

Hacking America's Health

The Brookings Institution
May 13, 2014

Hashtag: ThingsYouCanDoWithCMSData

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May 13, 2014

1. Which Provider is paid the most?

- Add, Sort Descending (stratify)

The image is a collage of news snippets from three different media sources, each highlighting a story related to chiropractic billing and Medicare payments.

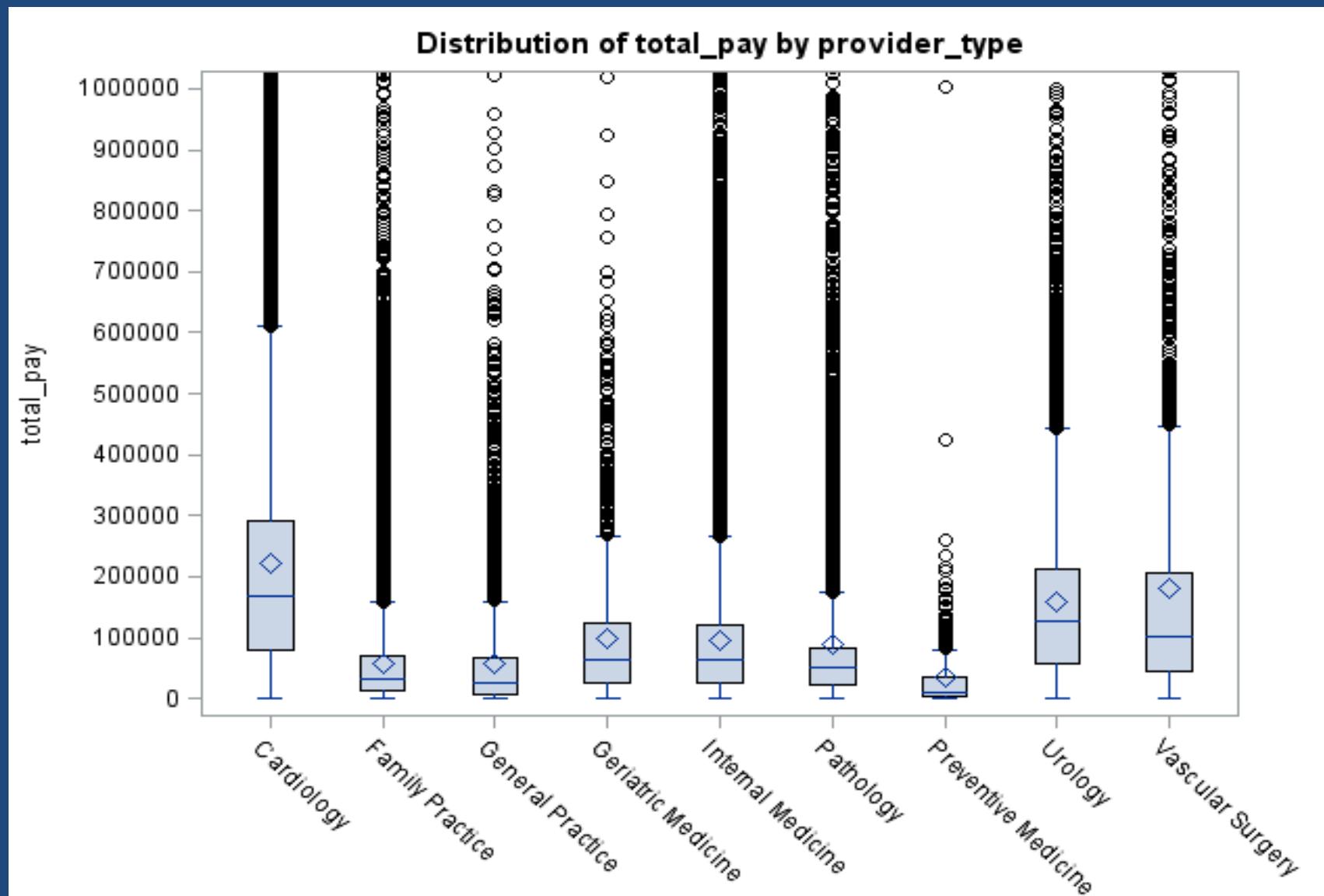
- USA TODAY:** A headline reads "Some chiropractors making big Medicare adjustments".
- The Washington Post:** A headline reads "INVESTIGATION One Therapist, \$4 Million in 2012 Medicare Billing".
- The New York Times:** A headline reads "Pain and gain: An Alabama clinic stands out amid data on Medicare payments".

Each news snippet includes a small image, a byline, and a date. The USA Today snippet includes social media sharing options (Facebook, Twitter, LinkedIn) and a Dell advertisement.

Backlash

- Doesn't mean what you think it does
 - Multiple Billers, one ID
 - Drug costs, not doctor
- Totally legal
- Says nothing about quality- just volume of services delivered

2. Look at distributions



4. Find the Experienced Hand

L3-L4: Diffuse disc bulge/posterior uncovering and bilateral ligamentum flavum thickening and facet hypertrophy causing severe central canal stenosis and bilateral foraminal stenosis, moderate to severe on the left and mild on the right.

- 453 Orthopedic Surgeons in MD
- Who is most experienced at injecting steroid into an arthritic and narrowed spine?

| | | | | | | |
|----------|----------|---------------------------|---------------|-------|------------|-----|
| FISCH | IRA | 10215 FERNWOOD RD | BETHESDA | 64483 | Inj forame | 263 |
| SCHNEIDE | PHILIP | 10400 CONNECTICUT AVE | KENSINGTON | 64483 | Inj forame | 68 |
| SELYA | LEONID | 4000 MITCHELLVILLE RD | BOWIE | 64483 | Inj forame | 43 |
| PERIM | DAVID | 1400 FOREST GLEN RD | SILVER SPRING | 64483 | Inj forame | 41 |
| GRECO | JOHN | 1675 WOODBROOKE DRIVE | SALISBURY | 64483 | Inj forame | 32 |
| LEVIN | DAVID | 9420 KEY WEST AVE STE 300 | ROCKVILLE | 64483 | Inj forame | 20 |
| OSMAN | SAID | 1050 KEY PKWY | FREDERICK | 64483 | Inj forame | 19 |
| COHEN | DAVID | 601 N CAROLINE ST | BALTIMORE | 64483 | Inj forame | 17 |
| KNOX | BENJAMIN | 510 IDLEWILD AVE | EASTON | 64483 | Inj forame | 15 |
| SETHI | NAVINDEE | 3414 OLANDWOOD CT | OLNEY | 64483 | Inj forame | 13 |

3. Practice Pattern Variation



“While the national average was 46 surgeries over the two year period, some did more than 460.

While the average spine surgeon performed them on 7 percent of patients they saw, some did so on 35 percent. ”

More Practice Pattern Variation



460 Park Avenue

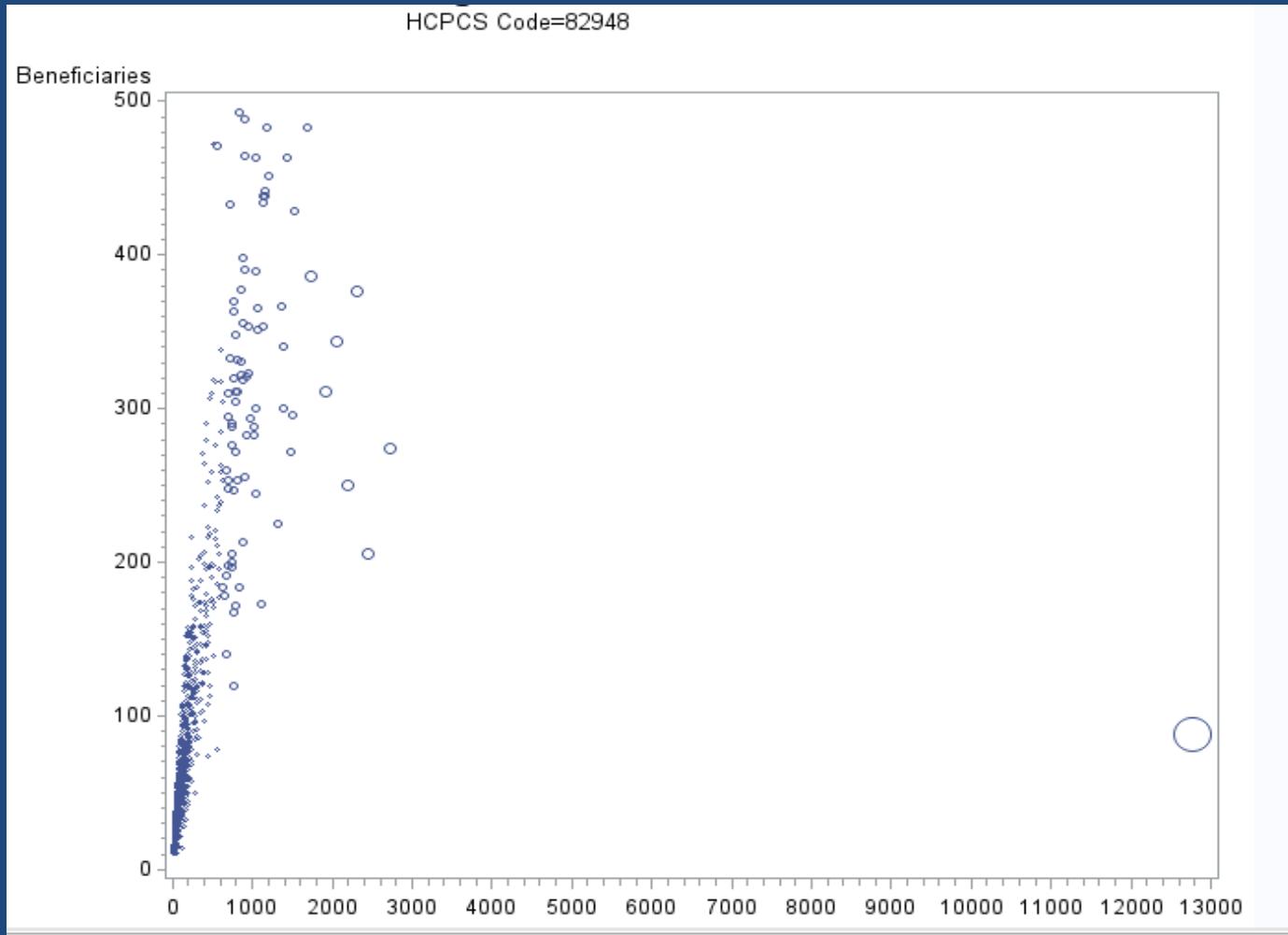
Dr Freund- 389 Eye Injections in 2012
\$4,930,730 from Medicare
\$12,675 each



550 Park Avenue

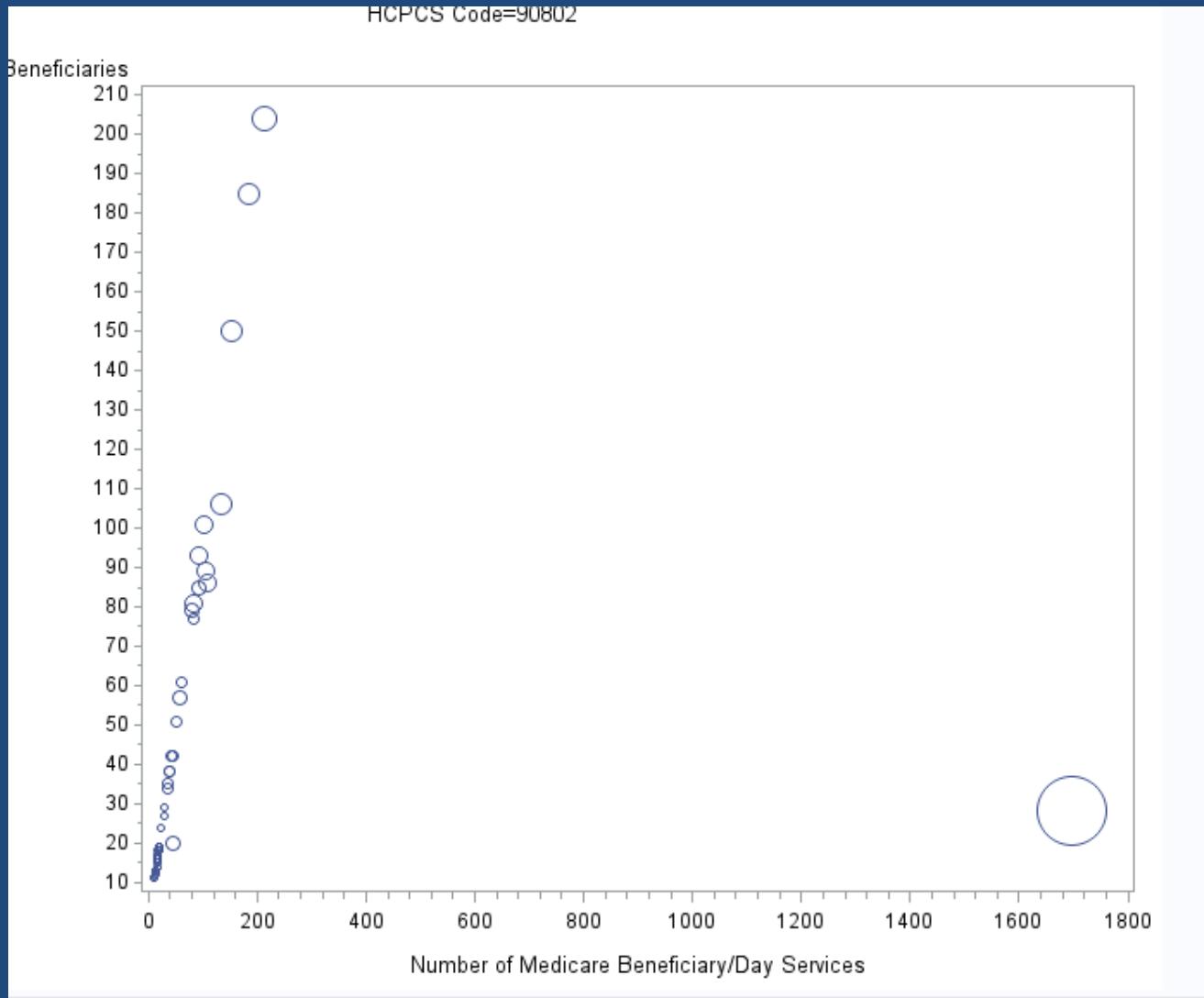
Dr Fromer- 103 Eye Injections in 2012
\$47,581 from Medicare
\$462 each

