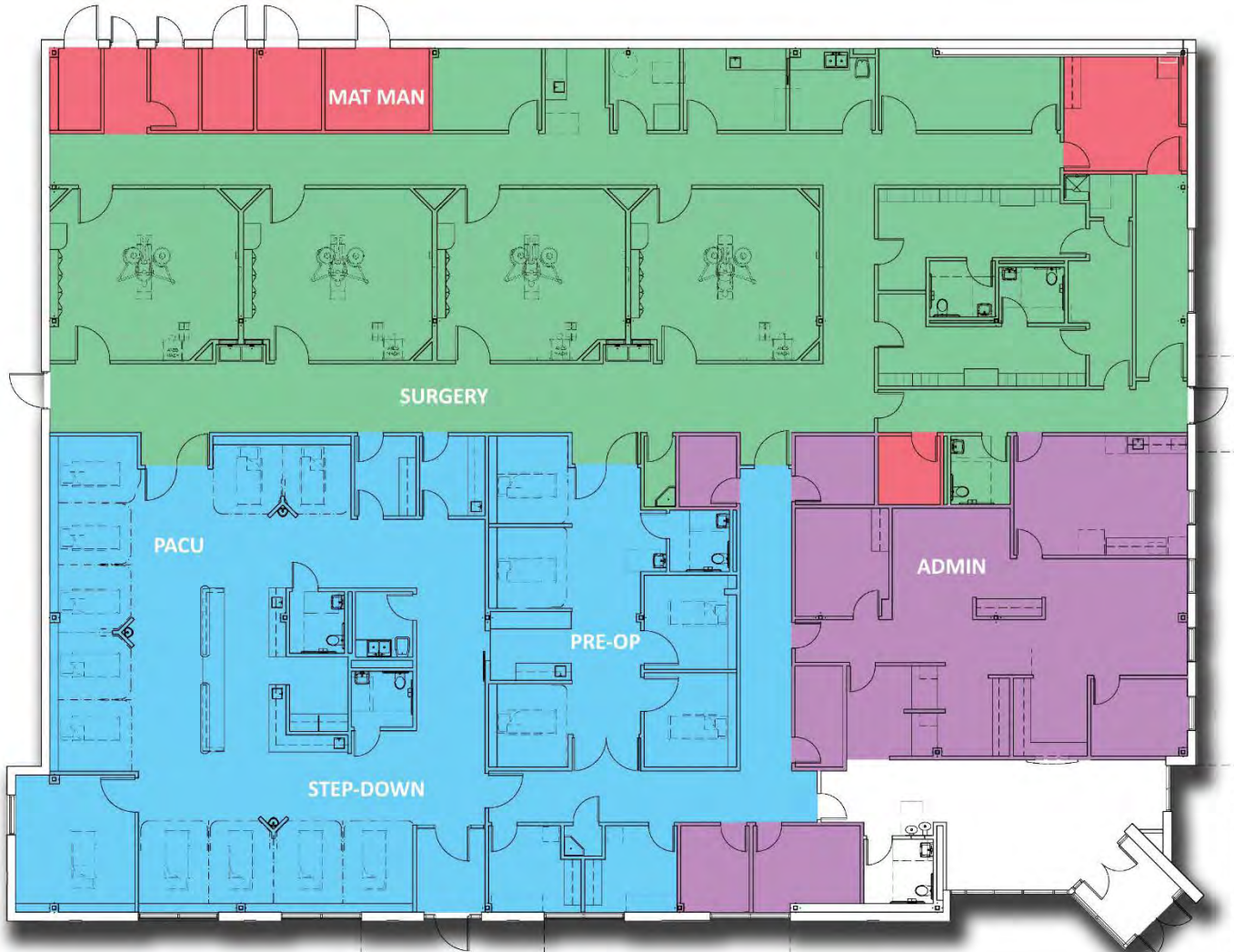
 **BAYLOR SurgiCare**

IN PARTNERSHIP WITH UNITED SURGICAL
PARTNERS INTERNATIONAL

SURGICAL SPECIALTIES

- General Surgery
- Orthopedics
- Gynecology
- Gastrointestinal
- Ophthalmology
- Oral Surgery
- Ear, Nose & Throat
- Colon Rectal
- Plastic Surgery
- Pain Management

government – non-profit/for-profit partnership



United Surgical Partners
INTERNATIONAL

Surgery Centers and Surgical Hospitals
Imaging Centers
Urgent Care MedPost
Urgent Care CareSpot

- Own and operate over 260 short-stay ambulatory facilities
- Serve more one million patients each year
- Maintain strategic joint-venture partnerships with more than 4,000 physicians and 50 health systems nationwide

