



## The Promise of Data

David Newman, HCCI, Executive Director

CT Health Policy Roundtable: Connecticut's APCD  
October 24, 2013

# Health Care Cost Institute (HCCI)

- **Non-profit - Incorporated as a 501(c)(3)**
- **Public mission - improving US health system by creating comprehensive data infrastructure and analytics**
- **Non-partisan - HCCI does not advocate policy**
- **Independent board comprised principally of academic health economists**
- **We hold roughly 9 billion claim lines, all with allowed amounts, for more than 50 million Americans, from 2007 onward – national repository for claims and other data**

# HCCI Public Reporting and Research



## INSURANCE TRENDS

By Carolina-Nicole Herrera, Martin Gaynor, David Newman, Robert J. Town, and Stephen T. Parente

### Trends Underlying Employer-Sponsored Health Insurance Growth For Americans Younger Than Age Sixty-Five

**ABSTRACT** Little is known about the trends in health care spending for the 156 million Americans who are younger than age sixty-five and enrolled in employer-sponsored health insurance. Using a new source of health insurance claims data, we estimated per capita spending, utilization, and prices for this population between 2007 and 2011. During this period per capita spending on employer-sponsored insurance grew at historically slow rates, but still faster than per capita national health expenditures. Total per capita spending for employer-sponsored insurance grew at an average annual rate of 4.9 percent, with prescription spending growing at 3.3 percent and medical spending growing at 5.3 percent. Out-of-pocket medical spending increased at an average annual rate of 8.0 percent, whereas out-of-pocket prescription drug spending growth was flat. Growth in the use of medical services and prescription drugs slowed. Medical price growth accelerated, and prescription price growth decelerated. As a result, changes in utilization contributed less than changes in price did to overall spending growth for those with employer-sponsored insurance.

**W**ith rare exceptions, health care spending growth has outpaced economic growth in the United States since the end of World War II.<sup>1</sup> Most of the information on health care spending comes from the Medicare program, surveys, or aggregate health accounts.<sup>2</sup> However, more than half of Americans are enrolled in private, employer-sponsored health insurance plans.<sup>3</sup> Although much information is available about the trends in premiums for these people,<sup>4</sup> little is known about their health care use and spending.

The Health Care Cost Institute (HCCI) is an independent, nonprofit, nonpartisan research institute. It was established in 2011 with the goal of advancing knowledge on health care use and spending in the United States.<sup>5</sup> Three large private health insurance companies agreed to make

paid claims data available to HCCI to create a repository of US health insurance claims data.<sup>6</sup> In 2012 HCCI released three reports on people with private insurance.<sup>7,8</sup> These reports used fee-for-service claims data to estimate expenditures on employer-sponsored insurance for 2010 and 2011.<sup>9</sup>

This study expands on those reports to examine trends in those expenditures from 2007 through 2011. This longer period offers a more complete picture of health care expenditures for the privately insured. We describe the trends in per capita health care expenditures, utilization, prices, and intensity for people with employer-sponsored insurance. We explore how medical and prescription spending changed during this period. We describe the different trends in out-of-pocket and insurer spending and the impact of these trends on the privately insured. We also compare spending trends in employer-

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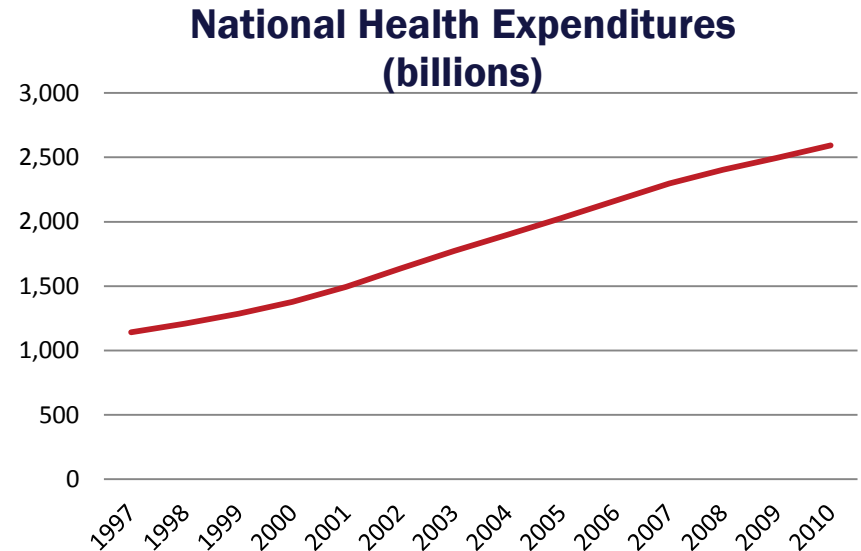
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# US health care spending is high and rising

We all know the problem:  
Total health care spending  
in 2011

- \$2.7 trillion; 17.9% of GDP
- Grew by 3.9% from 2010



- Government spending on health care has grown more than twice as fast as national income.
- Part of the perceived solution is **information/data**.

