

The Deloitte logo, consisting of the word "Deloitte" in a white, sans-serif font with a small yellow dot at the end of the word. The background is a dark blue, cloudy sky over a runway with a large white arrow pointing forward.

**Deloitte.**

# Medical Professional Liability Issues and Trends for 2014 and Beyond

**Kevin Bingham**

[kbingham@deloitte.com](mailto:kbingham@deloitte.com)

**2014 CAS RPMS Seminar**

**April 1, 2014**

**Madison B**

**11:15 to 12:30**

Audit • Tax • Consulting • Corporate Finance



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# Agenda

Electronic Health Records

Big Data

The Shift Towards Outpatient

PPACA

Where do we go From Here

# Electronic Health Records



# The Risks from Implementing Electronic Health Records Easing



## Electronic Health Record Malpractice Risks

- EHR liability risks come from:
  - Failure to access available patient information
  - Drug interaction errors
  - Alert fatigue/Closing prompt (e.g., Rocky Mountain Spotted Fever)
  - Copy and paste errors
  - Etc.
- EHR risk management lessons learned being shared quicker than ever
  - Training seminars, conference presentations and articles
  - EHR vendors educating users based on past implementations
  - On-line education vendors



Sources: [http://www.thedoctors.com/KnowledgeCenter/PatientSafety/articles/CON ID 003743](http://www.thedoctors.com/KnowledgeCenter/PatientSafety/articles/CON_ID_003743)  
32<sup>nd</sup> PIAA Annual Meeting, Jim Saxton, *EHR Risk in 2009 and Beyond*

# The Benefits From Using Electronic Health Records are Emerging

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EHR alerts increase abdominal aortic aneurysm screenings

Author Name **Nicole Freeman** | Date **February 10, 2014** | Tagged **Abdominal Aortic**

- A recently published study from Kaiser Permanente has found that integrating screening alerts for abdominal aortic aneurysms (AAA) into an electronic health record (EHR) **can reduce the number of at-risk patients who go without screenings by over 50 percent.** The study was published in the Journal of Vascular Surgery.
- Kaiser Permanente studies have found reporting time reductions in quality measures, **and a decrease in readmissions and emergency room visits for diabetic patients.** The HealthConnect HER system is used in 618 medical offices and 38 hospitals, securely connecting more about 9.1 million users, and is the largest non-governmental system in the world. The system also allows researchers access to an enormous collection of medical data.



EHR-Based Screening Program for Abdominal Aortic Aneurysms Cuts the Number of Unscreened At-Risk Men by More than Half

Sources:

<http://ehrintelligence.com/2014/02/10/ehr-alerts-increase-abdominal-aortic-aneurysm-screenings/>

<http://www.prnewswire.com/news-releases/ehr-based-screening-program-for-abdominal-aortic-aneurysms-cuts-the-number-of-unscreened-at-risk-men-by-more-than-half-244716391.html>

# The Benefits From Using Electronic Health Records are Emerging



## Benefits of Electronic Health Records (EHRs)

When fully functional and exchangeable, the benefits of EHRs offer far more than a paper record can. EHRs:

- Improve **quality and convenience** of patient care
- Increase **patient participation** in their care
- Improve accuracy of **diagnoses and health outcomes**
- Improve **care coordination**
- Increase **practice efficiencies and cost savings**

### ▪ Empowering of advanced analytics

*Population Management*

*Patient Segmentation*

*Patient Treatment Management*

*Doctor/Patient Matching*

*Readmission Management*

*Clinical Decision Support*

*Care Plan Follow Up*

*Anomaly Detection*

*Practice Variation*

Source: <http://www.healthit.gov/providers-professionals/benefits-electronic-health-records-ehrs>

Big Data



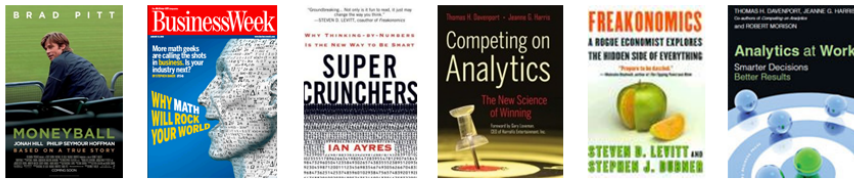
# Bid Data is Everywhere



## Big Data: A Revolution That Will Transform How We Live, Work, and Think Hardcover

by Viktor Mayer-Schönberger (Author), Kenneth Cukier (Author)

“Big data” refers to our burgeoning ability to crunch vast collections of information, analyze it instantly, and draw sometimes profoundly surprising conclusions from it.



