What Journalists Can Do If They Learn to Code

Sisi Wei, @sisiwei Deputy News Apps Editor, ProPublica



Should Journalism Schools Require Reporters to 'Learn Code'? No

The faulty logic behind a popular theory

OLGA KHAZAN | OCT 21 2013, 7:31 AM ET



Wikimedia Commons

When I started journalism grad school in 2009, I couldn't wait to finish so I could begin my reporting career. But this was the recession, and after I had read the hundredth news article documenting the travails of aspiring journalists walking dogs for cash or eating vitamin soup, I got a little discouraged.

And after I had what felt like my hundredth freelance nitch rejected. I grew

Scooped by code

"Every skill you don't have leaves a whole class of stories out of your reach. And data stories are usually the ones that are hiding in plain sight."

PREDICTIONS FOR JOURNALISM 2014: A NIEMAN LAB SERIES



In 2014, you will be scooped by a reporter who knows how to program. Yes, you. Not the reporter a few cubes over. Not that guy you went to j-school with. You.

Sure, reporters don't need to know how to program. But there are lots of things reporters don't need to know how to do.

They also don't need to know how to write — plenty of great scoop artists can barely write their names and get heavily rewritten by harried editors. Plenty of great writers are nervous types who never get the hang of convincing strangers to tell them their secrets. And we all know reporters who don't



know how to write a FOIA letter and who can't bear the thought of reading the

Code = ?

Three (thousand?) stories journalists can only tell with code.