INFLUENCERS: Insurance

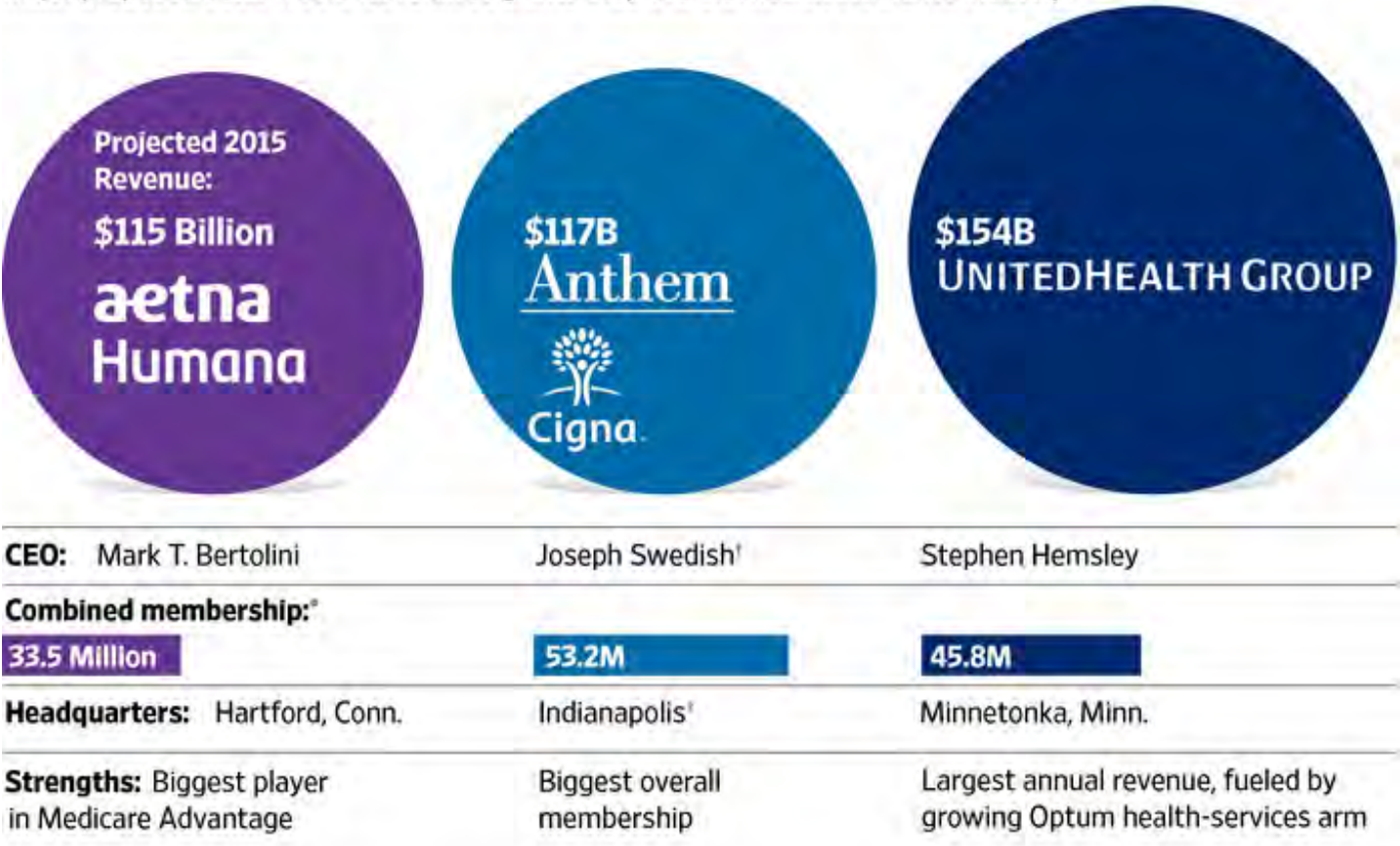


“We can get a discount on our health insurance if we list Google as our primary care physician.”

insurance – mergers and acquisitions

The Big Three?

Major proposed deals would leave three giants atop the U.S. health-insurance industry.



*As of March 31, 2015. †Assuming Anthem maintains CEO and headquarters
Source: the companies

THE WALL STREET JOURNAL.

Insurance companies merging and taking on issues and pricing competitively themselves





This estimate is based on the criteria you selected.

Diagnostic Test: MRI Lower Joint Extremity

Insurance Type: Commercial

Location: Massachusetts



[Shields Express Link](#) [Patients](#) [Company](#) [News](#) [Contact](#) [Select Language](#)

[WHY SHIELDS](#) [PARTNER WITH US](#) [OUR SERVICES](#) [FIND A LOCATION](#)



MRI

What is MRI? Magnetic Resonance Imaging (MRI) systems allow medical professionals to “see” the inside of the body with outstanding clarity. With MRI images, physicians can easily identify areas of treatment, track progress, and rule out serious problems with greater speed and accuracy than ever before. An MRI scan involves no surgery, no radiation, and no hospitalization, and has no known side effects.

An MRI system uses a powerful magnet, radio signals, and sophisticated computer software technology. Because certain atoms in our cells respond or “resonate” lightly in the presence of magnetic fields, the MRI is able to use that response to create an amazingly clear, detailed picture of internal organs, muscles, connective tissue, and the central nervous systems. Detailed MRIs allow physicians to better evaluate parts of the body and certain diseases that may not be diagnosed as accurately with other imaging methods.

insurance – outpatient imaging

AIM Specialty Health (Anthem subsidiary) requires outpatient MRI and CT scans not considered medically necessary to be **completed at a freestanding imaging facility** in order to be covered

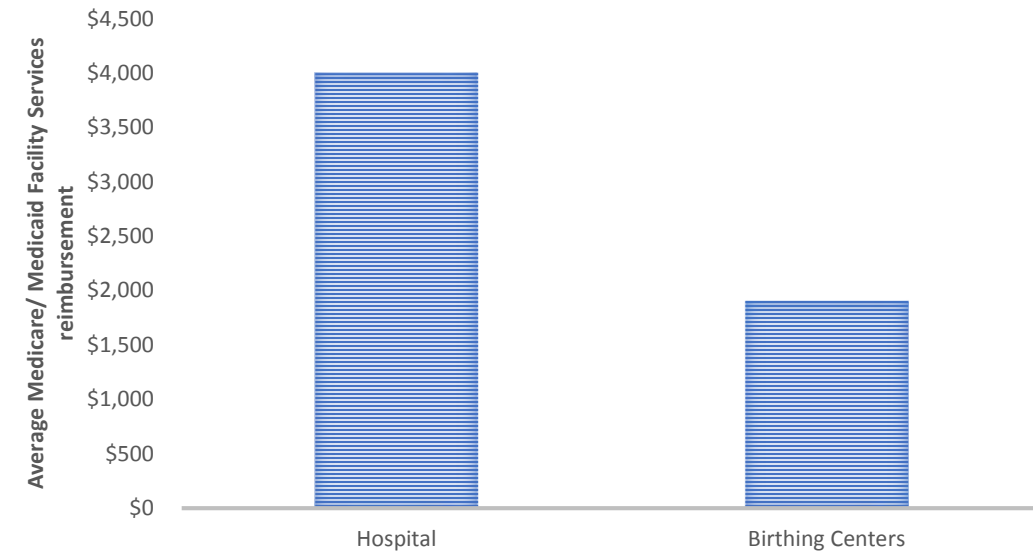
insurance – redistribution of services

childbirth is the number one cause of hospitalization in the U.S

Registered Birthing Centers in North East



COST OF UNCOMPLICATED VAGINAL BIRTH



Registered Birthing Centers in New England

Birth Cottage of Milford (NH) Cambridge Birth Center (MA)

North Shore Birth Center (MA) Holly No. 7 (ME)

INFLUENCERS: Upstream Intervention



West Clermont HealthPlex Features

- Premier strength & cardio equipment
- Group fitness classes
- 8 lane lap pool & warm water pool
- Basketball, tennis, turf field and track
- KidTown childcare and activity center
- Fully appointed locker rooms with towel service

Find all the activities you and your family love, **all under one roof.**



Personal Training
Heart Zone Training
Basketball Leagues
Tennis Lessons
Nutrition Coaching