Google predictive modeling

Web Books Images News Videos More Search tools

About 5,530,000 results (0.27 seconds) → **5.5 million**

Google advanced analytics

Web Images News Videos Shopping More Search tools

About 87,700,000 results (0.23 seconds) → **87.7 million**

Google big data

Web News Images Books Videos More Search tools

About 2,310,000,000 results (0.28 seconds) → **2.31 billion**

Google big data

Web News Images Books Videos More Search tools

About 2,310,000,000 results (0.28 seconds) → **2.31 billion**

 <b>Justin Bieber</b> 980 million	 <b>Christmas</b> 432 million	 <b>Statistics</b> 630 million
 <b>Soccer</b> 197 million	 <b>Miley Cyrus</b> 540 million	 <b>Love</b> 1.69 billion
 <b>United States</b> 3.77 billion	 <b>Web</b> 2.99 billion	 <b>China</b> 876 million

## The Importance of Data

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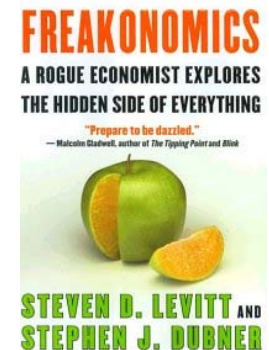
“In the past, one could get by on intuition and experience. Times have changed. Today, the name of the game is data.”



Steven Levitt  
*The University of Chicago*

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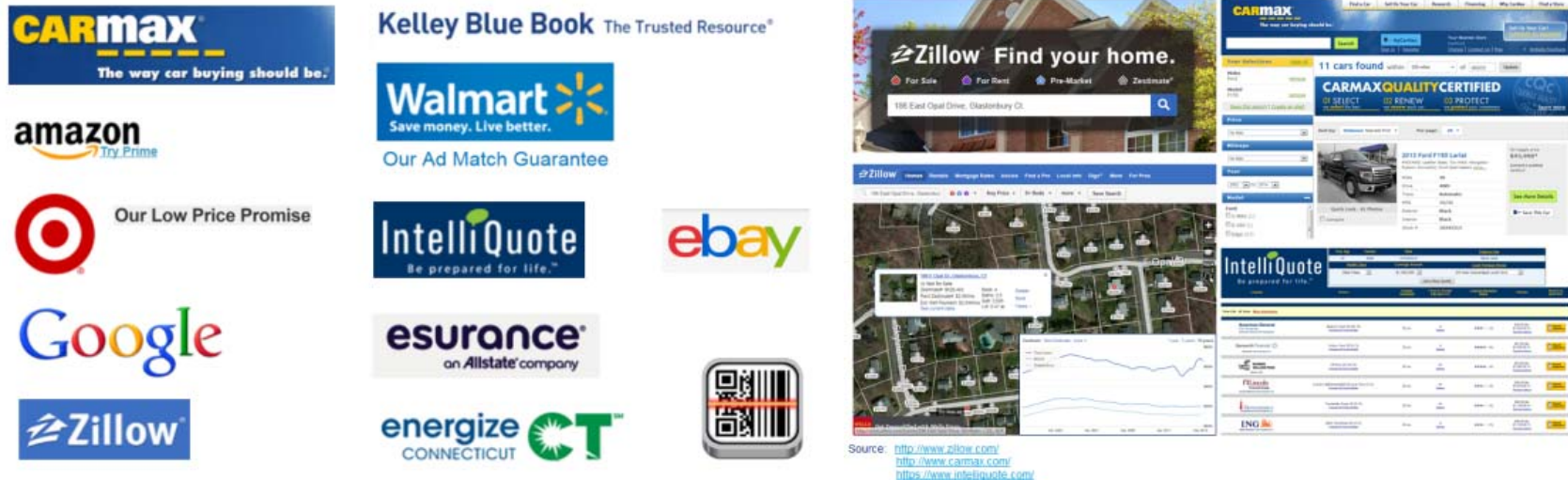
Author of “Freakonomics – A Rogue Economist Explores the Hidden Side of Everything.”