1. Stories that require collecting large amounts of data

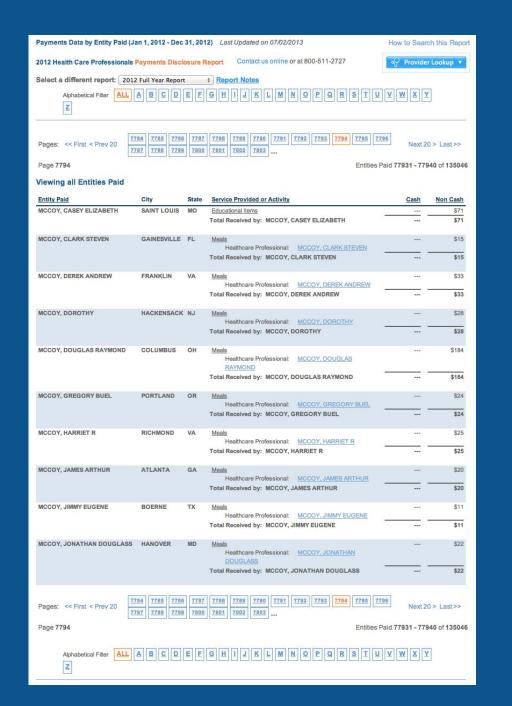




2012 U.S. Health Care Professionals Payment Disclosure Report - Cumulative

Period January 1, 2012 to December 31, 2012

Recipient Name	Affiliated Organization	Recipient Address	Spend Date	Payment	Service Provided or Related Activity
Aamodt - St Pierre,		1900 W. Polk St	12/13/2012	\$0.00 - \$100.00	Meals or refreshments in connection with
Stephanie		Chicago, IL			informational presentation
Aamodt - St Pierre,		1900 W. Polk St	12/13/2012	\$0.00 - \$100.00	Meals or refreshments in connection with
Stephanie		Chicago, IL			informational presentation
Aamodt - St Pierre,		1900 W. Polk St	12/13/2012	\$0.00 - \$100.00	Meals or refreshments in connection with
Stephanie		Chicago, IL			informational presentation
Aanderudd, Paul		13450 E. 12 Mile Rd.	05/22/2012	\$0.00 - \$100.00	Meals or refreshments in connection with
		Warren, MI	05,11,1011	70.00	informational presentation
Aanderudd, Paul	1	13450 E. 12 Mile Rd.	08/15/2012	\$0.00 - \$100.00	Meals or refreshments in connection with
		Warren, MI	A CONTRACTOR AND ADDRESS OF THE PARTY OF THE		informational presentation
Aaron, Brunner		210 Village Center Pkwy	08/03/2012	\$0.00 - \$100.00	Meals or refreshments in connection with
		Stockbridge, GA		Maria Maria	informational presentation
Aaron, Katrina		4021 Balmoral Dr Sw	05/15/2012	\$0.00 - \$100.00	Meals or refreshments in connection with
		Huntsville, AL			informational presentation
Aaron, Loyd		301 Ne Knott St	11/02/2012	\$0.00 - \$100.00	Meals or refreshments in connection with
		Portland Or 97212, OR			informational presentation
Aaron, Loyd		301 Ne Knott St	11/02/2012	\$0.00 - \$100.00	Meals or refreshments in connection with
		Portland Or 97212, OR			informational presentation
Aarons, Maureen		3225 Blue Ridge Rd, Ste. 101	04/08/2012	\$0.00 - \$100.00	Meals or refreshments in connection with
		Raleigh, NC			informational presentation
Aarons, Maureen	2	3225 Blue Ridge Rd, Ste. 101	04/25/2012	\$0.00 - \$100.00	Meals or refreshments in connection with
		Raleigh, NC		ALCOHOLOGO AL CONTROL PRODUC	informational presentation
Aarons, Maureen		3225 Blue Ridge Rd, Ste. 101	05/17/2012	\$0.00 - \$100.00	Meals or refreshments in connection with
CONSTRUCTOR CONTROL CO		Raleigh, NC	93889009995390000	1000 3010 0410 0410 000 000 000 000	informational presentation
Aarons, Maureen	<u> </u>	3225 Blue Ridge Rd, Ste. 101	05/24/2012	\$0.00 - \$100.00	Meals or refreshments in connection with
		Raleigh, NC		501/502/16/2011/15/2019/6/2020/0	informational presentation
Aarons, Maureen	1	3225 Blue Ridge Rd, Ste. 101	07/22/2012	\$0.00 - \$100.00	Meals or refreshments in connection with
0.00		Raleigh, NC	1211/287 388 153	80 8 8 2 8	informational presentation
Aarons, Maureen		3225 Blue Ridge Rd, Ste. 101	07/22/2012	\$0.00 - \$100.00	Meals or refreshments in connection with
355	8	Raleigh, NC	76 27 3	190 9	informational presentation
Aarons, Maureen	1	3225 Blue Ridge Rd, Ste. 101	08/19/2012	\$0.00 - \$100.00	Meals or refreshments in connection with
		Raleigh, NC			informational presentation
Aarons, Maureen		3225 Blue Ridge Road	08/27/2012	\$0.00 - \$100.00	Meals or refreshments in connection with
		Raleigh, NC			informational presentation
Aarons, Maureen		3225 Blue Ridge Rd, Ste. 101	01/01/2012 -	\$0.00 - \$100.00	Meals or refreshments in connection with
AND THE PROPERTY OF THE PROPER		Raleigh, NC	03/31/2012		informational presentation
Aarons, Maureen	1	3225 Blue Ridge Rd, Ste. 101	01/01/2012 -	\$0.00 - \$100.00	Meals or refreshments in connection with
W 500		Raleigh, NC	03/31/2012		informational presentation
Aarons, Maureen		3225 Blue Ridge Road	11/20/2012	\$0.00 - \$100.00	Meals or refreshments in connection with
		Raleigh, NC			informational presentation
Abadi, Jules		285 Sills Rd	05/02/2012	\$0.00 - \$100.00	Meals or refreshments in connection with
20		Patchoque, NY	10.05.40.00	erent floor and the second	informational presentation



Payments Data by Entity Paid (Jan 1, 2012 - Dec 31, 2012) Last Updated on 07/02/2013 How to Search this Report Contact us online or at 800-511-2727 Provider Lookup V 2012 Health Care Professionals Payments Disclosure Report Select a different report: 2012 Full Year Report * Report Notes Alphabetical Filter Z Pages: All results Page 1 Entities Paid 1 - 1 of 1 Search on: MCCOY, CLARK STEVEN and Related Entities Service Provided or Activity **Entity Paid** City State Cash Non Cash MCCOY, CLARK STEVEN GAINESVILLE FL \$15 Meals Healthcare Professional: MCCOY, CLARK STEVEN \$15 Total Received by: MCCOY, CLARK STEVEN Pages: All results Page 1 Entities Paid 1 - 1 of 1 Alphabetical Filter D E F G H ! J K L M N O P Q R S T U Z

Total of

PDFs: 17,320 pages

Websites: 243,034 pages

1,099,377 records

- ~ 1.1 million records at 10 seconds per record
- = 11,000,000 seconds
- = 3055.55 hours

At 8 hours/day, 5 days/week, a person works 2,080 hours/year.