4. Spot the Outlier?



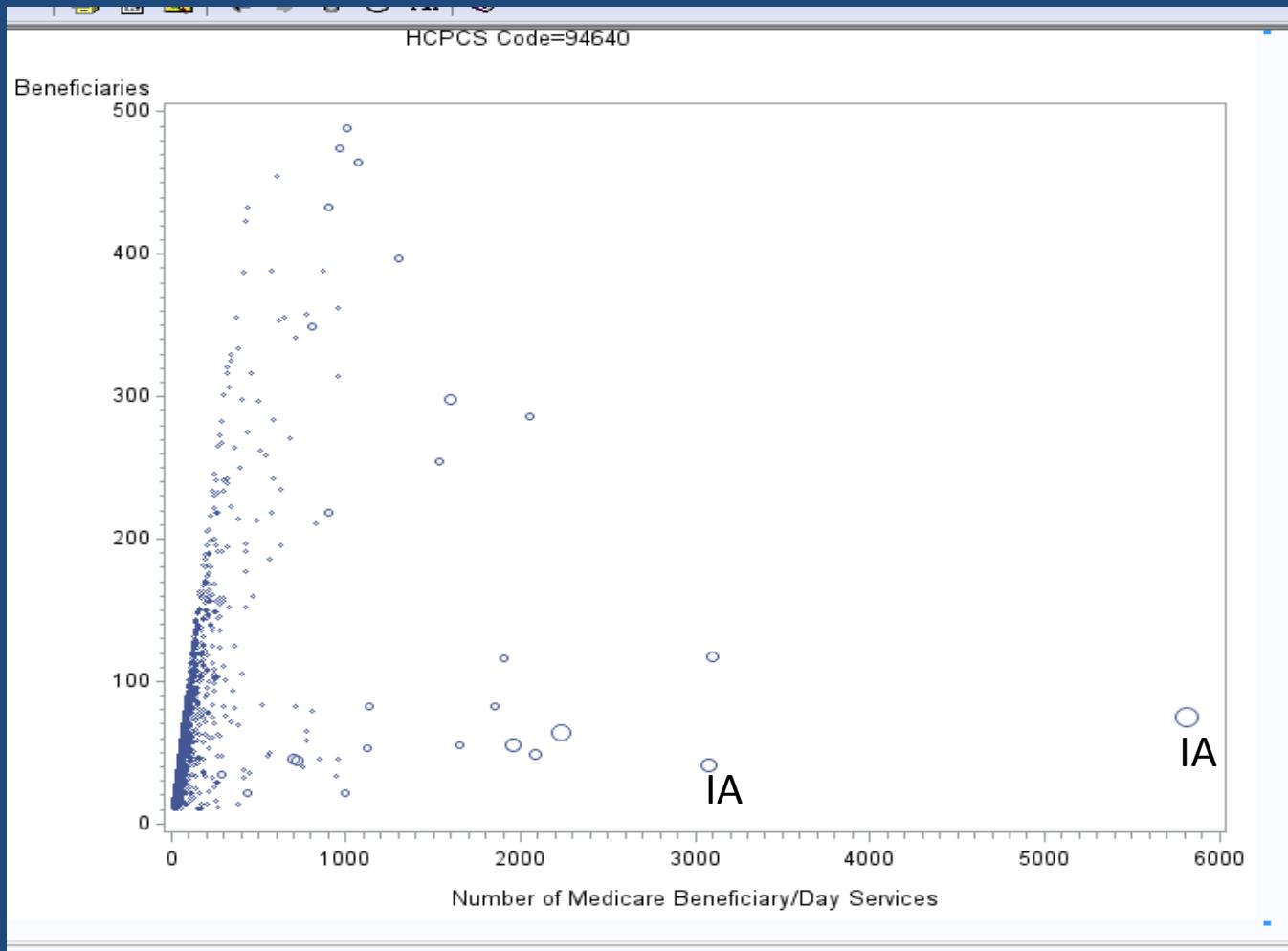
- Reagent strip/blood glucose: 28954
- On 88 patients

Another One



- Interactive Psychiatric Diagnostic Interview
- 1,697 on 28 patients

Spatial Clustering



- Airway Inhalation therapy
- 75 Rx-Days in 2012



Comments

Sliver of Medicare Doctors Get Big...



ALL

READER PICKS

NYT PICKS

me. But it confirms what I already knew: America has a screwed up healthcare reimbursement system. It is wildly skewed towards specialty procedures, whereas an internist who spends an hour with a difficult patient (maybe with dementia) gets reimbursed 80 dollars, while another performs 5 simple procedures in the same time on a single patient and gets 20 times more . Looking at the majority of doctor's reimbursements made me sad and looking at others made me angry. But the sadness prevails.

This also confirms that the great majority of doctors are very honest toiling every day trying to make 30 dollars here 20 dollars there, and barely getting by financially. It will be easy now to figure out who the outliers are and make the proper adjustments. But this will not change the pathetic state of things. the real solution to our healthcare problem would have been expansion of the VA system, where doctors are salaried , work decent hours and do not have to worry about the "running meter" like a cabbie.

5. The Future: Mash It Up!

- Link to other data-sets, find associations
 - Meaningful Use
 - Physician sanction
 - Drug prescribing
 - Sunshine Act disclosures of donations

The screenshot shows the ProPublica website with a dark blue header. The header features the ProPublica logo (a magnifying glass icon with the text 'PRO PUBLICA') and the tagline 'Journalism in the Public Interest'. There are buttons for 'SUBSCRIBE' and 'Email address'. Below the header is a navigation bar with links for 'Home', 'Our Investigations', 'Tools & Data', 'MuckReads', 'Get Involved', 'About Us', and social media links for Facebook and Twitter. A search bar is also present. The main content area has a sub-header 'The Prescribers' and the text 'Inside the Government's Drug Data'. The main title of the article is 'Even After Doctors Are Sanctioned or Arrested, Medicare Keeps Paying'. Below the title is a brief description: 'A ProPublica analysis of recently released data shows that dozens of physicians who received payments from Medicare in 2012 had been kicked out of Medicaid, charged with fraud, or settled claims of overbilling Medicare itself.' The author is listed as 'by Charles Ornstein' and the date is 'ProPublica, April 16, 2014, 12:02 p.m.'. There are buttons for '0 Comments' and 'Print'. At the bottom, it says 'This story was co-published with [NPR](#)' and 'In August 2011, federal agents swept across the Detroit area, arresting doctors, pharmacists and other health professionals'. To the right, there is a box for 'The Prescribers' investigation.



Digging Deeper into Physician Payment Data

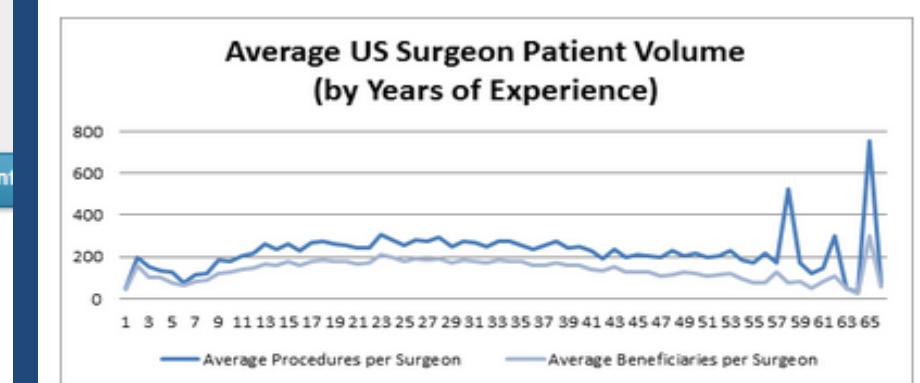
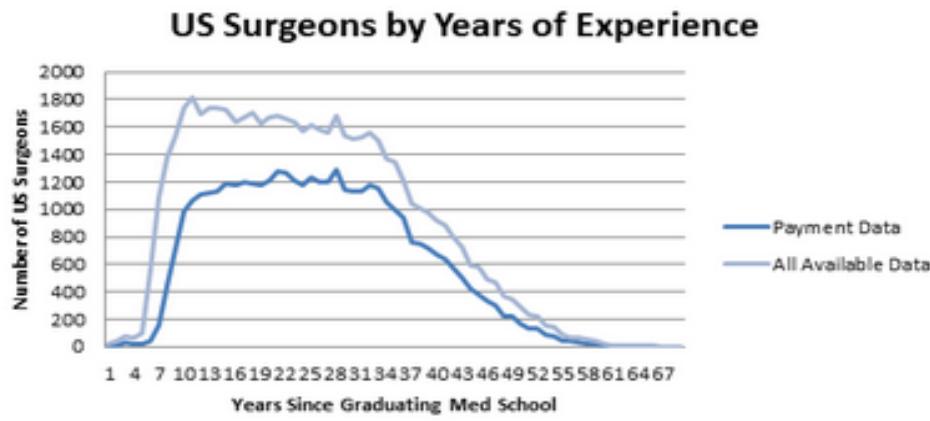
Loran Cook, Product Evangelist and Quality Assurance
May 8, 2014

[Print this page](#)

Amid the torrent of #ThingsYouCanDoWithCMSData ideas generated by the (relative) tsunami of Medicare physician payment data that was released last week, we were curious to look at how the data stacked up by physician experience in performing surgical procedures, among other things. The data used in this analysis were limited (by CMS for privacy reasons) to Medicare beneficiaries and surgeons who had billed CMS for more than 11 procedures in CY 2012. Data were further limited (by us for the purposes of this study) to only include MD/DOs with a Surgeon-specific taxonomy code performing surgery-specific HCPCS procedure codes (10021-69990).

Baselines and Limitations

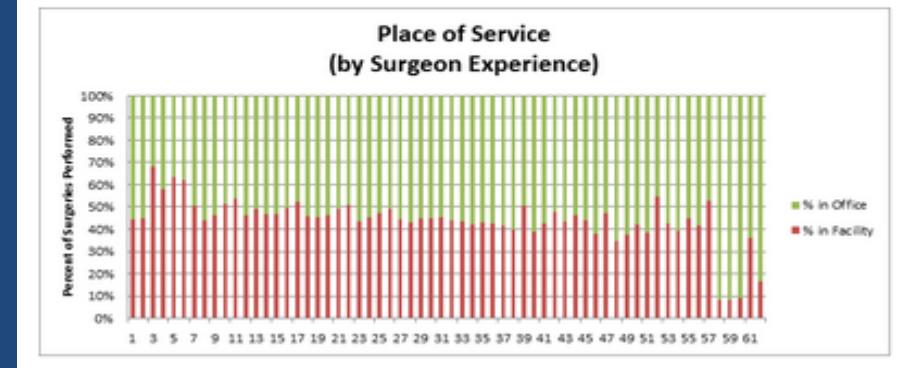
The data released by CMS appear to be fairly representative of the Medicare surgeon population as a whole. We looked at the number of years since graduation from med school for all surgeons with available data (surgeons who accept Medicare), and the cohort from the payment database matched the full population trend, as expected.



From the chart above we can see that for more experienced surgeons, it is common to see a spike in the average number of procedures. Further analysis showed that older surgeons were more likely to provide multiple surgical services to the same beneficiary on a single claim. This may be caused jointly by the increased trust placed by Medicare patients in more experienced doctors and the tendency for older patients to need multiple surgeries.

Patient Volumes, Charges by Care Setting

In addition to providing fewer surgical services per beneficiary, we found that surgeons with less experience tended to operate more in "facility" settings, whereas more experienced surgeons more frequently operated in an "office" setting^[iv].



http://www.billian'shealthdata.com/Knowledge/Blog/2014/May/Digging_Deep into_Physician_Payment_Data

How Data Can Better Inform the Four Ps- Patients, Providers, Payers and Policymakers

Kavita Patel, MD, MS
@kavitapmd

Engelberg Center for Health Care Reform
The Brookings Institution

May 13, 2014

Headlines

The screenshot shows the CMS.gov website with a navigation bar for Medicare, Medicaid/CHIP, Medicare-Medicaid Coordination, Private Insurance, Innovation Center, Regulations & Guidance, Research, Statistics, Data & Systems, and Outreach & Education. A search bar is at the top. Below the navigation is a breadcrumb trail: Home > Newsroom Center > Media Release Database > Press releases > 2014 Press releases > Press release: Historic release of data gives consumers unprecedented transparency on the medical services physicians provide and how much they are paid. The main content is a press release titled "Press release: Historic release of data gives consumers unprecedented transparency on the medical services physicians provide and how much they are paid". The release date is April 9, 2014, and the contact is press@cms.hhs.gov.