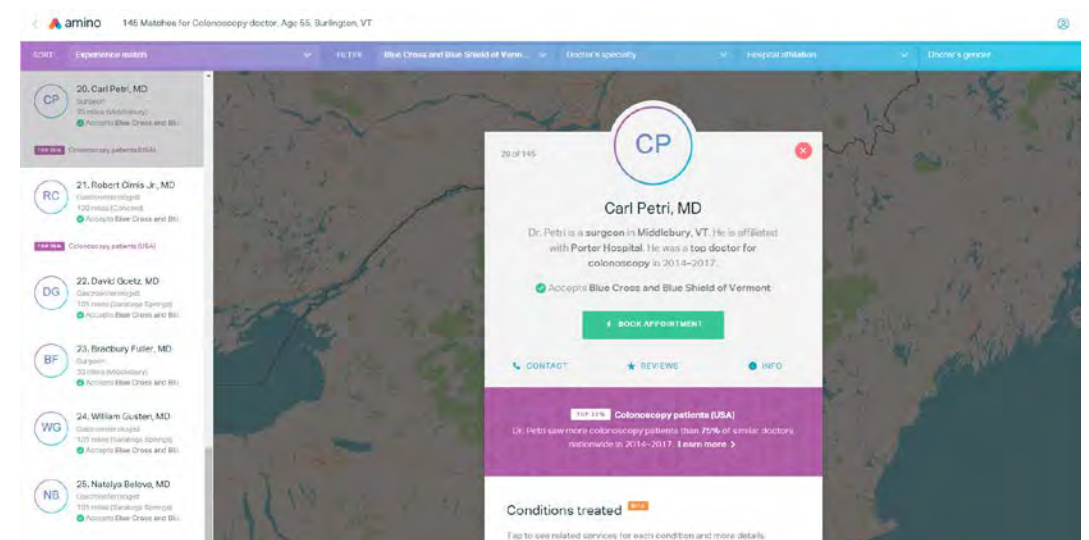
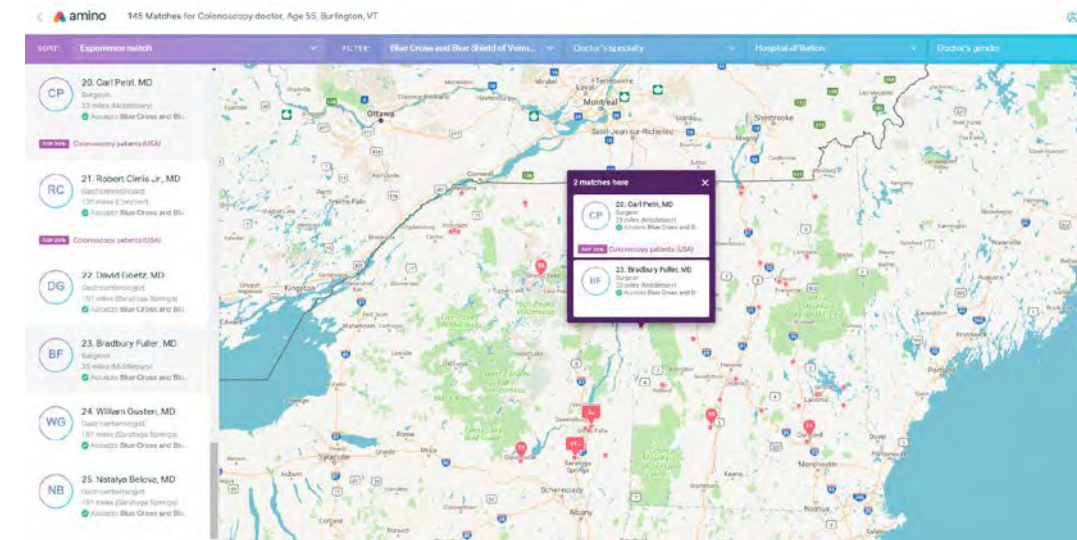
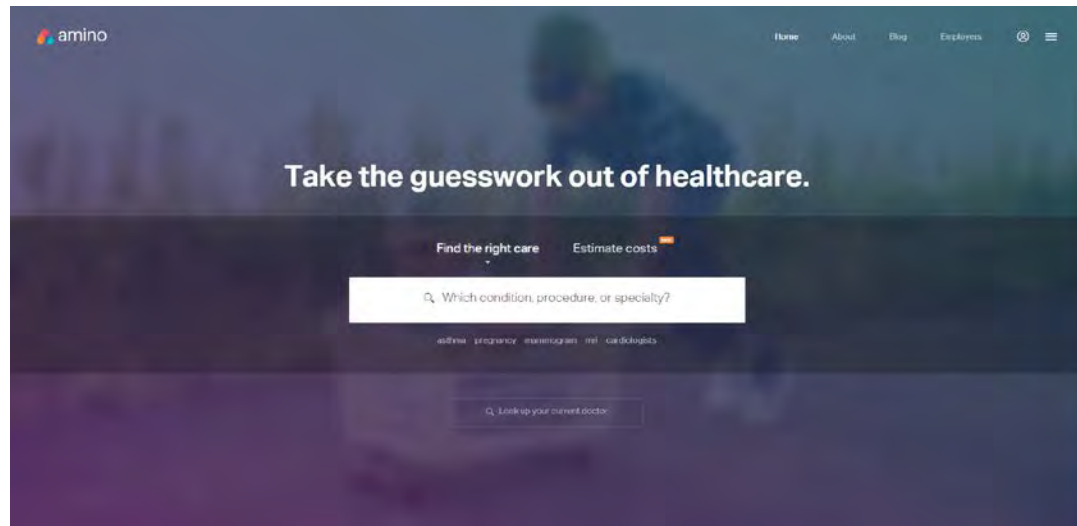
Weight Loss Programs
Swim Lessons
Children's Programs
Kids Camps
Wellness Programs