3055.55/2080 = 1.47 years of work



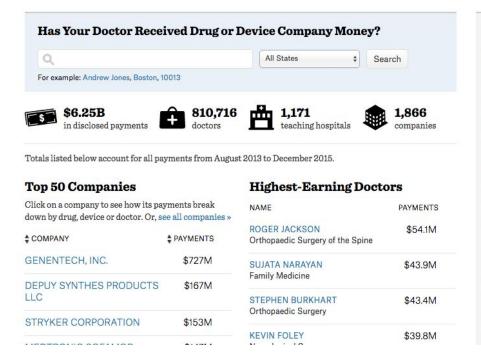


Dollars for Docs

How Industry Dollars Reach Your Doctors

By Charles Ornstein, Lena Groeger, Mike Tigas, and Ryann Grochowski Jones, ProPublica. Updated December 13, 2016

Pharmaceutical and medical device companies are now required by law to release details of their payments to a variety of doctors and U.S. teaching hospitals for promotional talks, research and consulting, among other categories. Use this tool to search for general payments (excluding research and ownership interests) made from August 2013 to December 2015. Related Story; We've Updated Dollars for Docs. Here's What's New. »



About the Dollars for Docs Data

Details behind our drug company money database.

Download the Data

The entire data set is available for purchase in the ProPublica Data Store.

Source

The Centers for Medicare and Medicaid Services Open Payments data.

Archive

Search for payments made by 17 drug companies between 2009 and 2013.

Patients, Take Action

We want to know how you've used or might use this information in your day to day lives. Have you talked to your doctor? Do you plan to? Tell us: propub.li/participate-d4d

Reporters, Use Our Data

Have questions about how you can best

Has Your Doctor Received Drug or Device Company Money?

Q Jon Draud	All States	+	Search
For example: Andrew Jones, Boston, 10013			

Search Results: 1,011 Doctors

If your doctor is not listed:

Results are sorted to display closest matching names first. The addresses associated with doctors are provided by the government and do not reflect all of a doctor's practice locations. If your doctor does not appear in the listing, that could mean that the doctor did not receive industry payments from August 2013 to December 2015, or you have misspelled his/her name.

LOCATION	How Much
NASHVILLE, TN	\$664K
BIRMINGHAM, AL	\$1,383
JERSEYVILLE, IL	\$80
MADISON, WI	\$278
MATHER, CA	\$26
BIRMINGHAM, AL	\$25
GALENA, KS	\$2,505
CHICAGO, IL	\$323
WOODINVILLE, WA	\$1,957
	NASHVILLE, TN BIRMINGHAM, AL JERSEYVILLE, IL MADISON, WI MATHER, CA BIRMINGHAM, AL GALENA, KS CHICAGO, IL

Dollars for Docs » Tennessee » JON DRAUD

JON DRAUD

Listed Specialty: Psychiatry

1916 PATTERSON ST 715, NASHVILLE, TN, 37203-2118

Q SEARCH THIS NAME IN DOLLARS FOR DOCS ARCHIVE »

IS THIS YOU? DO YOU BELIEVE THE DATA CONTAINS ERRORS? CLICK HERE FOR INFORMATION »

Yearly Payment Breakdown: 2015

2015 \$

C----

All Payments: At a Glance

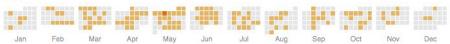
2015	291 PAYMENTS	\$199,702 PAYMENT TOTAL	14 COMPANIES PAID THIS DOCTOR
2014	547 PAYMENTS	\$373,940 PAYMENT TOTAL	13 COMPANIES PAID THIS DOCTOR
2013	145 PAYMENTS	\$90,198 PAYMENT TOTAL	9 COMPANIES PAID THIS DOCTOR

Payment Calendar in 2015

This doctor received a payment on 133 days in 2015.