HEALTH

How Much Medicare Pays for Your Doctor's Care

Use the form below to find a doctor or other medical professional among the more than 800,000 health care providers that received payments in 2012 from Medicare Part B, which covers doctor visits, tests and other treatments. Payments may also cover overhead, such as staff salaries and drug costs. In some cases, when doctors work as salaried employees of group practices, the payments that show up under their names go to their institutions. **Related Articles:** Sliver of Medicare Doctors Get Big Share of Payouts, The Medicare Data's Pitfalls APRIL 9, 2014

| | | |
|---------------------------------------|--|----------------------|
| Name | Specialty | City or ZIP Code |
| <input type="text"/> | <input type="button" value="All Specialties"/> | <input type="text"/> |
| <input type="button" value="SEARCH"/> | | |

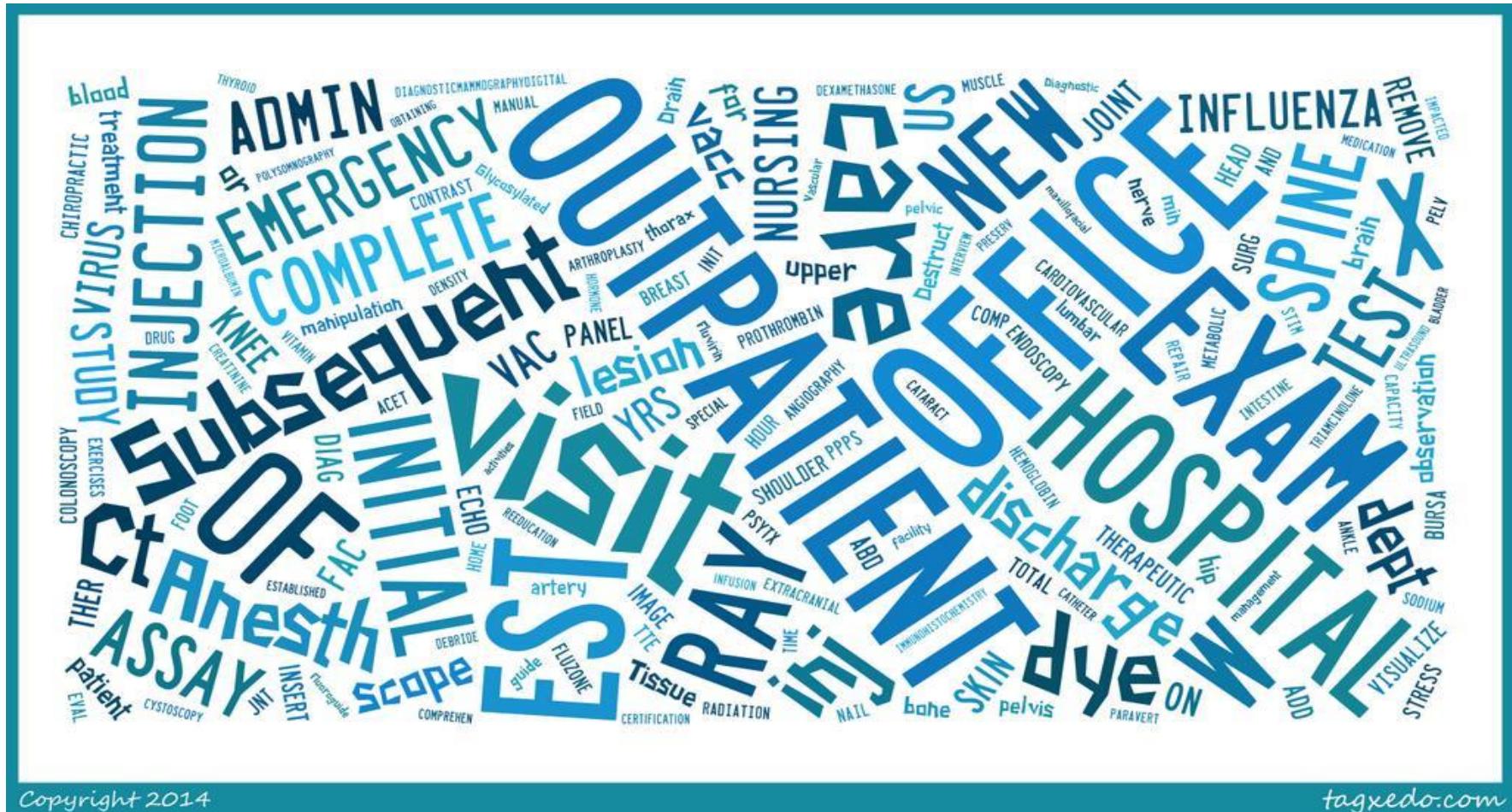
DATABASE

The image contains three news headlines. The first is from The New York Times, titled "Sliver of Medicare Doctors Get Big Share of Payouts", dated April 9, 2014, by Reed Abelson and Sarah Cohen. It includes a sub-headline: "Medicare reveals how much it pays each doctor. Here's what the data show" and a quote: "Just 100 doctors received \$160 million in 2012 reimbursements". The second is from The Wall Street Journal, titled "THE WALL STREET JOURNAL", with a sub-headline: "Small Slice of Doctors Account for Big Chunk of Medicare Costs". The third is from The Washington Post, titled "The Washington Post".

Data Transparency: The Four Perspectives

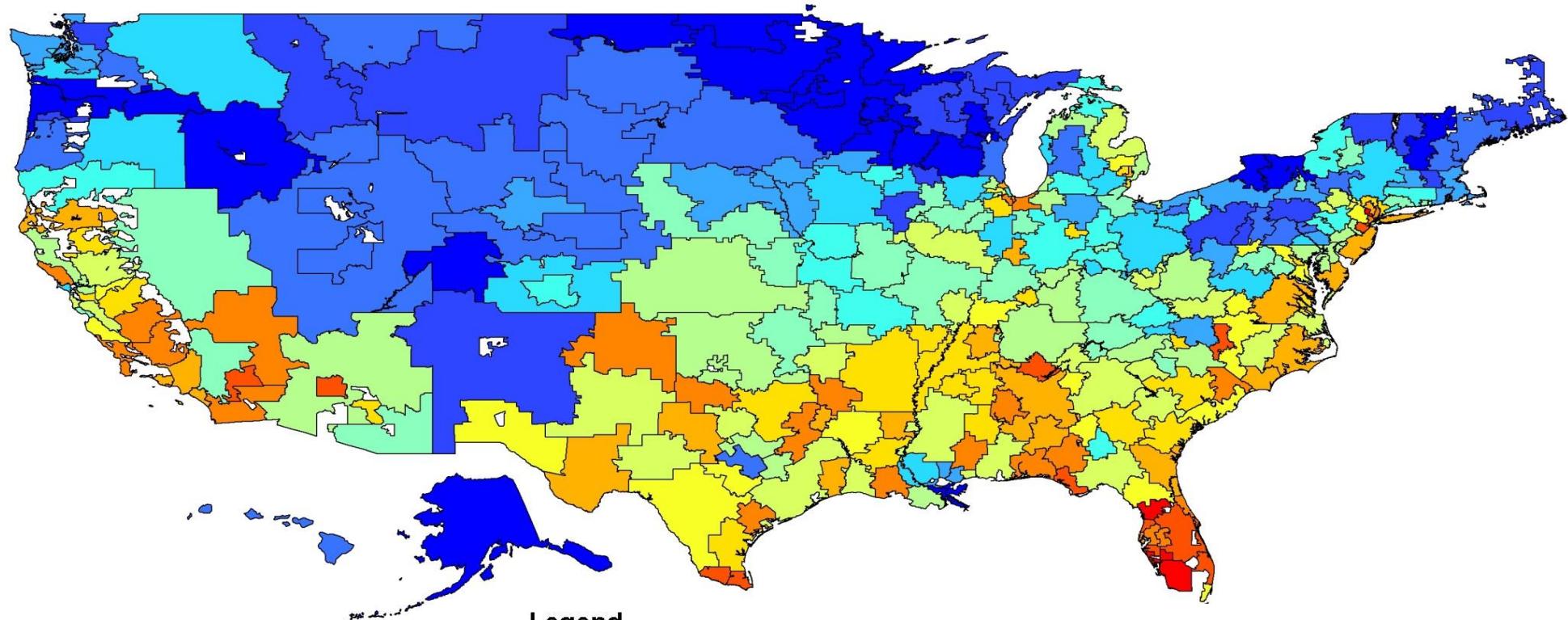
- Patient
 - Level of provider experience
 - Out-of-pocket costs
- Provider
 - Claims data to understand practice patterns
 - Defense of current practices
- Payer
 - Way to leverage their claims data
 - Promote provider cost awareness
 - Reimagine networks with high-value physicians included
- Policymaker
 - Identify anomalies
 - Price transparency for lower costs
 - Find high/low value services

Word Cloud of HCPCS Code Descriptions



PAYERS AND POLICYMAKERS

Average Payments to Providers by Medicare across Dartmouth Atlas HRRs



Legend

Average Total Medicare Payment

By HRR

| | |
|---|---------------------------|
| ■ | \$31,190.12 - \$44,477.11 |
| ■ | \$44,477.12 - \$59,099.62 |
| ■ | \$59,099.63 - \$69,916.32 |
| ■ | \$69,916.33 - \$80,096.90 |