# Transparency all Around us



- Everyday life



- Hospitals putting prices online

## FREE MARKET AT WORK: OKLA. CITY HOSPITAL CAUSES BIDDING WAR BY POSTING SURGERY PRICES ONLINE

- “When we first started we thought we were about half the price of the hospitals,” Dr. Lantier said. “Then we found out we’re less than half price. Then we find out we’re **a sixth to an eighth of what their prices are**. I can’t believe the average person can afford health care at these prices.”

Source: <http://www.theblaze.com/stories/2013/07/12/free-market-at-work-okla-city-hospital-causes-bidding-war-by-posting-surgery-prices-online/#>

# Costs in our Healthcare System

**The New York Times**

As Hospital Prices Soar, a Stitch Tops \$500

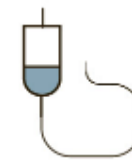


Two-year-old Ben Bellar of East Lansing, Mich., getting stitches after a fall at home. The bill for his treatment came to more than \$2,000. Fabrizio Costantini for the New York Times

## Inflated Prices

Hospital vs. Market Price

IV fluid bag



\$137

Under \$1

Echocardiogram



\$1,791

Hospital fee only

\$358

Includes doctor

Neck brace



\$154

\$19.99

Knee arthroscopy



\$14,110

\$2,037

Sources: [http://www.nytimes.com/2013/12/03/health/as-hospital-costs-soar-single-stitch-tops-500.html?hp&\\_r=1&](http://www.nytimes.com/2013/12/03/health/as-hospital-costs-soar-single-stitch-tops-500.html?hp&_r=1&)



# Big Data in Healthcare



- MA and NH allowing residents to search healthcare costs online
- EHR

*Billing Data (ICD9, CPT)  
Medications*

*Lab Results  
Clinical Notes*

*X-Rays*



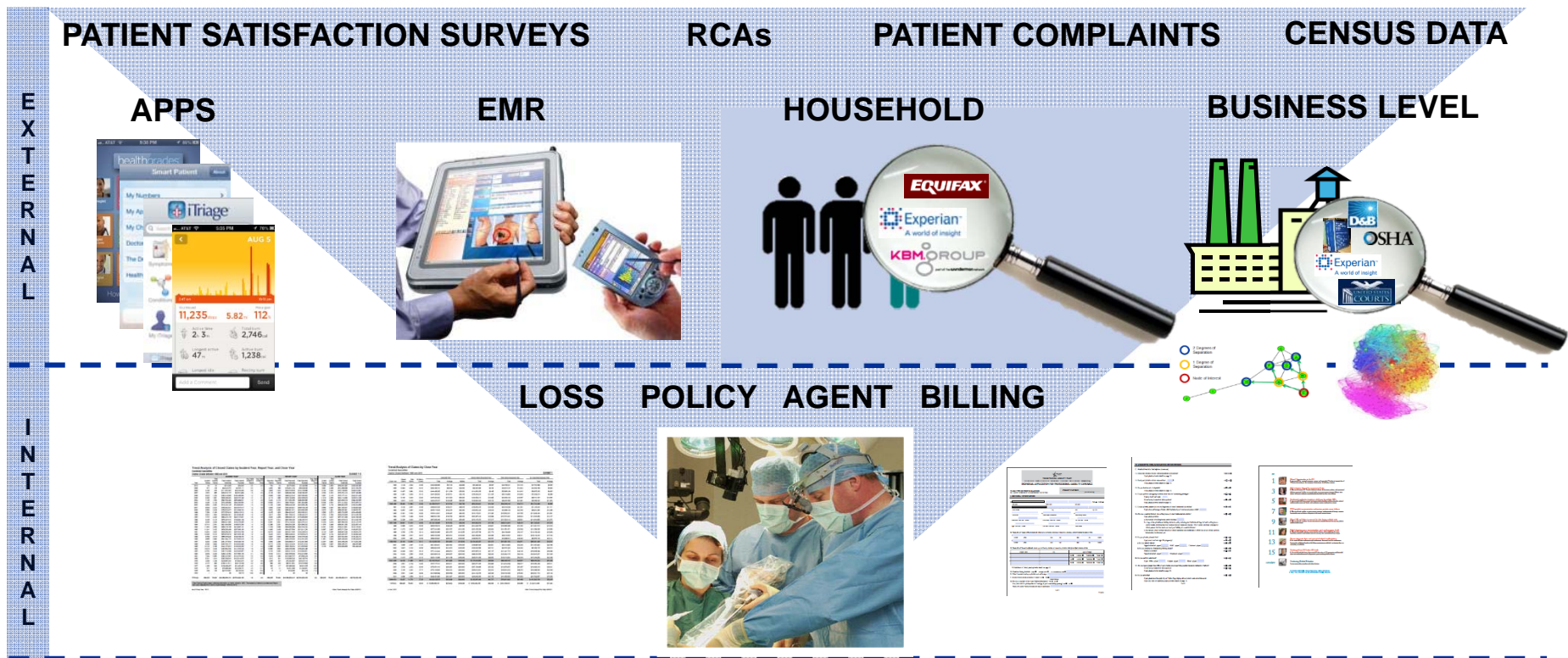
- Accountable Care Organizations (ACO) and measuring shared savings
  - CMS is measuring quality of care using 33 measures in 4 key domains:

- Patient/caregiver experience (7 measures)
- Care coordination/patient safety (6 measures)
- Preventive health (8 measures)
- At-risk population (i.e., Diabetes (6 measures), Hypertension (1 measure), Ischemic Vascular Disease (2 measures), Heart Failure (1 measure), Coronary Artery Disease (2 measures))

- External 3<sup>rd</sup> Party data



# Big Data For MPL



**ENHANCING PREDICTIVE MODELS FOCUSED ON UNDERWRITING, CLAIMS, RISK MANAGEMENT AND PATIENT SAFETY**

**Physician Panel**

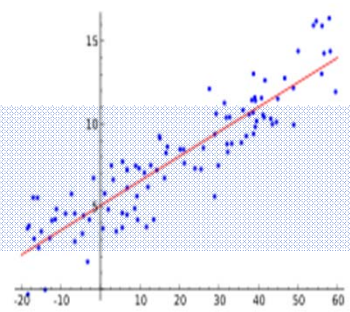
- Age
- Health

**ACO/Practice**

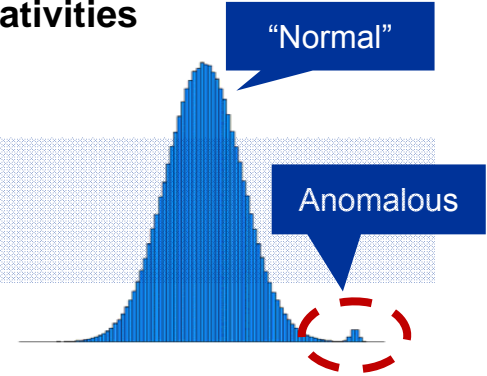
- OPE
- CMS measures

**Physician Relativities**

- Prescribing
- Procedure



$$Y = \beta_0 + \beta_1 * X_1 + \beta_2 * X_2 + \dots + \beta_n * X_n$$





## The Importance of Data

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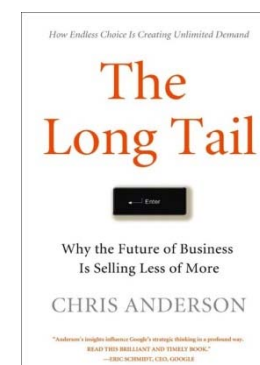
“Perhaps the most important cultural trend today: The explosion of data about every aspect of our world and the rise of applied math gurus who know how to use it.”