INFLUENCERS: Patient

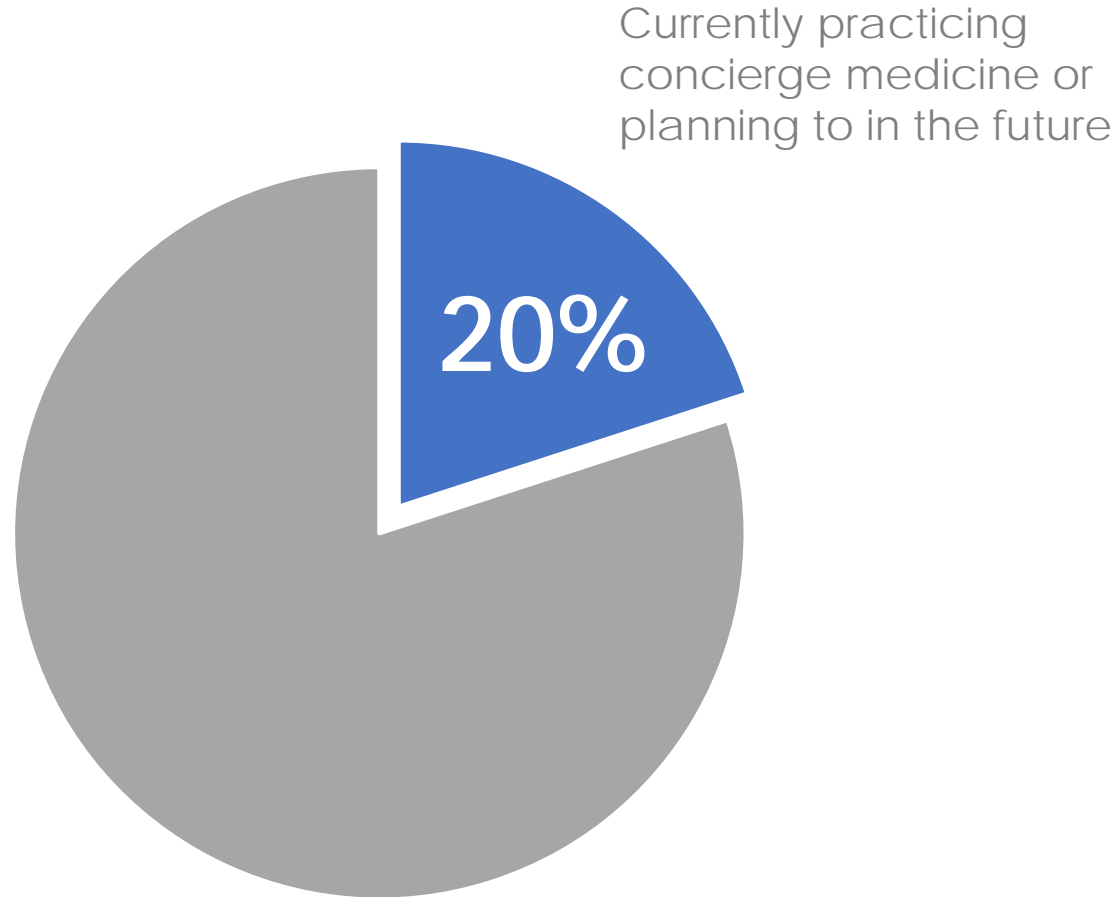


“I’ve been waiting for over 10 minutes.
When can I get something for this cold?
It isn’t going to get better on it’s own!!!”

patient – shopping



patient – concierge medicine



Concierge medicine allows doctors to charge a **flat monthly fee** for services

- Florida-based MDVIP was founded in 2000 and has grown to a national network of more than 800 physicians.
- Physicians in traditional practices can have between 2,500 and 4,000 patients - MDVIP physicians are capped at 600.
- An annual membership in MDVIP is approximately \$150 a month

patient – concierge medicine



patient – aging population



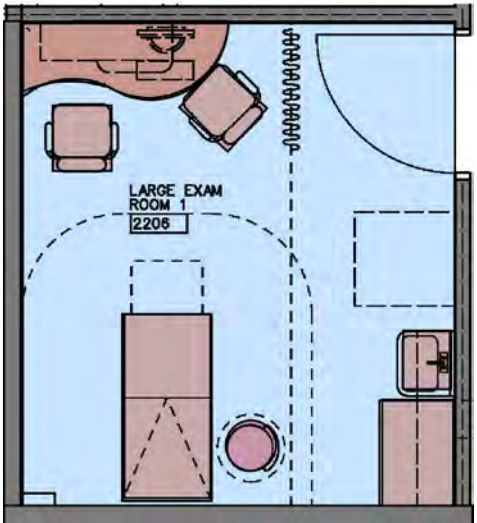
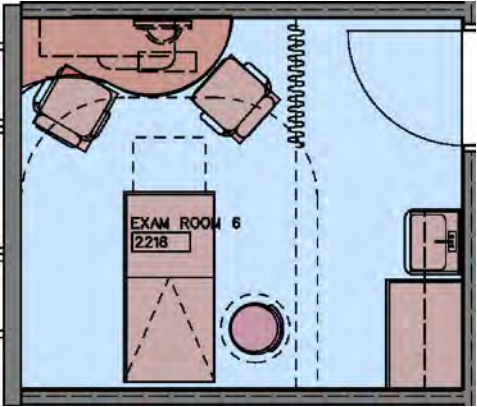
patient – village of care



patient – universal design



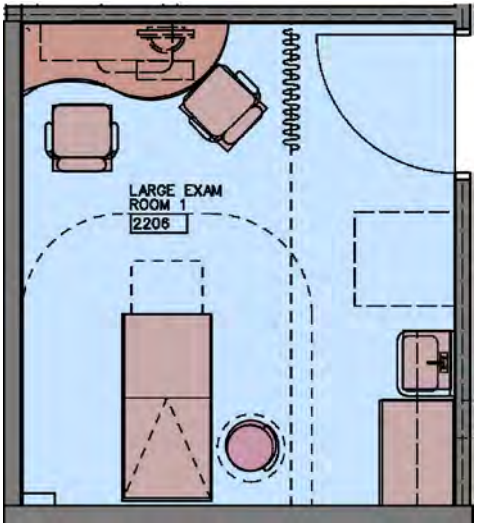
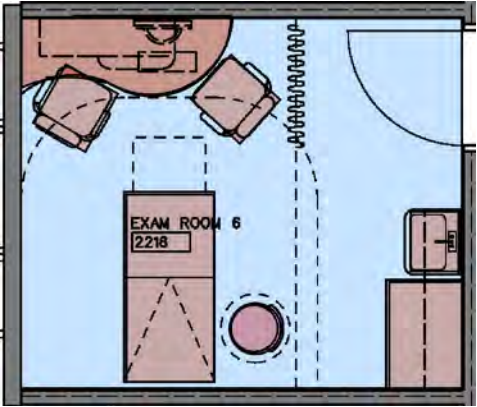
Universal Exam Room Primary Care & Multi-Specialty Clinics Dartmouth Hitchcock



patient – universal design



Universal Exam Room Primary Care & Multi-Specialty Clinics Dartmouth Hitchcock

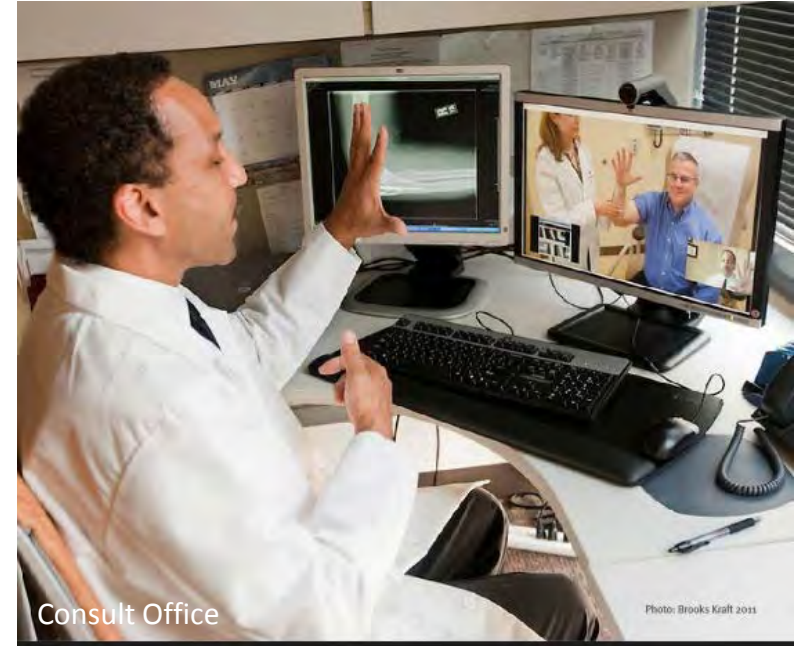
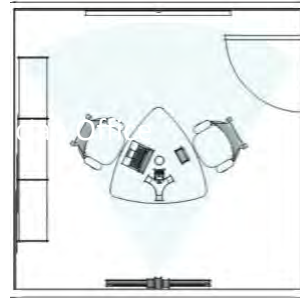
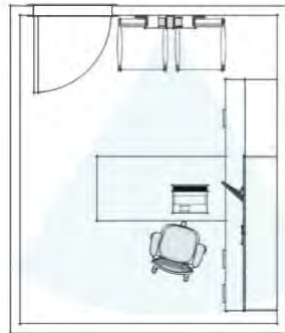