\* Sources: Centers for Medicare & Medicaid Services, Office of the Actuary, National Health Statistics Group; U.S. Department of Commerce, Bureau of Economic Analysis; and U.S. Bureau of the Census.

# There are several trends driving data

ARRA funding for electronic medical records – **we have data**

Technology that allows for “big” data – **we can deal with data**

Emphasis on triple aim – **there is a purpose**

Changing benefit designs that shift burden to consumers – **there is potential widespread demand**

Interest in comparative and cost effectiveness – **there is a potential return on investment**

## Data and Technology

In 2009, President Obama signed the American Recovery and Reinvestment Act (ARRA) which included the Health Information Technology for Economic and Clinical Health (HITECH) Act. HITECH allocated \$19 billion to hospitals and physicians who demonstrated “meaningful use” of electronic medical records. Other data such as registries, HCCI, etc.

Second, while still challenging, our technical capacity has kept up with the growth of data.

- EMRs
- Computing and storage
- HIPAA
- HHS data transparency

## Triple Aim

For years we have confronted the health care system as four discrete pieces: private insurance (regulated by states), Medicare (a system for the elderly), Medicaid (a system for the poor and children with shared federal/state responsibility), and the uninsured.

This approach did not work and the Triple Aim encouraged a focus on population health with states taking an integrated approach to the health care of their state's population.

An integrated approach requires more than just data on a state's Medicaid population – a traditional source of data available to states.

**What was needed was data on the privately insured, Medicare, Medicaid, and the uninsured – in part gave rise to need for APCDs.**

## Demand for Data

HCCI studies have documented that consumers are shouldering an increased burden of health care costs – consumers want to know what it is going to cost.

The ACA does not eliminate the need for better pricing information - if you buy a plan on an exchange, your annual out-of-pocket costs can be as high as \$6,350 for individuals; \$12,700 for a family of two or more in 2014.

As costs continue to rise, purchasers want data on both cost and quality in order to acquire “value”. Hence, push by employers for data too.



# Return on Investment

Health providers (hospitals, doctors, pharmacies, dentists) also want data as financial performance is increasingly dependent on data:

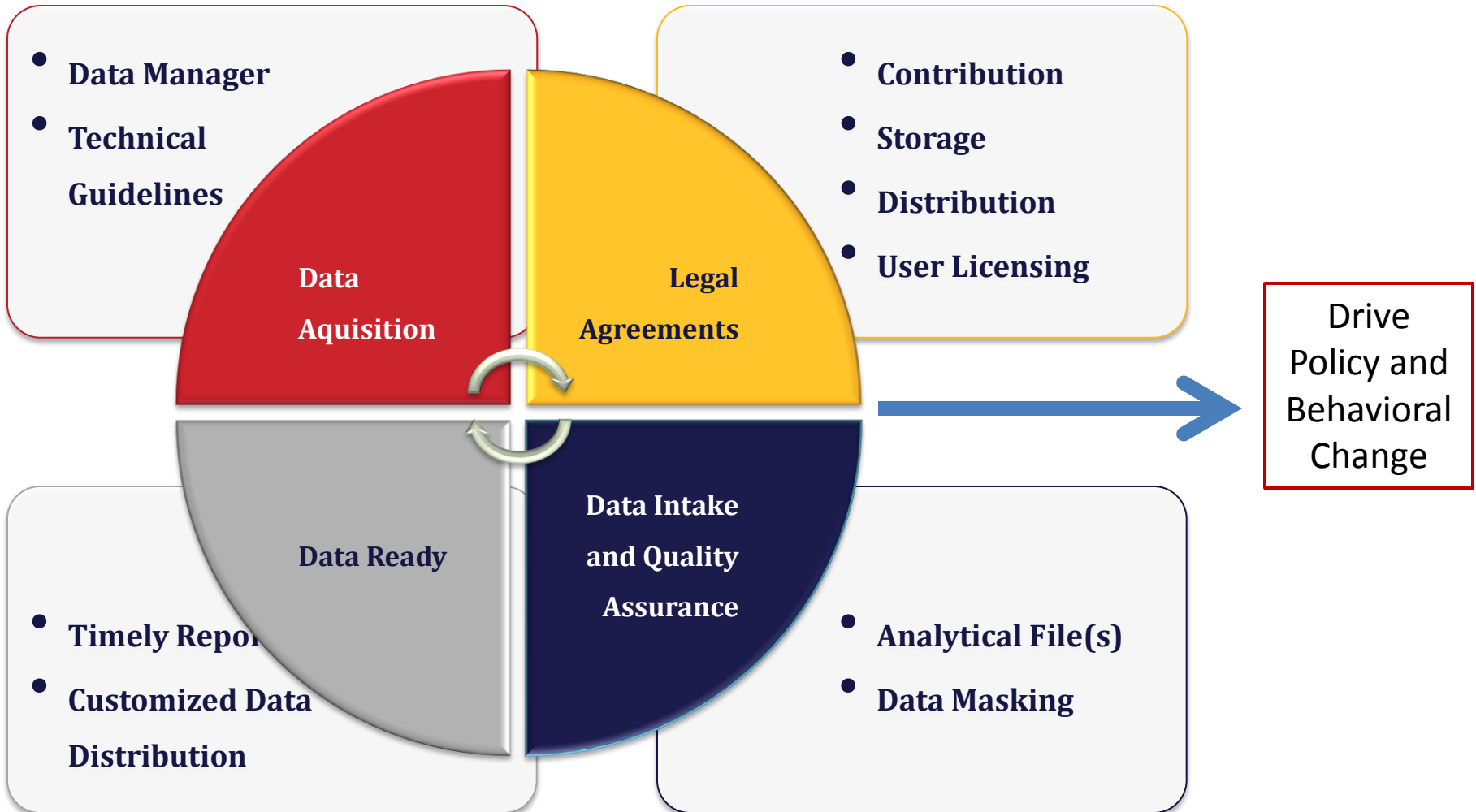
**Hospital readmissions** – the *Dartmouth Atlas* estimates that Medicare could save \$17 billion a year on preventable readmissions – additional savings for other payers. CMS no longer pays for preventable readmissions.