■ \$80,096.91 - \$91,239.26

■ \$91,239.27 - \$104,140.79

■ \$104,140.80 - \$120,145.86

■ \$120,145.87 - \$142,041.95

■ \$142,041.96 - \$181,713.99

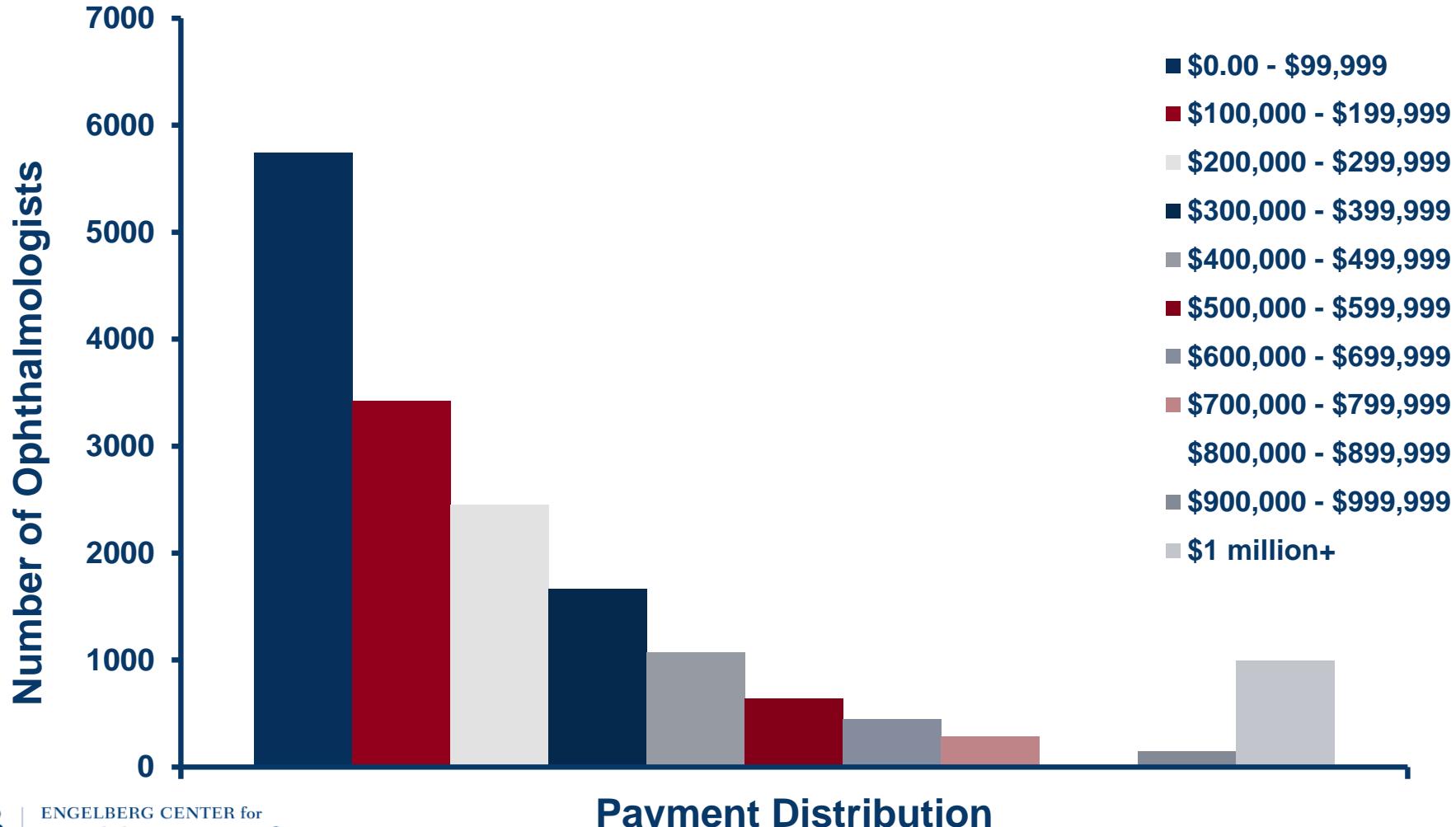
■ \$181,714.00 - \$244,057.31

Average Total Medicare Payments to Providers by Dartmouth Atlas HRR

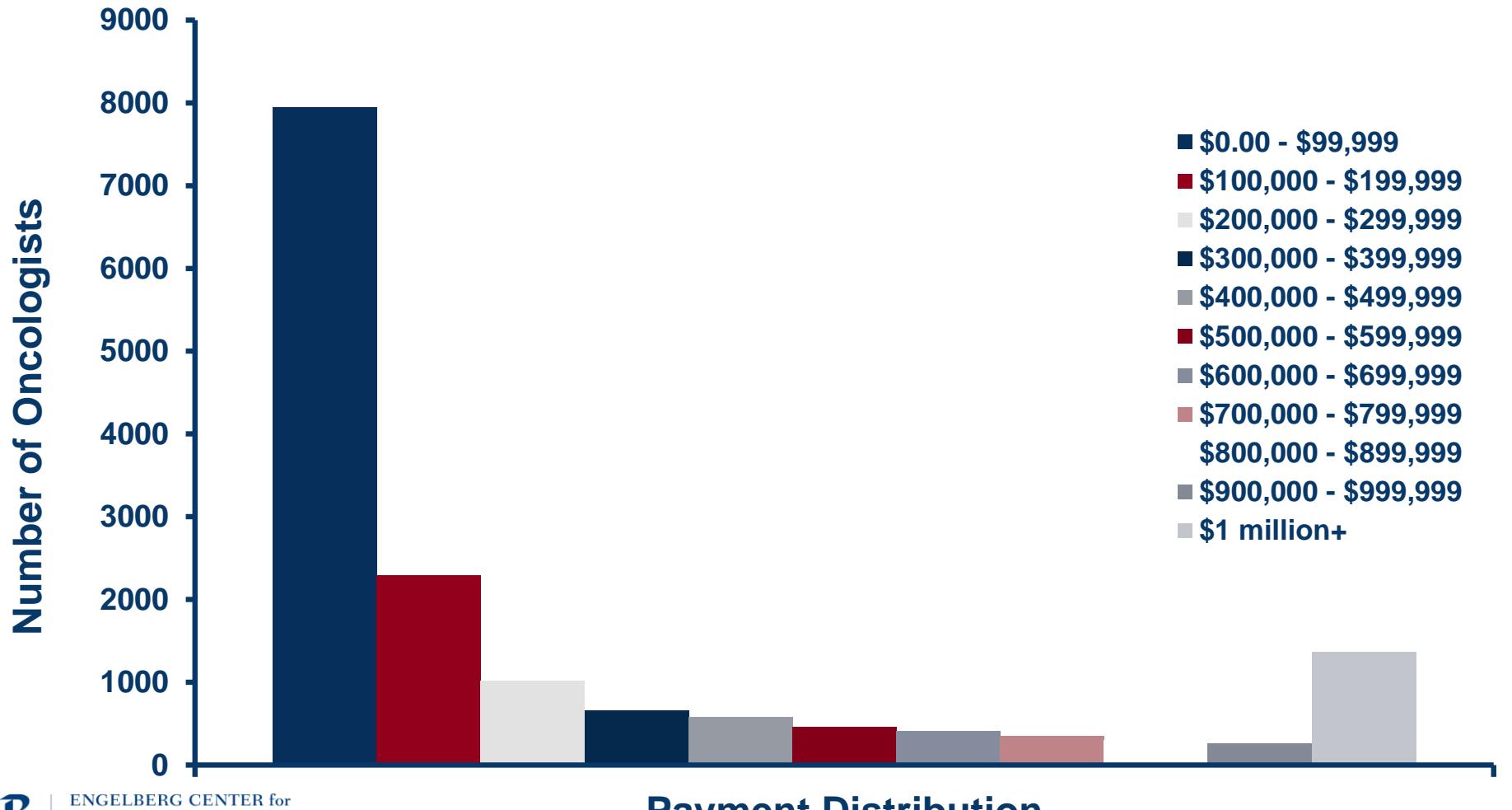
| | HRR Region | City and State | Average Total Payments To Providers |
|---|------------|------------------|-------------------------------------|
| Top Ten HRR Regions for Average Total Medicare Payments to Providers | 129 | Ocala, FL | \$244,057.31 |
| | 119 | Ft. Meyers, FL | \$226,695.52 |
| | 291 | Paterson, NJ | \$225,254.18 |
| | 137 | Sarasota, FL | \$220,034.58 |
| | 313 | Greensboro, NC | \$181,713.99 |
| | 402 | McAllen, TX | \$176,477.85 |
| | 133 | Panama City, FL | \$168,094.91 |
| | 122 | Hudson, FL | \$163,043.31 |
| | 69 | Palm Springs, CA | \$159,080.01 |
| | 5 | Huntsville, AL | \$158,331.96 |
| Lowest Ten HRR Regions for Average Total Medicare Payments to Providers | 323 | Grand Forks, ND | \$38,660.43 |
| | 344 | Portland, OR | \$37,308.80 |
| | 254 | St. Cloud, MN | \$36,753.12 |
| | 256 | St. Paul, MN | \$35,435.26 |
| | 448 | La Crosse, WI | \$34,577.07 |
| | 250 | Duluth, MN | \$34,140.05 |
| | 324 | Minot, ND | \$33,647.82 |
| | 446 | Appleton, WI | \$33,229.01 |
| | 304 | Rochester, NY | \$32,141.75 |
| | 251 | Minneapolis, MN | \$31,190.12 |

PROVIDERS

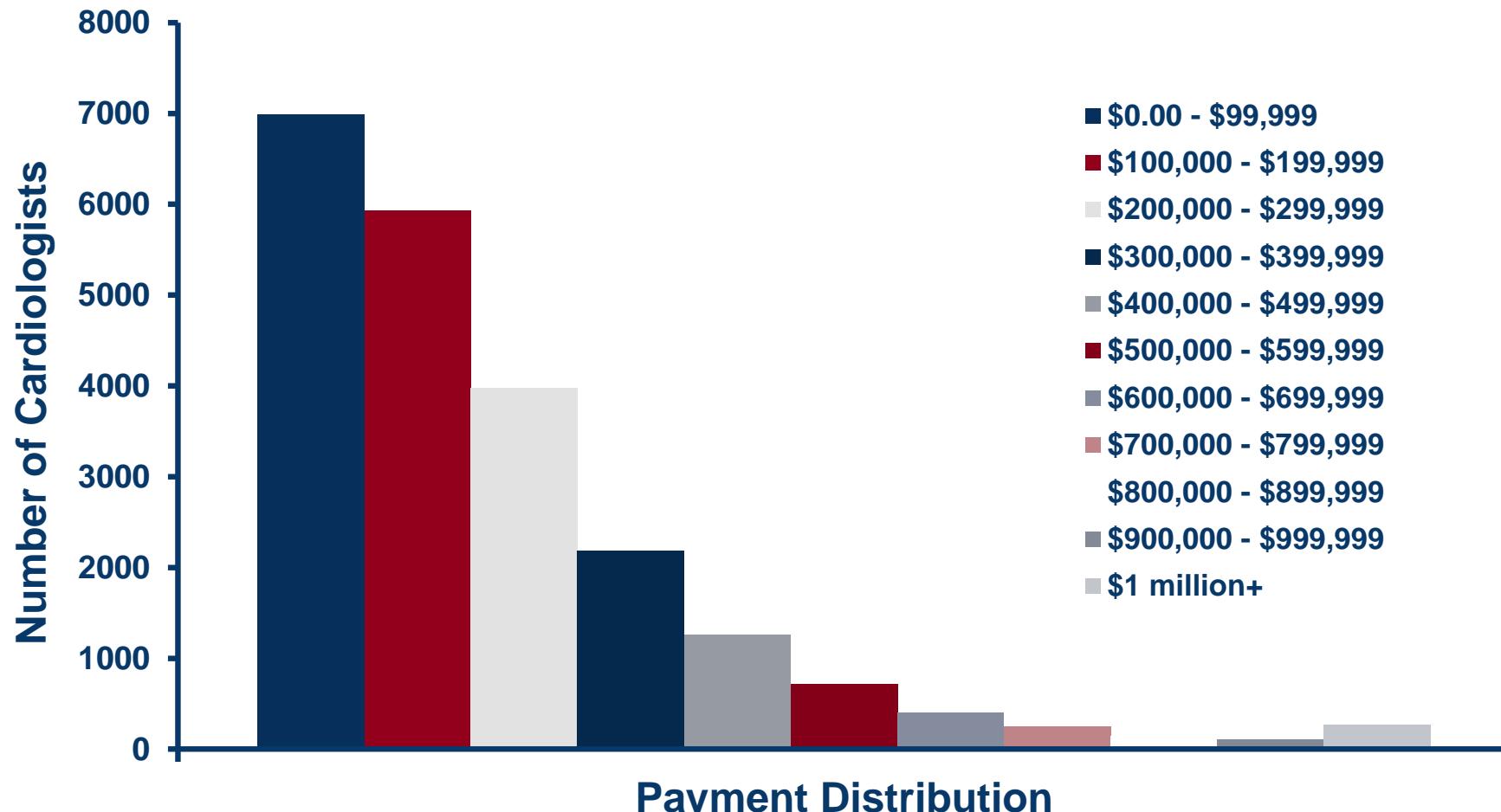
Payment Distribution Across Ophthalmologists



Payment Distribution Across Oncologists



Payment Distribution Across Cardiologists

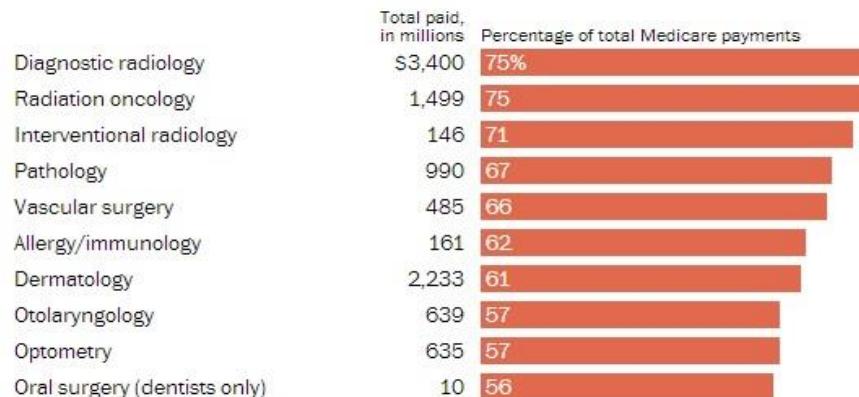


Data to Contextualize Payments

Specialties with large percentages of their Medicare payments going to:

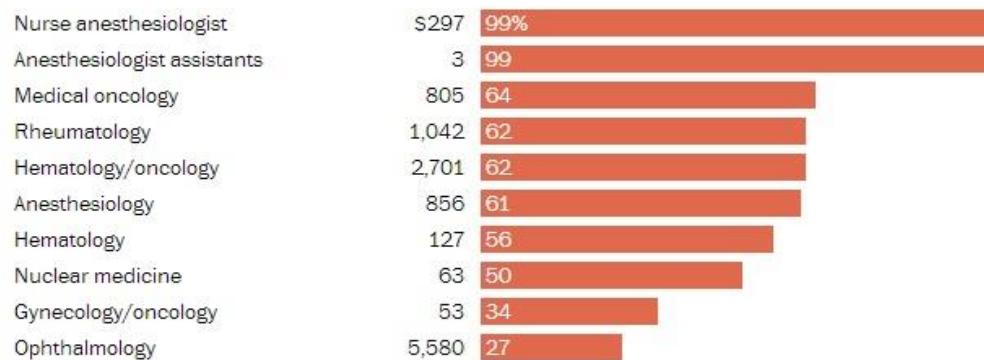
Office overhead

These specialties have very high investments in equipment and staff.



Drugs and other costs

These specialties often have to administer expensive drugs.



PATIENTS

“Give Me My Damn Data”

SECTIONS HOME SEARCH

The New York Times

LOG IN GEAR

A Simple Theory, and a Proposal, on H.I.V. in Africa Disease of Pakistan's Poor Now Worries the Affluent A Soldier's War on Pain Deadly Illness in Nicaragua Baffles Experts Patient's Cells Deployed to Attack Aggressive Cancer

HEALTH

SHARE

How Much Medicare Pays for Your Doctor's Care

Use the form below to find a doctor or other medical professional among the more than 800,000 health care providers that received payments in 2012 from Medicare Part B, which covers doctor visits, tests and other treatments. Payments may also cover overhead, such as staff salaries and drug costs. In some cases, when doctors work as salaried employees of group practices, the payments that show up under their names go to their institutions. **Related Articles:** Sliver of Medicare Doctors Get Big Share of Payouts, The Medicare Data's Pitfalls **APRIL 9, 2014**

Name

John Doe

Specialty

Preventive Medicine

City or ZIP Code

12345

SEARCH

Source: The information presented here is from a database released by the Centers for Medicare and Medicaid Services. The database excluded, for privacy reasons, any procedures that a doctor performed on 11 or fewer patients. The total reimbursements for each doctor does not include those procedures either. Results shown above include only individuals like doctors, nurses or technicians but not organizations like Walgreens. While some providers could have multiple offices, the address shown is the main address indicated in the database. Descriptions of the medical procedures are from the Current Procedural Terminology (CPT[®]) code set, which is copyrighted by the American Medical Association.

An Evidence Case for Data Transparency

Jonathan Blum
Centers for Medicare & Medicaid Services

May 13, 2014

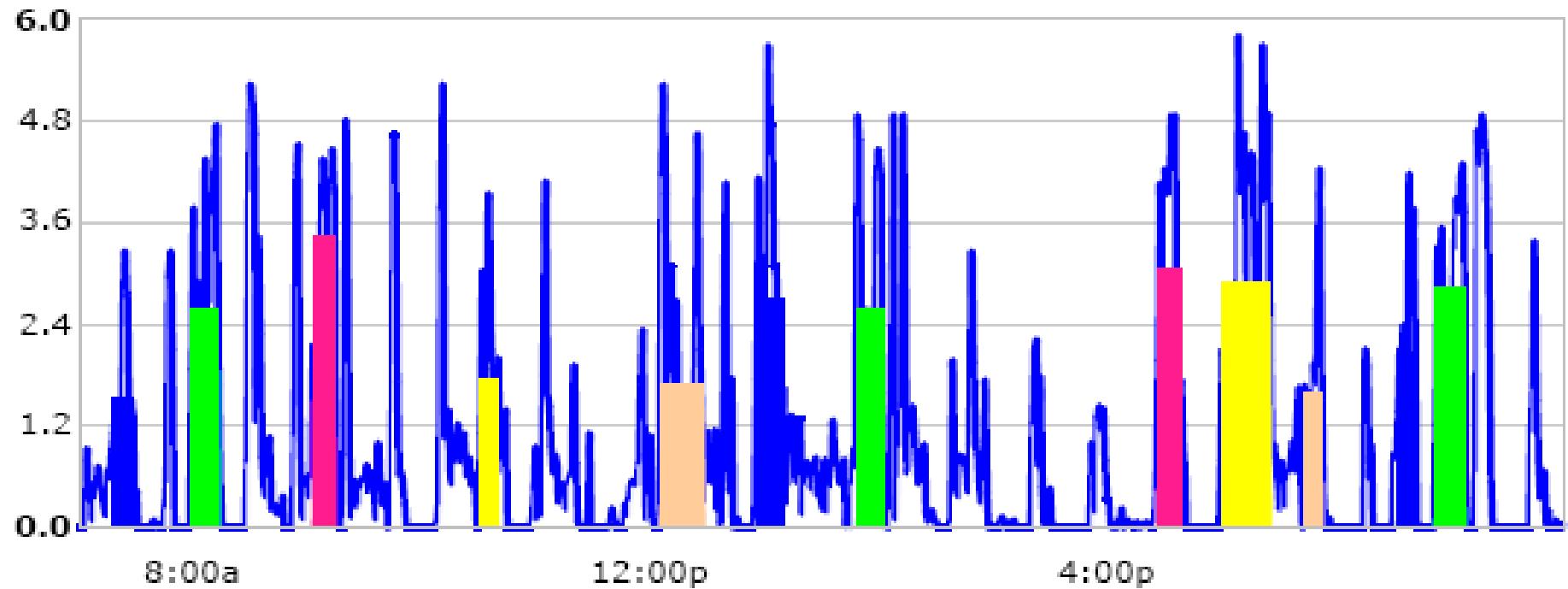
How Patients Can Use Data for Better Health, and Maybe Save Their Own Lives