patient – telemed

Practice Model – TeleMedicine



Care Provider Location: Example 1

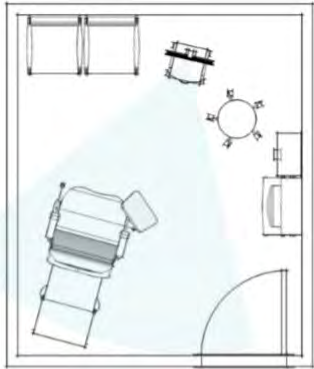


Consult Office

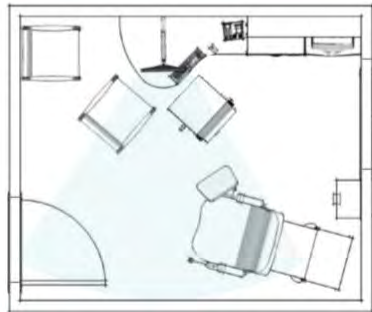
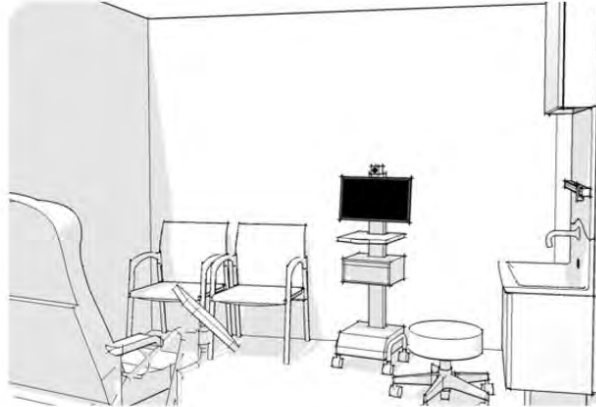
Photo: Brooks Kraft 2011