**Chris Anderson**  
*Editor-in-chief of Wired*

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**Author of “The Long Tail – Why the Future of Business is Selling Less of More”**



# The Shift Towards Outpatient

## The Changing Healthcare Landscape

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- The shift from fee-for-service to value-based care
  - PPACA focus on Accountable Care Organizations (ACO) and shared savings
  - Increased care coordination driven by standardized protocols and information sharing
  - Heavier focus on maximizing “value” of healthcare delivered through alignment of incentives, preventative care, reducing defensive medicine, and risk management

BECKER'S  
**Hospital Review**

### 7 Forecasts on Hospital Inpatient, Outpatient Volumes

Written by Bob Herman ([Twitter](#) | [Google+](#)) | June 14, 2013

- Sg2 expects outpatient volumes to grow **17 percent** over the next five years, while inpatient discharges may decrease by 3 percent
- Outpatient cardiovascular services are expected to swell by **15 percent** over the next five years
- Outpatient bariatric surgery may increase by **75 percent** over the next five years

Source: <http://www.beckershospitalreview.com/racs/-/icd-9/-/icd-10/7-forecasts-on-hospital-inpatient-outpatient-volumes.html>  
[www.sg2.com](http://www.sg2.com)

# Shifting Focus from Inpatient to Outpatient

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## Capital Spending Reflects New Era in Healthcare

- The Patient Protection and Affordable Care Act (PPACA) is a game changer for hospitals and health systems, which are bracing for new reimbursement models based on value, the continued shift in patient volume from the inpatient to the outpatient setting, and the movement toward population health management.
- As a result, provider organizations are making major capital investments in their IT capabilities to increase their ability to manage patient records throughout the care continuum and reduce overutilization and duplication of services and in their ambulatory facilities to drive new levels of revenue and more inpatient referrals.
- Key changes
  - Hospitals are investing in large ambulatory care facilities
  - Most hospitals see growth opportunities in outpatient care
  - Increased referral opportunities and lower cost of care outside the hospital

Source: <http://www.healthleadersmedia.com/content/FIN-300783/Capital-Spending-Reflects-New-Era-in-Healthcare##>

# Shifting Focus from Inpatient to Outpatient



40 Ambulatory Surgery Center Acquisition Agreements in 2013



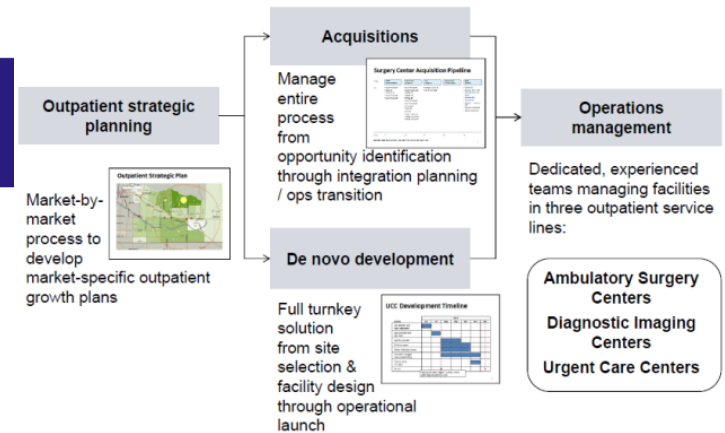
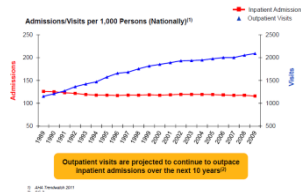
Edward scooping up two outpatient surgery centers for \$20 million



8 Recent Ambulatory Surgery Center Acquisitions & Affiliations

Written by Carrie Pallardy | December 05, 2013

**Outpatient Expansion**  
Tenet has invested in capabilities to significantly grow the outpatient business...



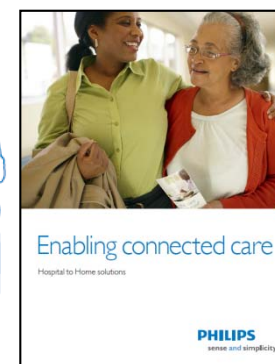
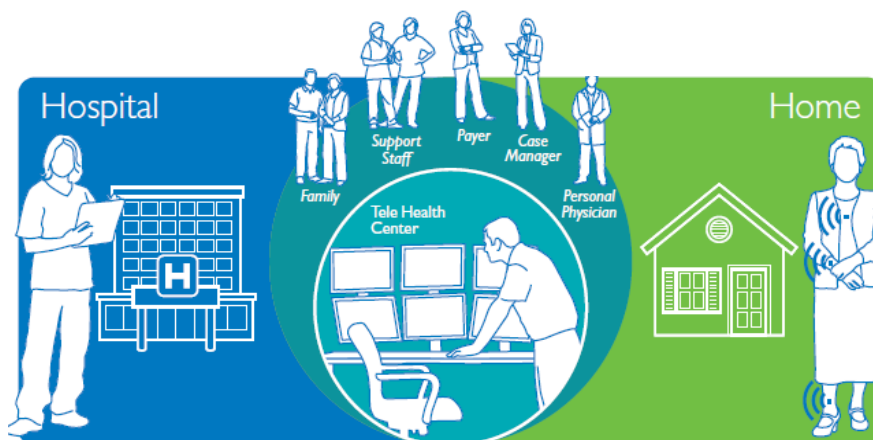
Sources:

- <http://www.merritthealthcare.com/40-ambulatory-surgery-center-acquisition-agreements-2013/>
- <http://www.chicagobusiness.com/article/20131119/NEWS03/131119755/edward-scooping-up-two-outpatient-surgery-centers-for-20-million#>
- <http://www.beckersasc.com/asc-transactions-and-valuation-issues/8-recent-ambulatory-surgery-center-acquisitions-affiliations.html>
- <http://www.tenethealth.com/Investors/Documents/Investor%20Presentations/Slides%20-%20Tenet%20Investor%20Webinar%20-%20Outpatient%20Services.pdf>

# Innovative Approaches to Bringing Patients Home

## PHILIPS Hospital to Home

- Philip's Intensive Ambulatory Care (IAC) program targets the 5 percent of patients with multiple chronic conditions that drive over 50 percent of healthcare costs.
- The IAC program focuses on improving a patient's health status
- Patients are cared for by a dedicated team of healthcare providers
- Primary locus of care is in the home
- Remote patient monitoring through advanced Tele Health Center and in home devices
- Patient tablet
- Health coach



Sources: <http://www.hospitaltohome.philips.com>  
<http://www.hospitaltohome.philips.com/programs/eIAC>



## The Importance of Admitted Versus Under “Observation”

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### Medicare: Inpatient or Outpatient?

Staying in the hospital without being formally admitted can cost you thousands of dollars

- Jean Arnau spent five days in the hospital with a fractured spine — lying in a hospital bed, wearing a hospital gown and ID bracelet, eating hospital food and receiving regular nursing care.

But when she was discharged and needed to transfer to a skilled nursing facility for rehabilitation, her family learned that she had never been formally admitted as an inpatient to the hospital at all. Instead, **she'd been classified as an outpatient under "observation" — a status that would cost her thousands of dollars.**

- Under the rules, Medicare picks up the whole tab for the first 20 days in an approved skilled nursing facility for rehab or other care, but **only if someone has spent at least three full days in the hospital as an admitted patient. If instead a patient has been under observation — for all or part of that time — he or she is responsible for the entire cost of rehab.**

Source: <http://www.aarp.org/health/medicare-insurance/info-08-2012/medicare-inpatient-vs-outpatient-under-observation.html>

# Shifting Focus from Inpatient to Outpatient

“The goal will be to manage a populations health across the care continuum, keeping patients healthy through preventable and primary care services, and *out* of acute care facilities whenever possible.”



Robert York, Kenneth Kaufman, Mark Grube  
*Health Affairs Blog*

HealthAffairs Blog discussing the decline in utilization rates signaling a change in the inpatient business model.

Source: <http://healthaffairs.org/blog/2013/03/08/decline-in-utilization-rates-signals-a-change-in-the-inpatient-business-model/>

PPACA

## **Patient Protection and Affordable Care Act (PPACA) Considerations**

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- Hospitals have acquired a number of physician practices
  - PPACA driving acquisitions that help forge closer links for referrals and capitalize on shared savings from leveraging ACO models
  - Challenges for hospitals
    - New risk exposure (i.e., inpatient versus outpatient risk)
    - Span of control issues
    - Settlement “delta”
  - Challenges for MPL insurers
    - Adverse impact on top line revenue
    - Impact on expense ratio for smaller insurers as large groups depart
    - Innovating in order to stay relevant

## PPACA Considerations

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- Aging population
  - Aging physicians
    - Physician shortages across the country when demand is on the rise
    - Long term shift away from solo and two-physician practices – 78% in 1975 to just over 30% today\*
    - Shift of younger physicians towards hospitalist type positions and a heavier focus on work life balance
  - Aging healthcare consumers
    - Physician panels are becoming more heavily weighted towards older Americans who have more health problems
    - PPACA messaging has increased the expectations of healthcare consumers (i.e., patients have unrealistic expectations)