Each box below represents a single day during the disclosure period. A gray box indicates no payments. The darker the color, the more payments a doctor received that day.

2015



Types of Payments in 2015

CATEGORY	PAYMENTS	PAYMENT VALUE
PROMOTIONAL SPEAKING/OTHER	83	\$153K
	192.91	*******

Is This Your Doctor?

Print out this record, along with questions and tips for talking with your physician about payments.

Have you used or plan to use this information? Tell us about it.



Dollars for Docs: Talk With Your Doctor

https://projects.propublica.org/docdollars/

You can print this page and show it your doctor.

ProPublica's Dollars for Docs database lets you search for payments to U.S.-based doctors made by pharmaceutical and medical device companies between August 2013 and December 2014. The disclosure of these payments is required under the Physician Payment Sunshine Act, a provision of the 2010 Affordable Care Act.

About This Information

- The information that appears here comes directly from the federal government. Companies must attest to its
 accuracy and doctors have the ability to contest information they believe is in error.
- This site includes payments for such activities as speaking, consulting, meals, travel and royalties. It does not
 include payments for clinical research.
- It is legal for companies to make payments to doctors as long as the payments are not a kickback or inducement to
 use their products.
- Some doctors say collaborative relationships, particularly those involving research, are necessary to develop new
 treatments and cures. But many ethicists have raised questions about the payments, and studies show that they
 may influence doctors' prescribing decisions.
- Only you can decide if this matters to you and if so, whether you want to talk to your doctor about it. If you plan to
 talk with your doctor (or if you already have), please help us by filling out this short survey: propub.li/participated4d

Preparing for Your Conversation

If you decide you'd like to talk to your doctor about this, please keep in mind:

2. Stories that require analyzing large amounts of data

Updates from last version:

- * Replaced screenshot with up-to-date version
- * Clarified language describing readmission measure to indicate 30 days from discharge

Assessing surgeon-level risk of patient harm during elective surgery for public reporting

Olga Pierce, Marshall Allen ProPublica

Whitepaper as of

August 4, 2015

Olga Pierce and Marshall Allen are journalists at ProPublica, a non-profit organization dedicated to journalism in the public interest. This analysis was done by ProPublica in consultation with Sebastien Haneuse, Karen Joynt and Ashish Jha of the Harvard T. H. Chan School of Public Health, Marty Makary of Johns Hopkins University School of Medicine, dozens of other researchers, surgeons and other practicing physicians, and hundreds of patients who have been harmed while receiving medical care.

Abstract

Background Patients undergoing elective surgical procedures sometimes suffer avoidable, serious complications like infections, blood clots and hemorrhage. However, little is currently known in American medicine about the relative performance of surgeons when it comes to minimizing these types of harm. While practices such as peer review may identify individual egregious errors, there is little infrastructure in place to identify patterns of complications over time, or across separate facilities. Overall, it's estimated that fewer than 1% of surgical outcomes are being measured¹, leaving patients, the medical community, and even surgeons themselves unaware of how their patients fare collectively over time. Most surgeons Pro Publica







Surgeon Scorecard

by Sisi Wei, Olga Pierce and Marshall Allen, ProPublica, Updated July 15, 2015

Guided by experts, ProPublica calculated death and complication rates for surgeons performing one of eight elective procedures in Medicare, carefully adjusting for differences in patient health, age and hospital quality. Use this database to know more about a surgeon before your operation.

READ OUR STORY

METHODOLOGY

EDITOR'S NOTE

Making the Cut: Why Choosing the Right Surgeon Matters Even More Than You Know Read how we calculated complications and the key questions we considered.