patient – telemed

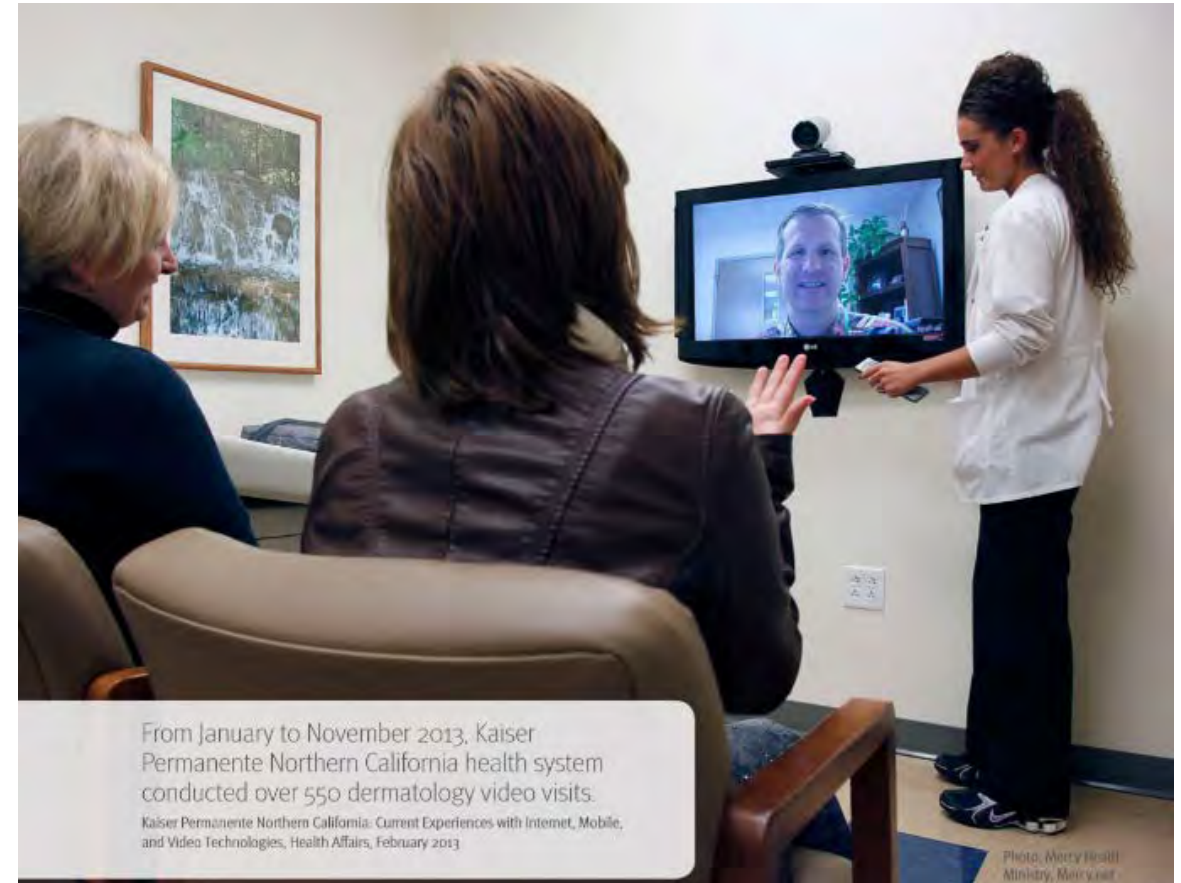
Practice Model – TeleMedicine



Exam Room: Example 1
Mobile cart with patient on exam table



Exam Room: Example 2
Desk-based with patient in guest chair



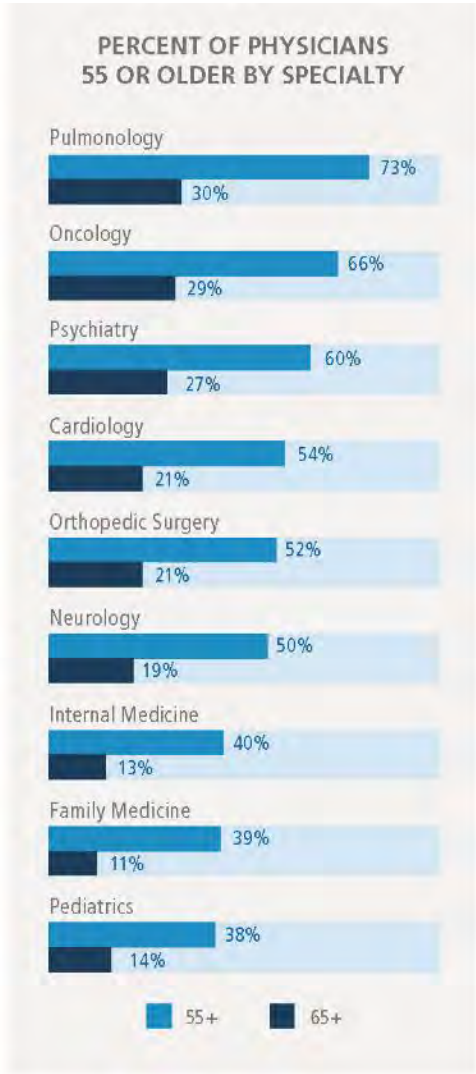
From January to November 2013, Kaiser Permanente Northern California health system conducted over 550 dermatology video visits. Kaiser Permanente Northern California: Current Experiences with Internet, Mobile, and Video Technologies, Health Affairs, February 2013