Darshak Sanghavi, MD
@darshaksanghavi

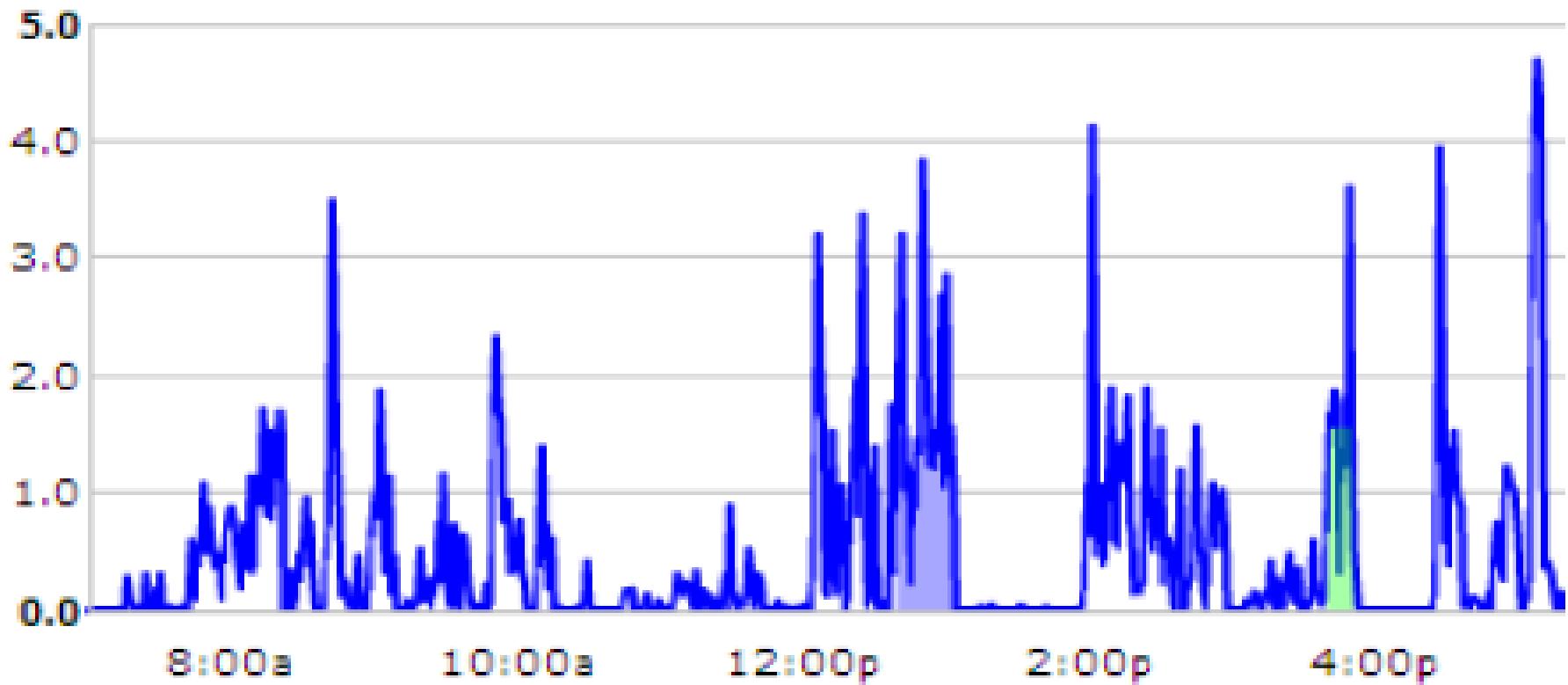
Engelberg Center for Health Care Reform
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Pediatric Obesity (con't)

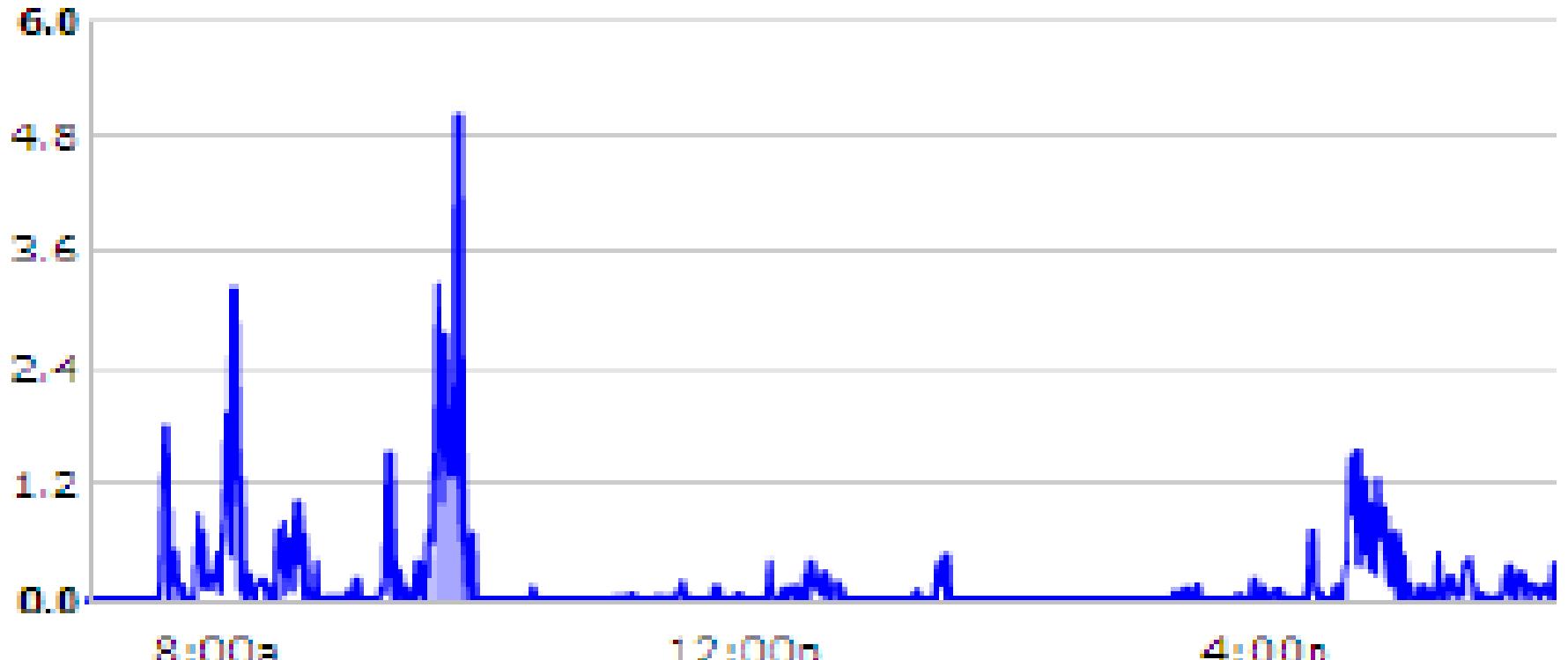


Pediatric Obesity (con't)

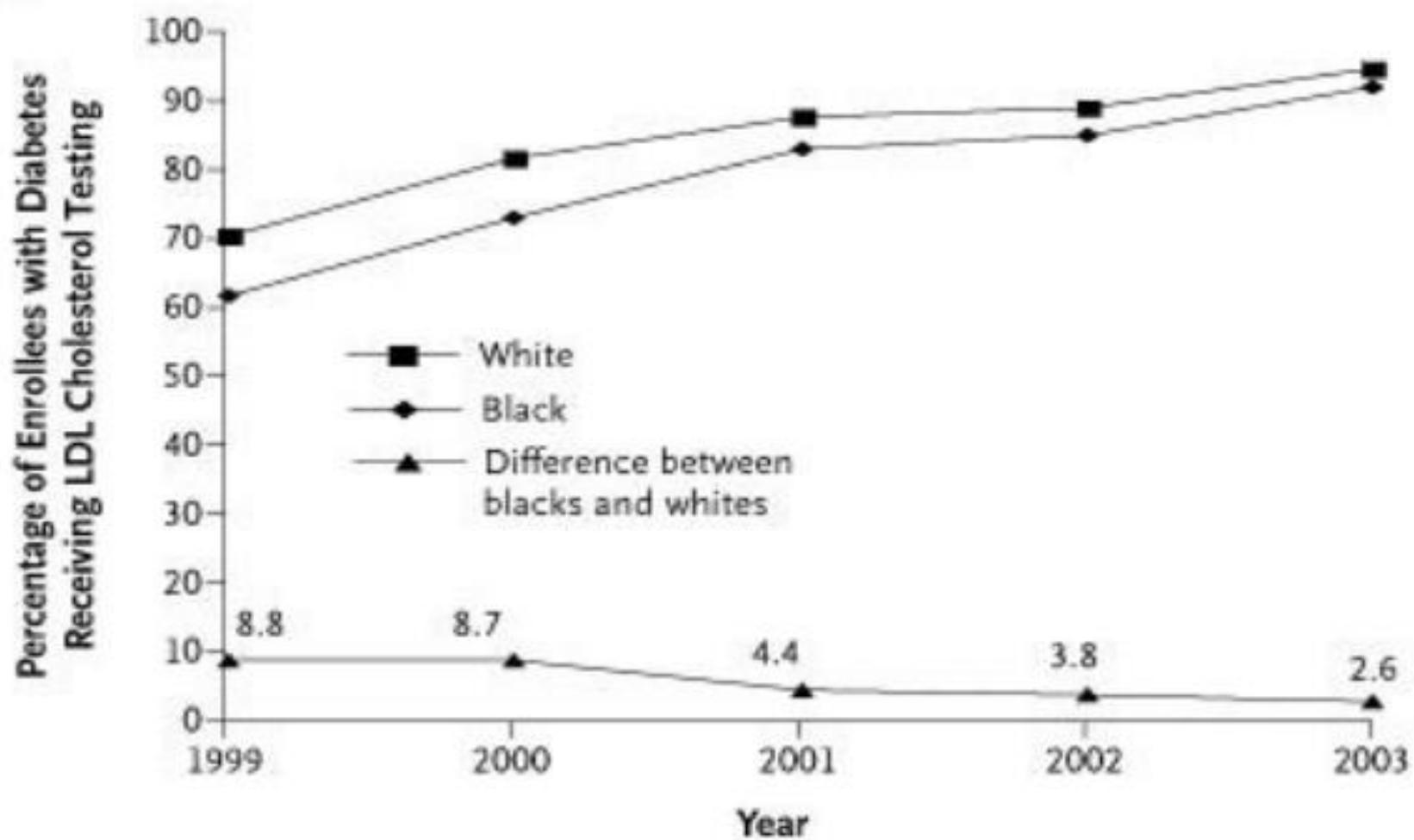


Jake Sanghavi at home on wknd. 13,245 steps

Pediatric Obesity (con't)



Jake Sanghavi at daycare. 4,873 steps

A

N Engl J Med 2005; 353:692-700.



President in ‘Excellent Health,’ Routine Checkup Finds

By **LAWRENCE K. ALTMAN and JEFF ZELENY**

Published: February 28, 2010

WASHINGTON — President Obama “is in excellent health” and likely to remain able to carry out his duties for the rest of his term, his doctor said Sunday after completing Mr. Obama’s first routine medical checkup since he took office.

New York Times

Early Release Article, posted March 8, 2010

Editorial

HEALTH CARE REFORM
First Physical

Rita F. Redberg, MD, MSc, Editor

Arch Intern Med. 2010;170(7):(doi:10.1001/archinternmed.2010.81).

Like most Americans, I was pleased to learn that our commander in chief is in excellent health and that he is exercising regularly, including working out 6 times a week and playing basketball and golf.¹ The President has set a great example by responding to his increased cholesterol level by "walking to work." Active commuting is associated with better fitness and lower body mass index and blood pressure.² Mr Obama's excellent fitness is reflected in the news accounts of his low resting pulse and low blood pressure. Commendably, the President and First Lady also have made healthy eating a priority and have planted the first White House vegetable garden since Eleanor Roosevelt's victory garden.

In the midst of these positive news stories, however, I was troubled to read that the President's physical examination included an electron beam computed tomographic (CT) scan for coronary calcium. This screening test likely exposed Mr Obama to significant radiation unnecessarily, increasing his risk of future cancer. A single electron beam CT scan is estimated to result in a lifetime excess cancer risk of 9 (range, 3-42) additional cancers per 100 000 persons for men.³ In light of this radiation risk, and the lack of proven benefit in low-risk persons, the US Preventive Services Task Force (USPSTF) recommends against this test in men such as Mr Obama.⁴ In addition, the leading professional cardiology societies do not recommend coronary calcium screening for such men.⁵ Indeed, the most powerful way for President Obama to reduce his cardiac risk is to stop smoking—a step that will reduce by 72% his chance of a cardiac event in the next 10 years. The relevance of Mr Obama's coronary calcium score, no matter how low, pales in comparison. According to news reports, Mr Obama also underwent colon cancer screening, even though this screening is not

Another example....

- Five years ago, former President Bill Clinton developed chest pains caused by blockages of several coronary arteries. After going to a small hospital near his home in Chappaqua, N.Y., Clinton had further tests at nearby Westchester Medical Center, where cardiologists suggested that he undergo surgery at Columbia-Presbyterian Hospital in New York City.