Why ProPublica is naming surgeons and what experts are saying about it

Find Near Me Find a Surgeon Find a Hospital

Surgeons and Hospitals Near My Location

ex: 155 6th Avenue, New York, New York

Use My Location

Knee Replacement

Q

...or jump straight to your state: Pick a state

CITRUS MEMORIAL HOSPITAL

502 W HIGHLAND BLVD, INVERNESS, FLORIDA, 34452, PHONE: 352-726-1551

How Surgeons at This Hospital Perform, by Procedure



Prostate Removal: No surgeons met the volume requirement of 20 for this procedure. Prostate Resection: No surgeons met the volume requirement of 20 for this procedure.

How we calculated these rates: Guided by top researchers and doctors, ProPublica used Medicare data from 2009-2013 to identify cases where a patient died in the hospital or had to be readmitted within 30 days for a problem related to one of these elective procedures. We then calculated complication rates for surgeons, carefully accounting for differences in patient health, age and hospital quality. These rates are calculated using data from Medicare records, which do not include patients with private insurance or in another program like Medicaid. A surgeon's rate spans all hospitals at which he or she operates and is not unique to a given hospital. Read our methodology »

Important: Some surgeons may no longer be operating at this hospital.

Hover over underlined items to see details.

Knee Replacement

Total knee replacement (ICD-9-CM code 81.54)

Replace diseased knee joint with an artificial knee. The most common reason for a knee replacement is osteoarthritis,

3. Stories that uncover what's been been removed from the Internet



































Dissidents 异见人士

This category includes images of well-known Chinese dissidents, their political essays, petitions for their release from jail and updates on their detainment or whereabouts. These dissidents include:

Xu Zhiyong (许志永), a well-known Chinese lawyer and rights activist who was arrested during our observation period in late July 2013. Xu is one of the co-founders of the New Citizens Movement, which calls for democracy in China. Many deleted posts are photos of Xu or Long Weibo petitions or essays calling for his release.

Xiao Shu (笑蜀), a journalist who campaigned for Xu's release, was taken away by police a few days after Xu was arrested. Censors deleted photos of him, as well as his public statement calling for Xu's malanna





```
"created at" : "Tue Nov 30 16:21:13 +0800 2010",
       "text": "转发微博。",
       "truncated" : false,
       "retweeted status" :
           "created at" : "Tue Nov 30 16:05:41 +0800 2010",
           "text":"对待事物的出发点、立足点,决定着事物的发展及发展后的结果。这个结果实际也是一种相对而
言的成败。世俗间追求这种成败却又调整不好出发点,更是找不到立足点。所以成也好败也好,放下了最好。",
           "truncated" : false,
           "in reply to status id" : "",
           "annotations" :
           "in reply to screen name" : "",
           "geo" : null,
           "user" :
               "name": "归元隆印",
               "domain" : "",
               "geo enabled" : true,
               "followers count" : 66710,
               "statuses count" : 77,
               "favourites count" : 0,
               "city" : "1",
               "description": "心存慈悲 身奉善行 出世入世 修己助人 归元禅寺官方网站: http://www.gui
yuanchansi.net",
               "verified" : true,
               "id": 1799833402.
               "gender" : "m",
               "friends count" : 4,
               "screen name": "归元隆印",
               "allow all act msg" : false,
               "following" : false,
               "url" : "http://1",
               "profile image url" : "http://tp3.sinaimg.cn/1799833402/50/1283207796",
               "created at" : "Tue Aug 24 00:00:00 +0800 2010",
               "province": "42",
               "location" : "湖北 武汉"
           "favorited" : false,
           "in reply to user id" : "",
           "id" : 3980364843,
           "source": "<a href=\"http://t.sina.com.cn\" rel=\"nofollow\">新浪微博</a>"
       "in reply to status id" : "",
       "annotations" :
```

YOU, yes you, can learn to code.

10.1 • 8



So how do I start?

1. Pick a project

2. Stay focused

3. Google it

4. Talk to people

Scooped by code

"Every skill you don't have leaves a whole class of stories out of your reach. And data stories are usually the ones that are hiding in plain sight."

PREDICTIONS FOR JOURNALISM 2014: A NIEMAN LAB SERIES







propublica.org/data-institute

Questions?

Sisi.Wei@propublica.org