Photo: Merry Health Ministry, Merry and

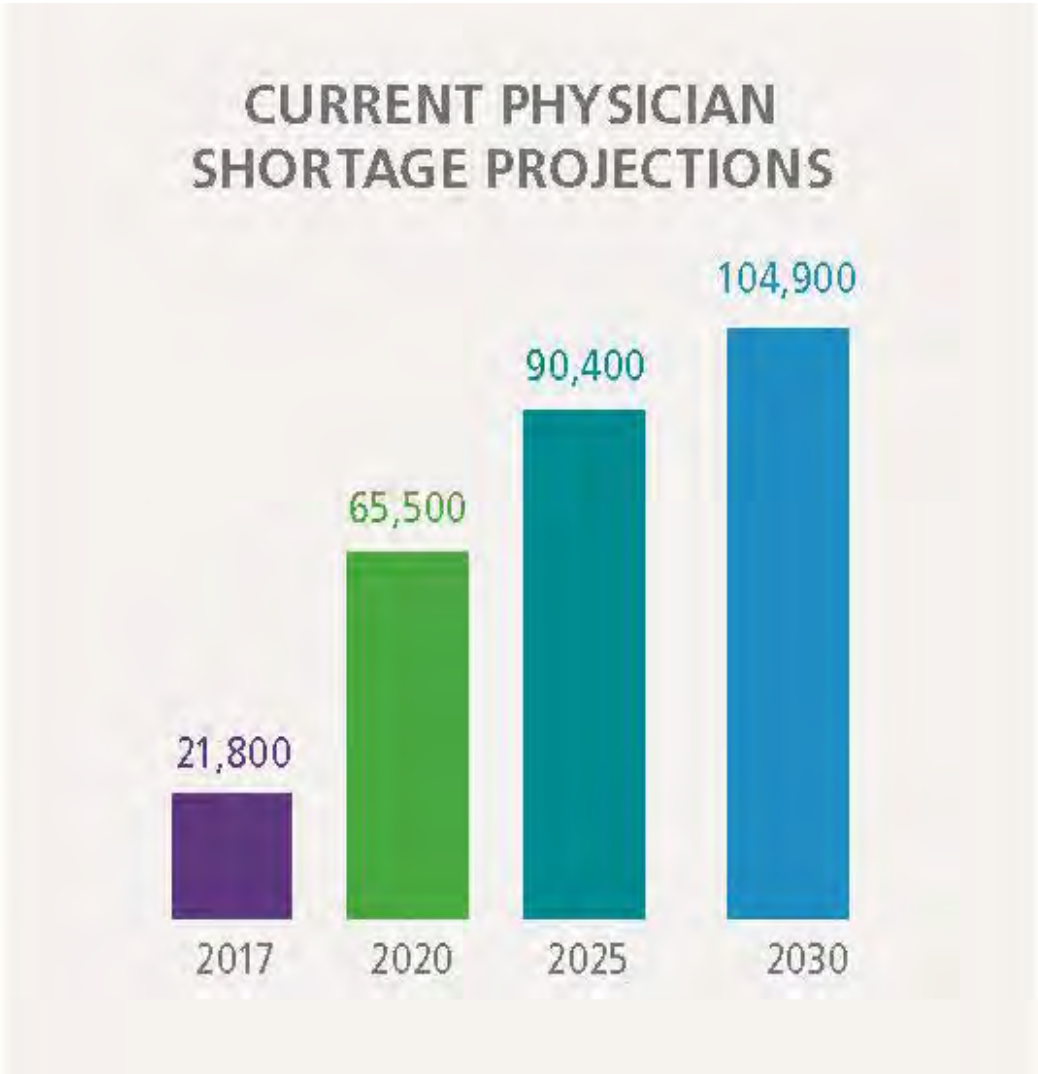
INFLUENCERS: Physicians



physician – shortage

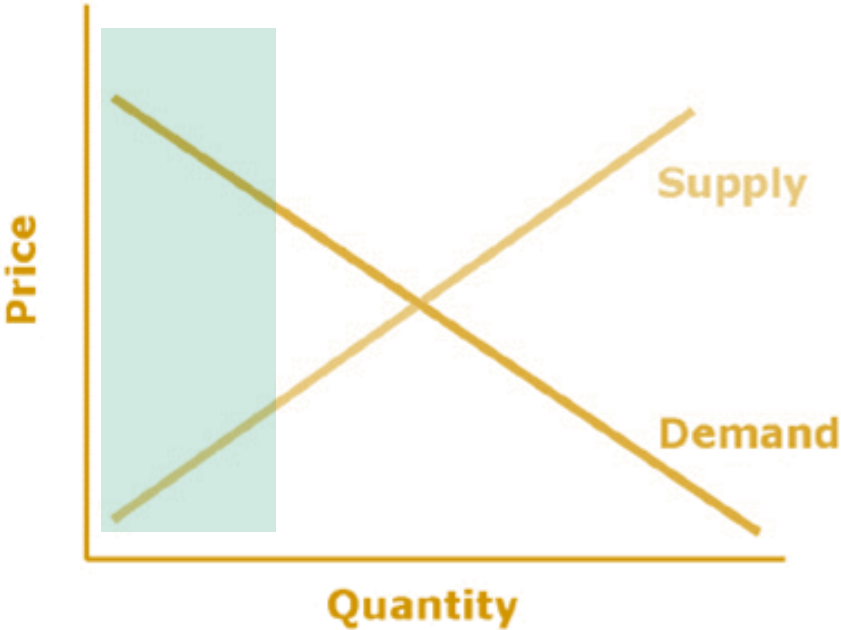


Source: AMA Physician Master File

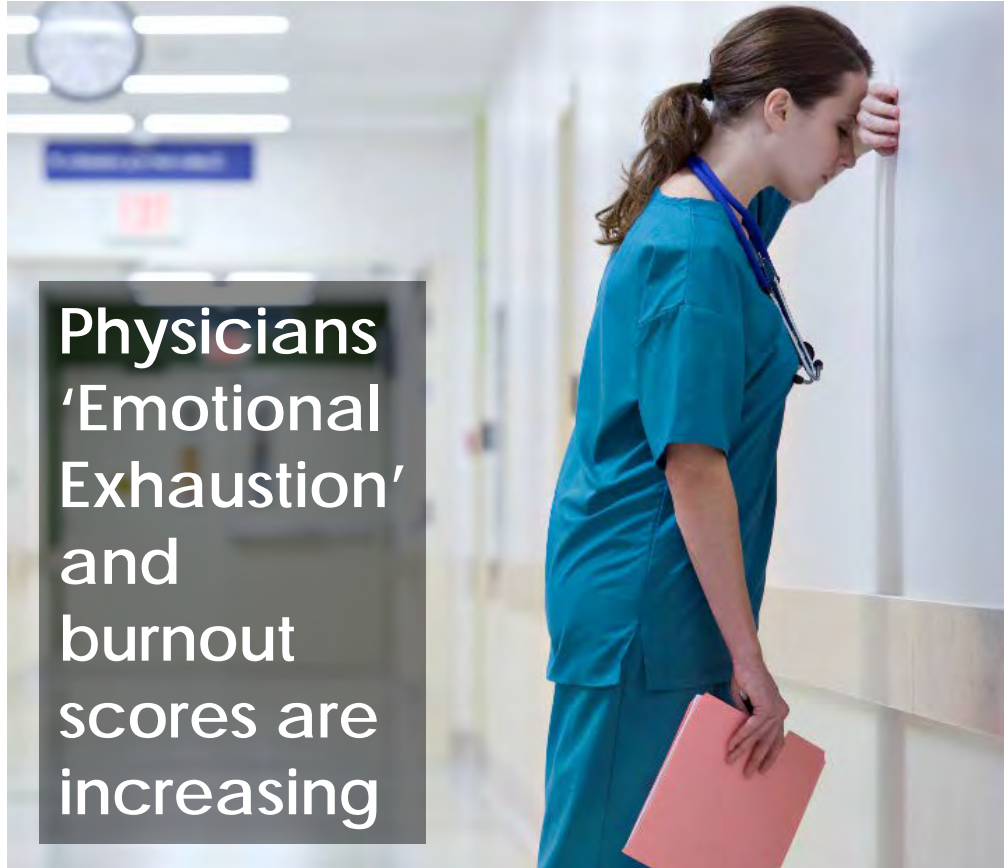


Source: IHS, Inc./AAMC. 2017 Update: The Complexities of Physician Supply and Demand: Projections from 2015 to 2030

Physicians Looking for Jobs



physician – burnout



Three years worth of 'Reduction in Professional Effort' is the equivalent of **eliminating one graduating class** from seven US Medical Schools

TABLE. Changes in Burnout Between 2013 and 2015 Based on Whether Physicians Reduced Professional Work Effort

Burnout variable	Reduced professional work effort in 12 mo following 2013 survey (n=40)	Did not reduce professional effort (n=1410)	P value
Change in emotional exhaustion score ^a			
Mean change ^b	−0.63	−.09	.02 ^c
Median change ^b	−1	0	.02 ^d
≥3-Point improvement	3 (8%)	69 (5%)	.02 ^c
2-Point improvement	6 (15%)	140 (10%)	
1-Point improvement	11 (28%)	299 (21%)	
No change	15 (38%)	490 (35%)	
1-Point worsening	3 (8%)	235 (17%)	
2-Point worsening	2 (5%)	109 (8%)	
≥3-Point worsening	0 (0%)	68 (5%)	
Change in depersonalization score ^e			
Mean change ^b	−0.53	+0.02	.02 ^c
Median change ^b	0	0	.08 ^d
≥3-Point improvement	4 (10%)	65 (5%)	.02 ^c
2-Point improvement	5 (13%)	87 (6%)	
1-Point improvement	6 (15%)	209 (15%)	
No change	16 (40%)	683 (48%)	
1-Point worsening	8 (20%)	211 (15%)	
2-Point worsening	1 (3%)	82 (6%)	
≥3-Point worsening	0 (0%)	73 (5%)	

^aChange in emotional exhaustion between 2013 and 2015 surveys (Likert scale, score range 0-6⁵).

^bPositive values indicate a worsening in score (higher burnout), and negative values indicate an improvement in score (lower burnout).

^cChange in depersonalization between 2011 and 2013 surveys (Likert scale, score range 0-6⁵).

^dAnalysis of variance.

^eMann-Whitney test.

TEAM-BASED CARE: Saving Time and Improving Efficiency

Physicians can maximize their time – and their practice's income –
by delegating more documentation tasks to well-trained staff.

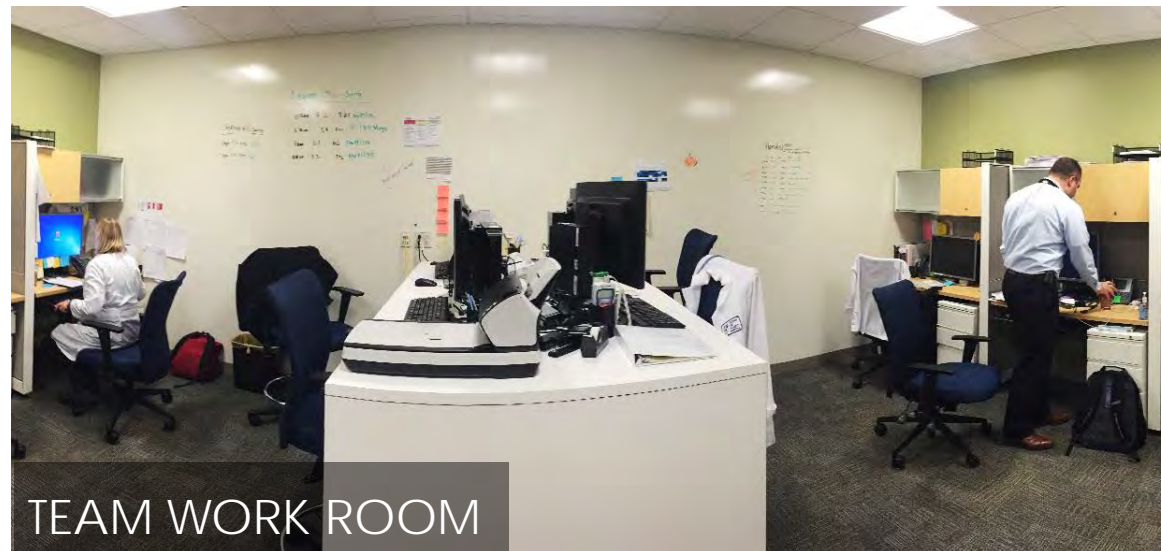
PATIENT SATISFACTION INDICATORS

Below are patient satisfaction metrics collected during Dr. Hopkins' transition to team-based care.