Table 2: Observed, Expected, and Risk-Adjusted Mortality Rates (RAMR) for isolated CABG Surgery in New York State, 2001 Discharges (Listed Alphabetically by Hospital)

| Hospital | Cases | Deaths | OMR | EMR | RAMR | 95% CI for RAMR |
|---------------------------|-------|--------|------|------|---------|-----------------|
| Albany Medical Center | 570 | 14 | 2.46 | 1.90 | 2.82 | (1.54, 4.74) |
| Arnot-Ogden | 124 | 0 | 0.00 | 1.45 | 0.00 | (0.00, 4.45) |
| Bellevue | 45 | 0 | 0.00 | 0.94 | 0.00 | (0.00, 18.97) |
| Beth Israel | 473 | 10 | 2.11 | 1.73 | 2.67 | (1.28, 4.91) |
| Buffalo General | 787 | 18 | 2.29 | 1.99 | 2.50 | (1.48, 3.95) |
| Columbia Presbyterian | 486 | 18 | 3.70 | 2.05 | 3.93 * | (2.33, 6.21) |
| Ellis Hospital | 472 | 11 | 2.33 | 1.94 | 2.61 | (1.30, 4.68) |
| Erie County | 251 | 2 | 0.80 | 1.89 | 0.92 | (0.10, 3.32) |
| LIJ Medical Center | 324 | 4 | 1.23 | 1.81 | 1.48 | (0.40, 3.80) |
| Lenox Hill | 686 | 17 | 2.48 | 2.39 | 2.26 | (1.32, 3.62) |
| Maimonides | 769 | 22 | 2.86 | 2.80 | 2.22 | (1.39, 3.37) |
| Millard Fillmore | 517 | 5 | 0.97 | 1.67 | 1.27 | (0.41, 2.95) |
| Montefiore - Einstein | 239 | 2 | 0.84 | 2.08 | 0.88 | (0.10, 3.17) |
| Montefiore - Moses | 286 | 6 | 2.10 | 1.76 | 2.60 | (0.95, 5.65) |
| Mount Sinai | 348 | 11 | 3.16 | 2.45 | 2.81 | (1.40, 5.02) |
| NY Hospital - Queens | 379 | 6 | 1.58 | 2.08 | 1.65 | (0.60, 3.60) |
| NYU Hospitals Center | 385 | 10 | 2.60 | 2.90 | 1.95 | (0.93, 3.59) |
| North Shore | 722 | 9 | 1.25 | 2.01 | 1.35 | (0.62, 2.56) |
| Rochester General | 685 | 14 | 2.04 | 2.71 | 1.64 | (0.90, 2.75) |
| St. Elizabeth | 375 | 10 | 2.67 | 1.87 | 3.11 | (1.49, 5.72) |
| St. Francis | 1723 | 37 | 2.15 | 2.38 | 1.96 | (1.38, 2.70) |
| St. Josephs | 641 | 15 | 2.34 | 2.17 | 2.34 | (1.31, 3.87) |
| St. Lukes - Roosevelt | 209 | 2 | 0.96 | 2.60 | 0.80 | (0.09, 2.90) |
| St. Peters | 553 | 10 | 1.81 | 1.86 | 2.12 | (1.02, 3.90) |
| St. Vincents | 405 | 11 | 2.72 | 2.35 | 2.52 | (1.26, 4.51) |
| Staten Island - North | 279 | 1 | 0.36 | 2.28 | 0.34 ** | (0.00, 1.90) |
| Strong Memorial | 312 | 13 | 4.17 | 2.56 | 3.55 | (1.89, 6.07) |
| United Health Services | 325 | 6 | 1.85 | 2.33 | 1.73 | (0.63, 3.76) |
| Univ. Hosp. - Stony Brook | 626 | 19 | 3.04 | 1.98 | 3.34 | (2.01, 5.22) |
| Univ. Hosp. - Upstate | 364 | 10 | 2.75 | 2.12 | 2.82 | (1.35, 5.19) |
| Univ. Hosp. of Brooklyn | 253 | 10 | 3.95 | 2.18 | 3.95 | (1.89, 7.26) |
| Vassar Brothers | 223 | 4 | 1.79 | 1.65 | 2.37 | (0.64, 6.07) |

Clinton, Con't

- At the time of Clinton's surgery, the most current report showed that Columbia-Presbyterian had the highest death rate of any of the 35 hospitals doing bypass surgery; it was twice the expected rate (about 4 percent instead of 2 percent, a margin not explained by random chance).
- Bottom line: Clinton's surgeon had a high mortality rate.

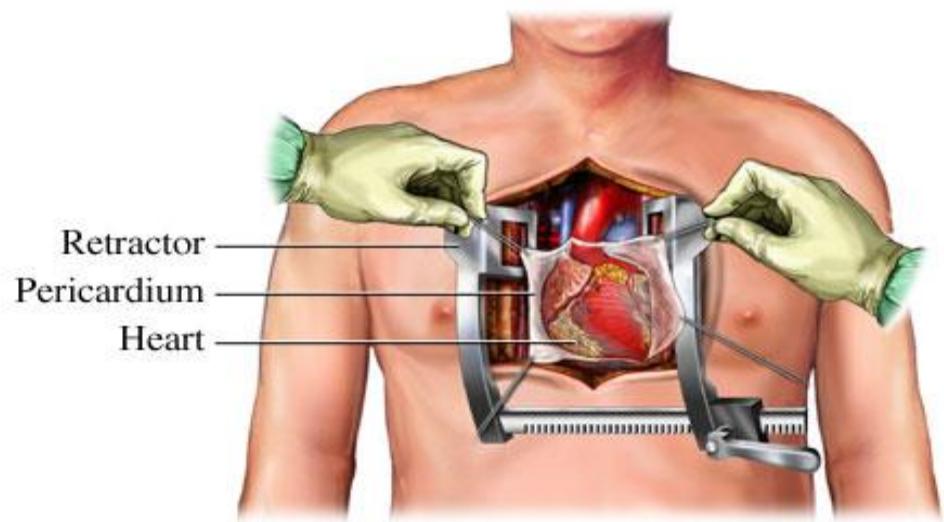
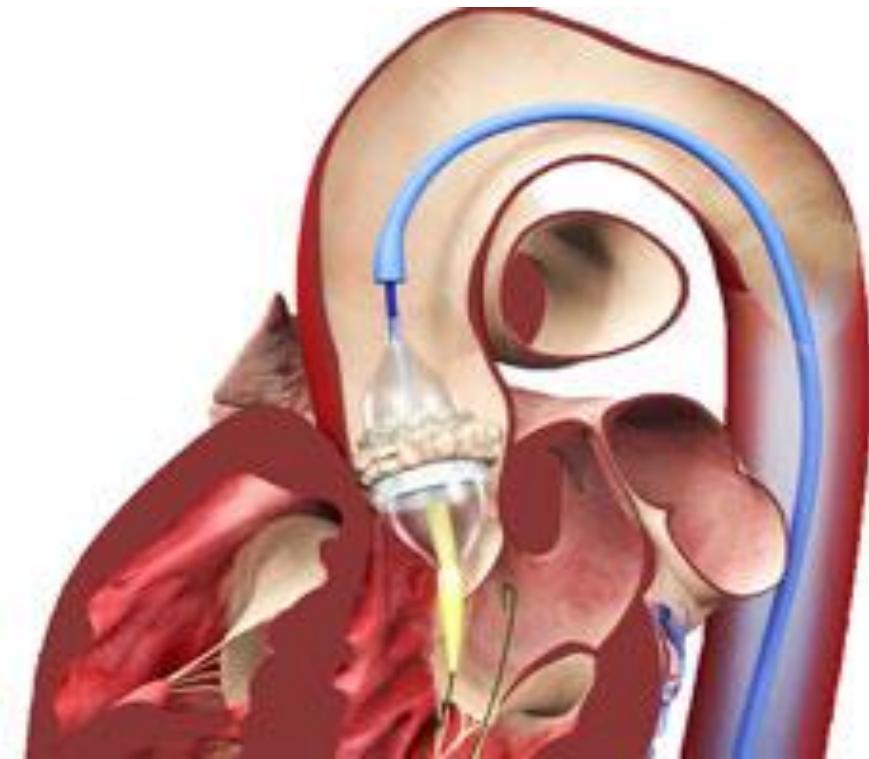
MASSACHUSETTS DOCTOR RATINGS

Ratings of practices for adults Continued

Based on patient experience In alphabetical order, within regions and towns

| Town | Practice Name | Address | Willingness to Recommend | Performance | | | | | |
|---------------|--|---|---|--|----------------------------------|--------------------------------------|--|---|---|
| | | | | How well doctors communicate with patients | How well doctors coordinate care | How well doctors know their patients | Getting timely appointments, care, and information | Getting courteous and respectful help from office staff | |
| | | | 0%  100% | | | | | | |
| Chestnut Hill | Beth Israel Deaconess Healthcare - Chestnut Hill | 25 Boylston St., Suite 204 | 81  85 | 3 | 3 | 3 | 3 | 2 | 2 |
| Chestnut Hill | Brigham and Women's Hospital, Physician Group | 850 Boylston St., Suite 530 | 81  85 | 4 | 4 | 3 | 2 | 2 | 2 |
| Chestnut Hill | Personal Physicians Health Care | 1244 Boylston St., Suite 306 | 98  100 | 4 | 4 | 4 | 4 | 4 | 4 |
| Chestnut Hill | The Fish Center for Women's Health | 850 Boylston St., Suite 402 | 78  82 | 4 | 3 | 4 | 2 | 2 | 2 |
| Newton | Brigham and Women's Hospital at Newton Corner | 272 Centre St. | 81  85 | 4 | 4 | 3 | 3 | 2 | 2 |
| Newton | Newton Wellesley Internists | 2000 Washington St., White bldg., Suite 546 | 74  78 | 4 | 3 | 3 | 3 | 3 | 3 |
| Newton | Newton Wellesley Primary Care | 2000 Washington St., White bldg., Suite 441 | 83  87 | 4 | 4 | 3 | 4 | 4 | 4 |
| Newton | Steward Medical Group - Newton | 29 Crafts St., Suite 400 | 90  94 | 4 | 3 | 4 | 4 | 4 | 4 |
| Waltham | Joseph M. Smith Community Health Center - Waltham | 564 Main St. | 76  80 | 3 | 1 | 2 | 1 | 1 | 1 |
| Waltham | Mass General West | 40 Second Ave., Suite 400 | 71  75 | 3 | 2 | 2 | 3 | 2 | 2 |
| Waltham | Steward Medical Group - Waltham | 231 Moody St. | 82  86 | 3 | 3 | 3 | 2 | 2 | 3 |
| Waltham | Waltham Family Medicine | 9 Hope Ave., Suite 151 | 73  77 | 3 | 3 | 2 | 1 | 4 | |
| Watertown | Harvard Vanguard Watertown | 485 Arsenal St. | 76  80 | 4 | 3 | 3 | 4 | 4 | 4 |
| Watertown | Mount Auburn Medical Associates | 521 Mount Auburn St., Suite 202 | 69  73 | 3 | 2 | 2 | 2 | 4 | 4 |

Naftali's Grandfather: SAVR vs TAVR?



Frankel NZ, "SAVR vs TAVR: a consumer's perspective regarding data education and transparency of hospitals." *JAMA Int Med* 2014; 174: 495-6.

The process: 3 months, numerous hours each day

- Emailed hundred of physicians worldwide
- STS registry?
- USN&WR rankings?
 - By specialty, not procedures
- NYSDOH?
 - Not public—had to use FOIA!
- Finally for 2012!
 - SAVR of 3 best surgeons
 - Annual cases 49-103
 - OMR 0%
 - OSR 0-3.23%
 - Highest volume surgeon (103 cases) has 0% OMR and OSR
 - TAVR of 2 biggest centers
 - 88 & 272 cases
 - OMR 5.5 – 5.7%
 - OSR 2.2%

Table 2. Procedural Outcomes at 30 Days and 1 Year in the As-Treated Population.*

| Outcome | 30 Days | | | 1 Year | | |
|--|-----------------------|---------------------------|---------|-----------------------|---------------------------|---------|
| | TAVR Group (N=390) | Surgical Group (N=357) | P Value | TAVR Group (N=390) | Surgical Group (N=357) | P Value |
| | | | | number (percent) | number (percent) | |
| Major vascular complication | 23 (5.9) | 6 (1.7) | 0.003 | 24 (6.2) | 7 (2.0) | 0.004 |
| Bleeding event† | | | | | | |
| Life-threatening or disabling bleeding | 53 (13.6) | 125 (35.0) | <0.001 | 64 (16.6) | 136 (38.4) | <0.001 |
| Major bleeding | 109 (28.1) | 123 (34.5) | 0.05 | 114 (29.5) | 130 (36.7) | 0.03 |
| Acute kidney injury | 23 (6.0) | 54 (15.1) | <0.001 | 23 (6.0) | 54 (15.1) | <0.001 |
| Cardiogenic shock | 9 (2.3) | 11 (3.1) | 0.51 | 9 (2.3) | 11 (3.1) | 0.51 |
| Cardiac perforation | 5 (1.3) | 0 | 0.03 | 5 (1.3) | 0 | 0.03 |
| Permanent pacemaker implantation | 76 (19.8) | 25 (7.1) | <0.001 | 85 (22.3) | 38 (11.3) | <0.001 |
| New-onset or worsening atrial fibrillation | 45 (11.7) | 108 (30.5) | <0.001 | 60 (15.9) | 115 (32.7) | <0.001 |

Adams DH et al. N Engl J Med
2014;370:1790-1798.

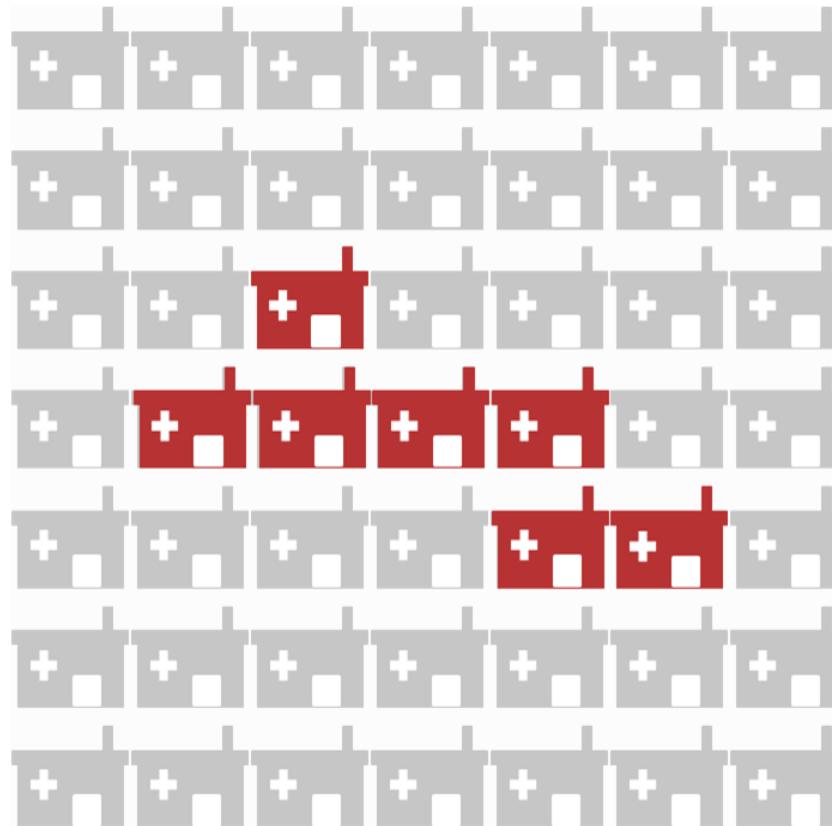
Where Does That Leave Us?