Sources: \*Center for Studying Health System Change's *2008 Health Tracking Physician Survey*

## PPACA Considerations

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- Emergency Department Challenges
  - Patient boarding (i.e., time from disposition to transfer for admitted patients)
  - Ambulance diversion
  - Excessive wait times
  - Patients walking out of ER before receiving treatment
  - Shortage of inpatient beds
  - Shortages of on call physicians

**AND THIS WAS BEFORE THE PPACA AND THE  
ADDITION OF 32 MILLION INSURED**



## PPACA Considerations

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- Rising role of NPs and PAs in the delivery of care driven by PPACA and physician shortages
  - Numerous states are pushing legislation to permit nurse practitioners to order and interpret tests, prescribe medications, administer tests, etc.
  - Actuarial considerations
    - The shift from shared limits to separate limits... digging deep on real claims history
    - With increased responsibilities comes increased exposure (and premiums)
    - Review of rates relative to other industry leaders

# PPACA Considerations



## Nurse Leader Insider

February 14, 2014

### The Week in Nursing

#### [FL House looks to give nurse practitioners more power](#)

In an issue that could spur a health-care industry fight, a House select committee Monday will take up a 155-page bill that would give nurse practitioners independence to provide medical services without physician supervision. House leaders say giving more authority to nurse practitioners, at least in part, could help address a shortage of primary-care physicians in Florida. The bill would apply to a group technically known as "advanced registered nurse practitioners," who have more education and training than registered nurses. Along with applying to nurse practitioners who provide primary care, it would apply to specialists such as nurse anesthetists.

#### [CT Governor: Let NPs work independently](#)

Nurse practitioners would be allowed to treat patients and prescribe medications independently under a proposal by Gov. Dannel P. Malloy's administration, a potentially significant — and controversial — change in the medical landscape aimed at expanding access to primary care. The ability of nurse practitioners to work independently of doctors has long been an issue of contention between the two professions, and states vary widely in how they allow nurse practitioners to practice. But the federal health law commonly known as Obamacare puts the debate in a new context: The expansion of insurance coverage to thousands more people is expected to raise the demand for primary care, at a time when the state already faces a shortage of primary care doctors and an aging physician population.

Sources: <http://www.hcpro.com/nursing>

## PPACA Considerations

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- Changing treatment options
  - “Group treatment” by physicians for diabetic and heart patients
  - Rising use of in store clinics
  - Rising use of telemedicine
- Innovative companies providing new options for taking care of patients



### What Services Can Be Provided By Telemedicine?

Sometimes telemedicine is best understood in terms of the services provided and the mechanisms used to provide those services. Here are some examples:



- **Primary care and specialist referral services** may involve a primary care or allied health professional providing a consultation with a patient or a specialist assisting the primary care physician in rendering a diagnosis. This may involve the use of live interactive video or the use of store and forward transmission of diagnostic images, vital signs and/or video clips along with patient data for later review.
- **Remote patient monitoring**, including home telehealth, uses devices to remotely collect and send data to a home health agency or a remote diagnostic testing facility (RDTF) for interpretation. Such applications might include a specific vital sign, such as blood glucose or heart ECG or a variety of indicators for homebound patients. Such services can be used to supplement the use of visiting nurses.
- **Consumer medical and health information** includes the use of the Internet and wireless devices for consumers to obtain specialized health information and on-line discussion groups to provide peer-to-peer support.
- **Medical education** provides continuing medical education credits for health professionals and special medical education seminars for targeted groups in remote locations.

[www.americantelemed.org](http://www.americantelemed.org)

Where do we go  
From Here?

## Where Do We Go From Here?

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- Flat to slightly rising **frequency**
- Some physician practices that become part of Hospital ACO efforts may unwind these transactions... but not enough to reverse the **top line erosion** MPL insurers have seen for the past few years
- **Reserve releases** → Two more years of reserve releases before we start to see announcements of adverse development in aggregate

### Howard H. Friedman, ACAS

*Co-President, Professional Liability Group; Chief Underwriting Officer, Chief Actuary & SVP, ProAssurance Corp.*

Fast forward to the end of Q2, where we have the perspective of six whole months of additional data and an updated study from our independent actuaries. That data showed, among other things, a minor deviation from the still favorable trends in one state, a small amount of adverse development in one of our allied health sub-lines and a couple of other minor changes.