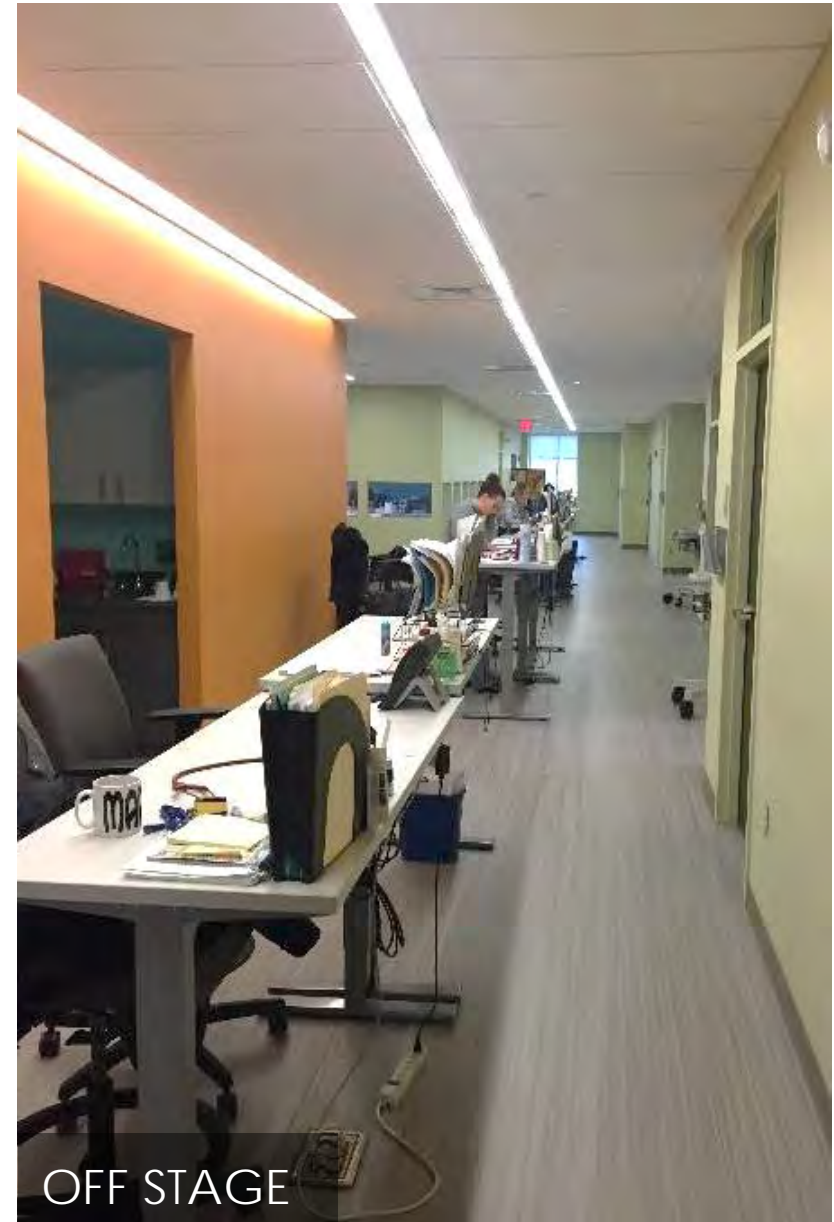
	2011	2012	
Indicator	% top performance	% top performance	Percent change
Wait time in exam room to see provider	66.3	73.4	+10.7
Time spent moving through visit	49.1	61.1	+24.4
Likelihood of recommending practice	79.4	84.1	+5.9
Wait time at clinic	48.6	59.7	+22.8
Time care provider spent with patient	72.2	78.6	+8.9
Ability to get desired appointment	57.1	62.3	+9.1

- RVUs per FTE physician increased approx. 20%
- Increased physician productivity by 40% with team-based care delivery model
- Increased patient satisfaction indicators
- Improved key quality metrics – more patients with blood pressure under control and screened for diabetes
- Hiring **one MA** for each physician paid for itself if each physician was able to see just **one additional patient per half-day clinical session**
- Hiring **one RN** for each physician paid for itself if each physician was able to see **two additional patients per half-day clinical session**

physician – flow / lean



Team Based Care Models



physician – flow / lean



physician – flow / lean



Practice Model

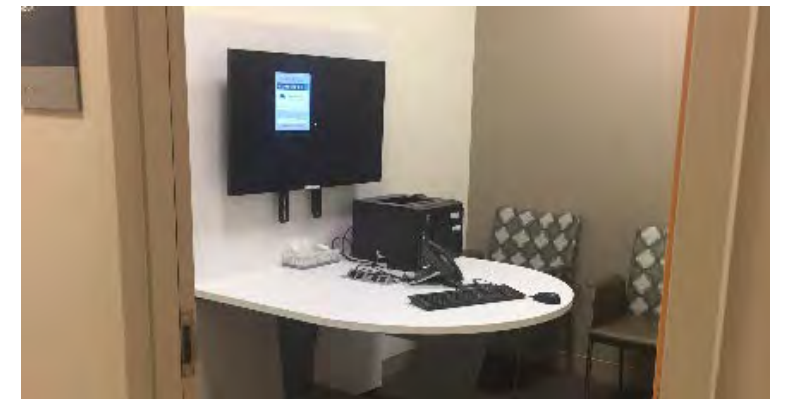
MGH Ambulatory Practice of the Future
Influenced by the Virginia Mason model

physician – flow / lean



Practice Model
MGH / NWH Primary Care Associates

physician – flow / lean



Practice Model
NWH Ambulatory Hub



ambulatory design for the new market

Where are we?

How did we get here?

Where are we going?

Influencers

Discussion

Government

- Policy changes
- 250-yard rule
- CMS reimbursables
- non-profit/for-profit partnerships

Insurance

- mergers and acquisitions
- outpatient imaging
- redistribution of services
- upstream intervention

Patients / Clients

- shopping
- concierge medicine
- aging population
- village of care
- universal design
- telemed

Physicians

- shortage
- burnout
- flow / lean

A wide-angle photograph of a modern hospital reception area. The room features a large, circular skylight in the center of the ceiling, which is illuminated from below. The ceiling is made of white acoustic tiles with recessed lighting. The walls are a light beige color, and there are several doors with wood paneling. In the foreground, there are two curved reception desks with white tops and purple bases. A woman in a white lab coat is seated at the left desk, and a man in a white lab coat is seated at the right desk. In the background, there is a small round table with four chairs, and a man in a white lab coat is seated at the table. The floor is covered with a patterned carpet. The word "discussion" is overlaid in the center of the image in a large, orange, sans-serif font.

discussion