- There is **NO**
SUBSTITUTE FOR
DEEP EXPERTISE
- Options...
 - UpToDate.com
 - Clinical guidelines
 - If all else fails...
 - ...crowdsource



The Innovation, Data & Health Ecosystem

Bryan Sivak // CTO & Entrepreneur-in-Residence
U.S. Department of Health and Human Services
@BryanSivak / @HHSIDEALab



IDEA LAB



All Patients



My Patients (27)

[Assign All](#) | [Print](#)[Follow All](#)

Armstrong, Joanny

Unit HLC (High Level Care) - Room 549-2

[Actions](#) |

SNF Referral

1 Referral Info

2 Timer & Providers

3 Share Responses

4 Authorize

Click the red buttons to advance your referral. You're done when you complete all 4 steps

Following

Bernhard, Isai

Unit HLC (High Level Care) - Room 552-2

[Actions](#) |

SNF Referral

1 Referral Info

2 Timer & Providers

3 Share Responses

4 Authorize

Click the red buttons to advance your referral. You're done when you complete all 4 steps

Following

Corwin, Amanda

Unit HLC (High Level Care) - Room 540-1

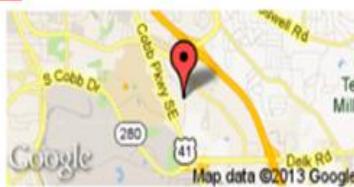
[Actions](#) |

Click 'Actions' to Create a New Referral

[Follow](#) 

1 Nursing and Rehab Center

| Provider Name | Address | Phone |
|-------------------------------------|---------------------------------------|--------------|
| JEFFERSON COUNTY HOME CARE | 540 BEACON PARKWAY WEST, SUITE 300 | 205-510-9100 |
| AGACARE HOME HEALTH & HOSPICE | 2610 LOBNA ROAD | 205-519-2619 |
| GENTHIA HEALTH SERVICES | 557 GLOVER STREET, SUITE 5 | 334-347-0234 |
| AMEDPS HOME HEALTH OF BLOUNTSVILLE | 1309 2ND AVENUE E, SUITE 5 | 205-274-0219 |
| SOUTHEAST ALABAMA HOMECARE | 806 GLOVER AVENUE, SUITE A | 334-796-0191 |
| SOUTHERN RURAL HEALTH CARE | 308 ST CLAIR STREET SE | 205-332-1431 |
| GENTHIA HEALTH SERVICES | 8225 RAINBOW STREET | 250-640-1138 |
| HARVEST HOME HEALTH | 800 COUNTRY CLUB DRIVE, SUITE 100 | 221-389-0979 |
| SOUTHEAST ALABAMA HOMECARE | 804 HETHERTON DRIVE, SUITE ONE | 334-798-0295 |
| SANDS HEALTHCARE SERVICES | 1515 UNIVERSITY BLVD, SOUTH | 251-345-9600 |
| GENTHIA HEALTH SERVICES | 2500 RIVERCHASE PARKWAY, BUILDING 700 | 205-789-7800 |
| HGA HOME CARE OF SECAUCUS | 2708 HIGHWAY 11, SOUTH, SUITE B | 216-320-4142 |
| CARESTERS | 420 20TH STREET SW | 205-783-7900 |
| ST. VINCENT'S EAST HOME HEALTH | 1400 UMBRAN CENTER DRIVE, SUITE 200 | 205-630-1795 |
| HOMECARE OF MONTGOMERY | 108 VILLA DRIVE | 334-242-4441 |
| INNFRM HOME CARE OF MOBILE | 4410 INNFRM DRIVE, SUITE 4 | 211-450-3300 |
| BAPTIST HOME HEALTH | 800 INFIRMARY PARK DRIVE, SUITE 312 | 334-395-5300 |
| AMEDPS HOME HEALTH OF HUNTSVILLE | 7047 OLD 2-MILESON PINE, SUITE 305 | 756-927-0918 |
| ABLE HOMECARE OF BIRMINGHAM | 2019 COLUMBIANA ROAD, SUITE 1900 | 225-979-3180 |
| GENTHIA HEALTH SERVICES | 1800 HIGHWAY 80 WEST | 334-493-4055 |
| SPECTRUM HOME HEALTH AGENCY | 3215 UNIVERSITY DRIVE SUITE C, | 256-539-4457 |
| GENTHIA HOME CARE | 1400 UMBRAN CENTER DRIVE, SUITE 200 | 211-340-1701 |
| CARE2GO HOME CARE PROFESSIONALS | 3000 ROCK CLIMB CENTER, SUITE 1 | 334-793-1798 |
| GENTHIA HEALTH SERVICES | 1200 EAST PARK DRIVE | 305-436-0777 |
| GENTHIA HEALTH SERVICES | 1200 EAST MAIN STREET | 334-361-5906 |
| GENTHIA HEALTH SERVICES | 2512 FAIRLINE DRIVE, SUITE C-200 | 334-213-0134 |
| FITPROPS USA HOMECARE SERVICES | 9037 INDEPENDENCE AVENUE, SUITE B | 251-621-0982 |
| SPRINGFIELD HOME HEALTH AND HOSPICE | 3014 MONTCLAIR RD, SUITE 302 | 205-873-3404 |
| VERITAS HOME CARE | 10 MONTGOMERY STREET | 211-430-8172 |
| VERITAS HOME CARE | 7321 LOVINGSTON DRIVE | 211-430-8172 |
| AMEDPS HOME HEALTH OF EKEDY | 1800 N MCKEESE STREET | 251-973-1436 |
| AMEDPS HOME HEALTH OF OTTOWILLE | 19375 NORTH 3RD STREET, SUITE 101 | 211-908-3291 |
| GENTHIA HEALTH SERVICES | 12523 ALABAMA HIGHWAY 257 | 205-739-7800 |
| AMEDPS HOME HEALTH OF GREENVILLE | 525 GREENVILLE BYPASS | 334-382-2042 |
| AMEDPS HOME HEALTH OF REFORM | 420 FIRST AVENUE WEST | 205-379-9703 |
| LAPORT HOME CARE | 1131 EAST 10TH STREET, SUITE B | 205-409-5136 |
| DEKOM HOME HEALTH CARE AGENCY | 1401 MONTGOMERY AVENUE | 205-759-7775 |
| CV HOME HEALTH OF BIBB COUNTY | 141 PERSON AVENUE | 205-320-3711 |
| HOMECARE PLUS | 3850 AULTON LANE | 205-298-9888 |
| GENTHIA HOME HEALTH SERVICES | 200 CENTRAL PARK PLACE | 334-872-6637 |
| COOSA VALLEY HOMECARE | 305 WETTE HICKORY STREET | 205-228-0087 |
| ALABAMA HOME CARE | 320A MCKELLUM AVENUE | 334-682-8030 |
| FAIRFIELD HOME CARE HOMECARE | 202 2ND STREET, SUITE 10 | 205-404-5264 |
| MAGNA HOME HEALTH | 12131 HIGHWAY 17, SUITE 3 | 211-545-1500 |
| HALE COUNTY HOSPITAL HOME HEALTH | 506 GREENE STREET | 334-424-3996 |
| MEDICAL CENTER HOME HEALTH | HAY 171 N, HOSPITAL DRIVE | 205-967-8111 |
| DEKAIR REGIONAL HOME HEALTH | 1708 GULIN BOULEVARD, SUITE 3 | 256-524-2411 |
| CHEROKEE HOME HEALTH | 775 CHEEKET PLAZA | 256-917-1244 |
| ATHENS LIMESTONE HOMECARE | 3428 FREEMAN AVENUE | 256-233-0533 |
| THREE RIVERS HOME CARE | 1310 HIGHWAY 205 SOUTH | 334-670-5237 |
| CLAY COUNTY HOSPITAL HOME CARE, LLC | 2002 HICKORY | 205-937-5077 |
| MARION REGIONAL HOMECARE | 1165 MILITARY STREET SOUTH | 205-921-4387 |
| HEALTH NOW HOME HEALTH | 751 DORBY DRIVE | 205-365-5263 |
| ALABAMA HOME CARE | 807 WILSON AVENUE, SUITE 3 | 305-373-3399 |
| BRYAN W. WHITFIELD MEM HOSP | HWTY BLD | 334-289-0701 |
| PHIGALANDS HOME HEALTH | 300 WOODS COVE ROAD | 710-719-4040 |
| EVERGREEN HOME CARE | 308 SOUTH MAIN STREET | 251-379-6800 |
| SHORECREST HOME HEALTH | 1000 LAFAYETTE ROAD | 205-260-4603 |



Map data ©2013 Google

34%
Readmission Rate

This number shows how often this provider sends patients like you back to the hospital within 30 days. Lower is better.

Medicare Summary

AVERAGE

Quality of Care: BAD GOOD

Staff: BAD GOOD

Inspections: BAD GOOD

Patient Reviews

AVERAGE

Quality of Care: BAD GOOD

Staff: BAD GOOD

Environment: BAD GOOD

"I was extremely happy with them. I received a lot of physical therapy and it made a huge difference in my recovery. Staff works together and it really made a difference."

- Previous Patient

"A very positive experience. Staff was friendly and engaging. Felt like everyone really cared."

- Previous Patient

"My mom is has had absolutely fabulous care. It's one of the most caring facilities I've ever been a part of. They have wonderful care and the employees have worked there for many many years. I would highly recommend. It's like a family there."

- Previous Patient

"Finding a facility that I felt comfortable with was definitely a challenge, but after reading some of the previous comments I felt more comfortable with my choice, and it was definitely the right one."

- Previous Patient

Services

- Skilled Nursing Care
- Physical Therapy
- Occupational Therapy
- Speech Therapy
- Social Worker

A Note from this Provider

For 110 years, our facility has been a mission-driven not-for-profit in its care for older adults. We rank as one of the area's most experienced sub-acute care providers and offer clinical, therapeutic and specialty programs. We meet high standards of care for the elderly, while preserving dignity, independence and quality of life.









IDEA LAB



Purplebinder



Cities & Funders

Healthcare

Non-Profits



IDEA LAB

Search for (e.g. homeless shelter, food pantry)

domestic violence shelter

Near (e.g. neighborhood, address, intersection)

Search

[+ Advanced Search](#)

rank by completeness | distance

[← Previous](#) 1 2 3 4 [Next →](#)Not finding what you wanted? [Tell us!](#)

BASTA! Domestic Violence Program

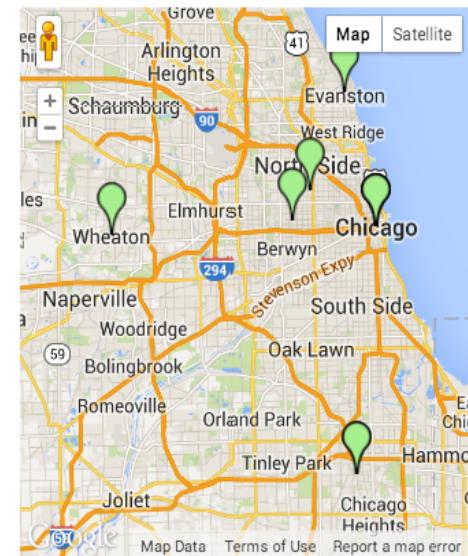
Healthcare Alternative Systems Inc

773-745-7107

5005 W. Fullerton, Chicago, IL 60647

... available to all victims of domestic violence and partner abuse: spouses, cohabitating ...

... to all victims of domestic violence and partner abuse: spouses ... , shelter and legal assistance. Preventing further violence and ... Spanish,English

[individual counseling](#)[domestic violence](#)[referrals](#)

Greenhouse Shelter

Connections for Abused Women and their Children (CAWC)

773-278-4566 - 24-hour hotline

Confidential, Chicago IL

Greenhouse Shelter accepts women victims of intimate partner violence and their children,

[case management](#)[individual counseling](#)[emergency shelter](#)[Feedback](#)

IDEA LAB

BASTA! Domestic Violence Program

[Add to Binder](#)[Send Text](#)[Send Email](#)[Print](#)[Report a Change](#)

Other programs at Healthcare Alternative Systems Inc

[Anger Management](#)

[Probation/ Parole Services](#)

[Substance Abuse Treatment](#)

[Reentry Services](#)

[Postpartum Depression](#)

[Partner Abuse Intervention Program \(PAIP\)](#)

[Residential Treatment](#)

[Substance Abuse Treatment](#)

[Medication Assisted Treatment \(MAT\)](#)

[Youth Counseling](#)

[DUI/ Risk Management](#)

[Youth Treatment- Substance Abuse](#)

[HIV/ AIDS Education and Outreach](#)

[Aftercare](#)

[Transitional Housing Program](#)

[« Back to search](#)

Organization

Healthcare Alternative Systems Inc

Service Types

Mental Health, Other

Services Offered

domestic violence

intimate partner violence

individual counseling

crisis intervention

court advocacy

support groups

referrals

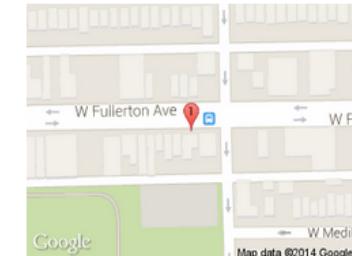
shelter

legal assistance

food

Intake phone

773-745-7107



5005 W. Fullerton

Chicago, IL 60647

Eligibility

- For males and females
- Offers outpatient treatment
- Accepts adults
- Free!

The BASTA! program is available to all victims of domestic violence and partner abuse: spouses, cohabitating partners, girlfriends/boyfriends, children, extended family members, and significant others. Spanish and English speaking. All services free

Languages: Spanish,English

How to Access

Call to schedule an intake; intakes can take 1-2 hrs

Description

The BASTA! program is available to all victims of domestic violence and partner abuse: spouses, cohabitating partners, girlfriends/boyfriends, children,

[Feedback](#)

IDEA LAB



Free Generic Drugs

Don't choose between your medications and your wallet. Most plans provide free generic drugs.



Free Doctor Visits

Most plans provide a few free primary care visits each year so you don't need to think twice about visiting your doctor.



Smart Technology

Intuitive web tools guide you where to get care and how to save money.



IDEA LAB

4:55 PM

Medical Profile

 **Asthma**

Asthma is a chronic disease that affects your airways. Your airways are tubes that carry air in and out of your lungs. If you have asthma, the inside walls of your airways become sore and s...

[READ MORE](#)

Choose how to get care
Below are some suggestions for where to get care and our best guess how much it will cost.