I want to emphasize that these are very small changes and isolated changes by themselves and it is too early to say if any are new long-term trends. But they became evident as we analyzed data for this quarter and we believe a cautious approach to such information is appropriate.

The changes that resulted from this recognition of updated data were incremental and did not move the needle to any significant extent on total reserves. But because of the size of our reserves, those minor changes in aggregate had a significant effect on the favorable development that you see in the quarter.

Sources: SNL, 2<sup>nd</sup> Quarter 2013 ProAssurance earnings call

## Where Do We Go From Here?

- **Severity trend** → Increase... especially with a return to the inflation levels of last decade as some predict
- **Interest rates** → Increase... helping boost the historically low investment returns of today and the ratio of Investment Income to NEP

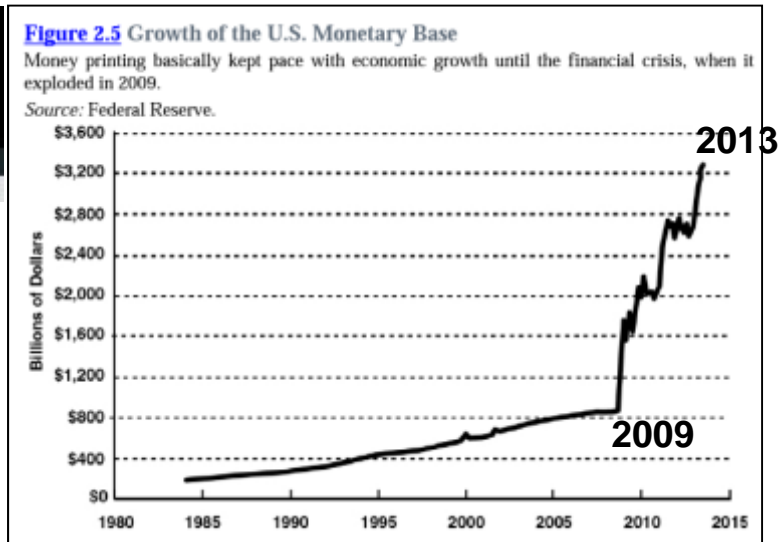


Ray Dalio worries the Fed's QE may run out of gas

Janet Yellen's mission impossible

The irony of Ben Bernanke's forward guidance

Is the Fed really driving up stock prices?



- Nobel Prize-winning economist Milton Friedman
  - “Inflation is always and everywhere a monetary phenomenon.”



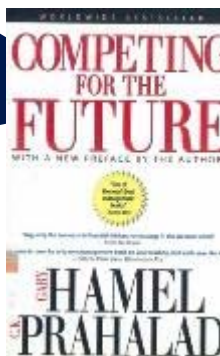


## Where Do We Go From Here?

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- **Expense ratios** will stabilize as we see fewer rate decreases, a declining impact of PPACA on hospitals acquiring physician practices, and ultimately a **hardening market** in 2017
- **Innovation**
  - One stop shopping (e.g., E&O, D&O, EPLI, Cyber, WC, etc.)
  - Enhanced risk management capabilities and partnerships with vendors
  - Hospital professional liability
  - TPA services

**“One doesn’t get to the future first by letting someone else blaze the trail.”**



*Competing for the Future*  
Gary Hamel and  
C.K. Prahalad

# Speaker Bio



Kevin M. Bingham  
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(860) 725-3056

- Leader of Deloitte Consulting's MPL practice and claim predictive modeling practice
- Past chairperson, Casualty Practice Council Medical Professional Liability (MPL) Subcommittee
- Official spokesperson for the American Academy of Actuaries in Washington
- Advisory board member and chairman of the annual MPL ExecuSummit
- Expert witness support, rate hearing assistance and testimony for insurance departments and MPL insurers
- Speaker, trainer and regular contributor to Contingencies Magazine, Physician Insurer Magazine and other publications on MPL and other industry issues
  - To date, Mr. Bingham has published over 60 articles/papers and has spoken at more than 80 conferences/seminars