-  **Primary Care Doctor** [\\$60 - \\$250](#)
-  **Pulmonologist** [\\$60 - \\$350](#)
-  **Urgent Care Clinic** [\\$60 - \\$250](#)

4:55 PM

 **Q. ey** [Cancel](#)

Find care for...

- [Eye Diseases](#)
- [Eye Cancer](#)
- [Eye Movement Disorders](#)

People [See all >](#)

- [David Eysler OBGYN \(Obstetrician and...\) !\[\]\(e84c425322150e26c8b4da4b630dcc86_img.jpg\)](#)
- [Eyal Herzog Cardiologist !\[\]\(506525c223f3a3409ea348f8395766ba_img.jpg\)](#)
- [Eyad Hijazin Internal Medicine !\[\]\(ab6b4ddc97e182a75852c752e2ff7c44_img.jpg\)](#)

Places [See all >](#)

- [Island Eye Surgicenter Carle Place, NY !\[\]\(fe7da0a88a3c95aa35ab83195c7ed81c_img.jpg\)](#)
- [Brooklyn Eye Surgery Center Brooklyn... !\[\]\(a472d65dd93e9f22b664a277ddd2718b_img.jpg\)](#)
- [New York Eye & Ear Infirmary New Yor... !\[\]\(ff8845caafa0e634912ae856b3c377a7_img.jpg\)](#)

Drugs [See all >](#)

4:55 PM

 **Q. Search for anything** [Cancel](#)

 **TALK TO A DOCTOR**

DOCTOR ON CALL [TODAY](#)

You requested a doctor call at 3:35 p.m.

DOCTOR ON CALL [MAR 20, 2014](#)

You requested a doctor call at 2:48 p.m.

BILLING [MAR 20, 2014](#)

You turned on recurring payments and we received your payment of \$405.90.

DOCTOR ON CALL [MAR 20, 2014](#)

You requested a doctor call at 1:11 p.m.

4:55 PM

 **Allergist** [List](#)

Map Area



Lisa Ellman Grunther [Allergist](#) 



IDEA LAB

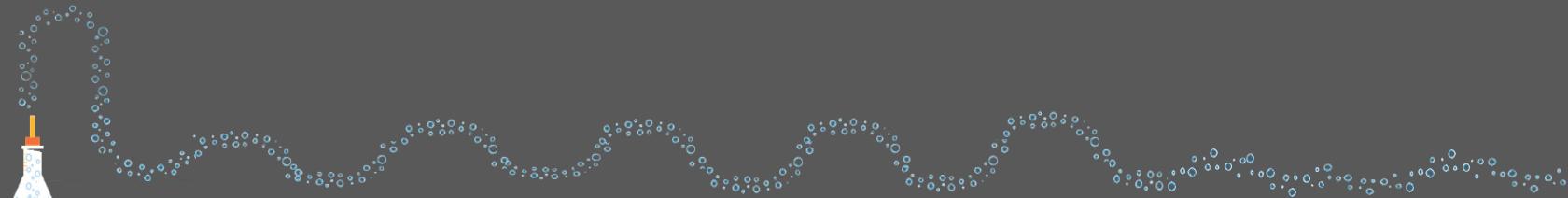


Health care is
a
\$2.8T
industry in the
U.S., 18% of
GDP and
growing

Health care is changing
dramatically, all set in motion
by the implementation of the
Affordable Care Act



We are now living in a health care system where data is driving change



Data is changing...



Payment reform



Individual health interaction



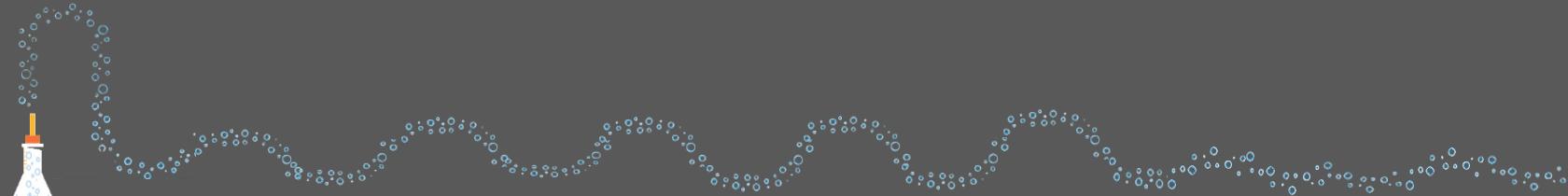
Treatment @ the point of care



Social program service provision



Data is the future of health care



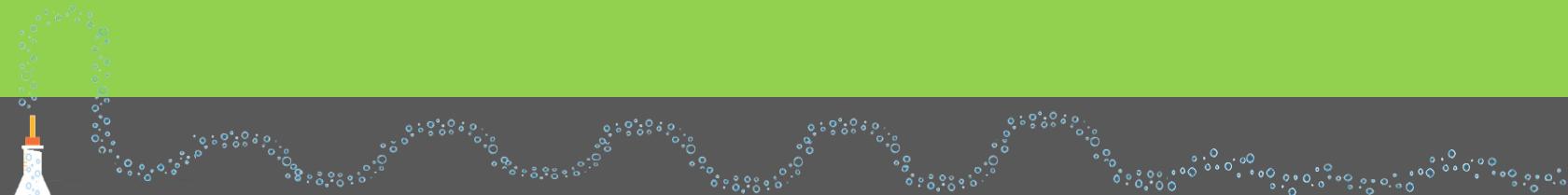


HEALTH DATA INITIATIVE



IDEA LAB

HELP US DISRUPT THE HEALTH ECOSYSTEM



IDEA LAB

Making “Open” the New Default for Government Information

Claudia Williams
OSTP
The White House

May 13, 2014

“One of the things we’re doing to fuel more inventiveness like this, to fuel more private sector innovation and discovery, is to make the vast amounts of America’s data open and easy to access for the first time in history.”

President Obama, May 9, 2013

Turning the Default to Open

- Executive Order 13642 and OMB's Open Data Memo
- *Project Open Data*, to share best practices, examples, and software code to assist agencies with opening data
- Ongoing series of hackathons, workshops (“data jams”) and summits (“datapaloozas”) to catalyze action, highlight success stories, and get important feedback

Open Data Ecosystem

Potential

\$3 trillion in additional economic value to be gained from open data globally

Partners

- Health Data Consortium
- Open Data 500
- U.S. Open Data Institute
- Countless other city and state governments, private industry partners and foundations

Where are the Healthcare Entrepreneurs?

HHS Highlights

- More than 1,000 openly available data sets
- Health Datapalooza in June – a festival of data innovation
- Release of Medicare hospital charge and physician utilization data
- Sharing Medicare claims data with....
 - ACOs – to improve care for patients
 - QEs – combine with private sector data for quality reporting
 - Researchers – desk top access at a fraction of prior cost
 - States – to improve care for dual eligible
 - Enrollees... blue button

“My Data” Initiatives

- Blue Button
- Green Button
- Dept. of Education’s MyStudentData
- IRS “Get Transcript”

Consumers have driven every major shift in our nation's economic history – Jay Walker

Will the same be true of healthcare?

Patients will soon have access to machine-readable digital health information from their providers and hospitals

Meaningful use gives patients ability to **view, download and share** their own coded clinical data

Creates a patient-powered digital dial tone across America

A New Dialogue Between Government and Citizens

Data.gov

DATA.GOV
EMPOWERING PEOPLE

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 **Wireless Spectrum Testbed Information Portal**

Latest Datasets

- 2011 Atlantic Pleasure Craft and Sail...
- 2011 Atlantic Tug and Towing Vessel D...
- 2009-2010 USACE Vicksburg District Li...
- NOAA Coastal Services Center Coastal ...
- 2011 Atlantic All Other Vessel Density
- 2011 Atlantic Fishing Vessel Traffic
- 2011 Atlantic Cargo Vessel Density
- Coastal Tribal Lands
- 2011 Atlantic Passenger Vessel Traffic
- 2011 Atlantic Tug and Towing Vessel T...

DATA AND TOOLS



- 88,394 datasets
- 349 citizen-developed apps
- 137 mobile apps
- 175 agencies and subagencies
- 87 galleries
- 409 Government APIs
- Suggest a dataset

EDUCATION **ENERGY**

COMMUNITIES



Come explore, discuss, meet others in the same field, and develop the data and apps in the community that you care about. Join in the discussions by [going to communities](#); some of which are listed below, that interest you.

OPEN GOVERNMENT



View our government at work and find opportunities to participate.

- [Open Government Initiative](#)
- [Open Government Platform](#)
- [Recovery.gov](#)
- [USA Spending.gov](#)
- [We the People](#)

Before

DATA.GOV

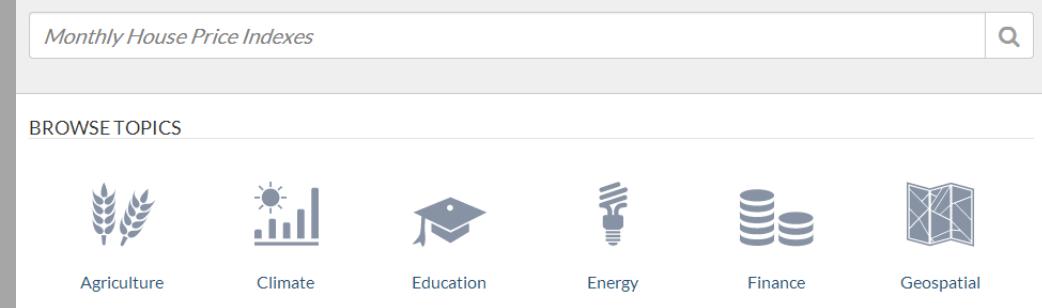
[DATA](#) [TOPICS](#) [IMPACT](#) [APPLICATIONS](#) [DEVELOPERS](#) [CONTACT](#)

The home of the U.S. Government's open data

Here you will find data, tools, and resources to conduct research, develop web and mobile applications, design data visualizations, and more.

GET STARTED

SEARCH OVER 104,942 DATASETS



Monthly House Price Indexes

BROWSE TOPICS

 **Agriculture**

 **Climate**

 **Education**

 **Energy**

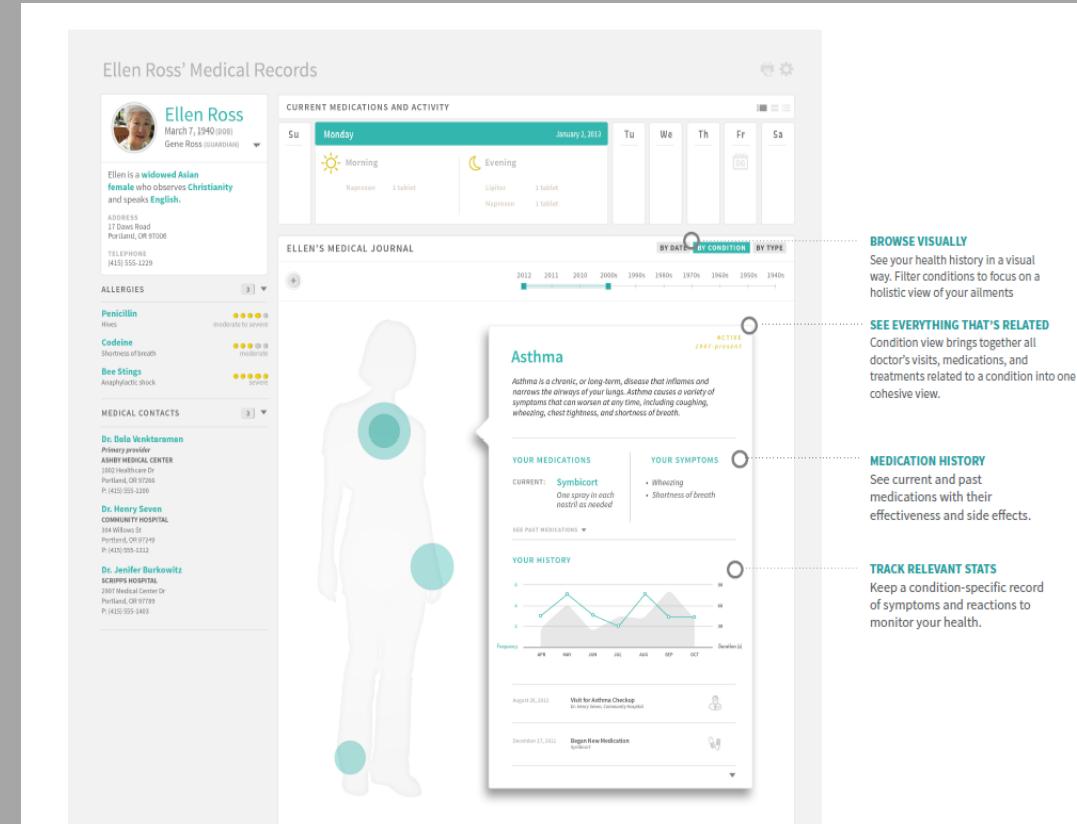
 **Finance**

 **Geospatial**

After

Blue Button Design Challenge – Reimagining Health Information

Demographics First Name: Ellen Last Name: Ross
Gender: Female Martial Status: Married Religious
Affiliation: Christian Ethnicity: Asian Language Spoken: English Address: 17 Daws Road, Portland, OR 97006
Telephone: 415-555-1229 Birthday: March 7, 1960 #
Guardian Role: Sister First Name: Martha Last Name: Shan Address: 1357 Amber Drive, Beaverton, OR 97006
Telephone: 816-276-6909 # Provider Name of Provider: Ashby Medical Center Address: 1002 Healthcare Dr, Portland, OR 97266 Telephone: 415-555-1200 #
Allergies Allergy Name: Penicillin Reaction: Hives
Severity: Moderate to severe Allergy Name: Codeine
Reaction: Shortness of Breath Severity: Moderate
Allergy Name: Bee Stings Reaction: Anaphylactic Shock
Severity: Severe # Immunizations Date: May 2001
Immunization Name: Influenza virus vaccine, IM Type:
Intramuscular injection Dose Quantity (value / unit): 50 / mcg Education/Instructions: Possible flu-like
symptoms for three days Date: April 2000 Immunization
Name: Tetanus and diphtheria toxoids, IM Type:
Intramuscular injection Dose Quantity (value / unit) 50 / mcg Education/Instructions: Mild pain or soreness in
the local area # Medication Date: March 28, 2005



Hacking America's Health

The Brookings Institution
May 13, 2014