**Accountable Care Organizations/Medical Homes** – providers are financially responsible for the entire continuum of care for a population.

**Value Based Purchasing** – additional payments based on demonstrated quality, greater reporting, and hopefully lower costs.

Even greater return if we get to comparative effectiveness and cost effectiveness.

# The Technical and Policy Challenges



# Information Needs to Be Actionable

## Spending on teen health rising

Health spending grew more quickly for teens than other age groups

Percent change in per capita spending, 2007-2010



Increase includes rise in mental health care spending

In 2010, on average, there were



**1.2**

central nervous system  
drug prescriptions per  
insured teen

Central nervous system drugs treat conditions including:

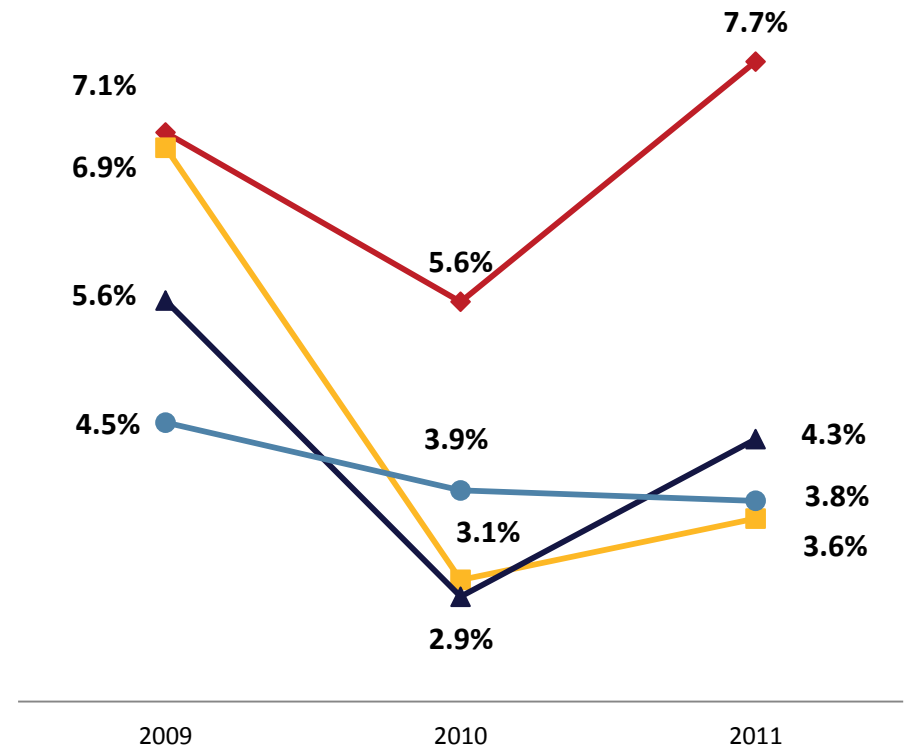
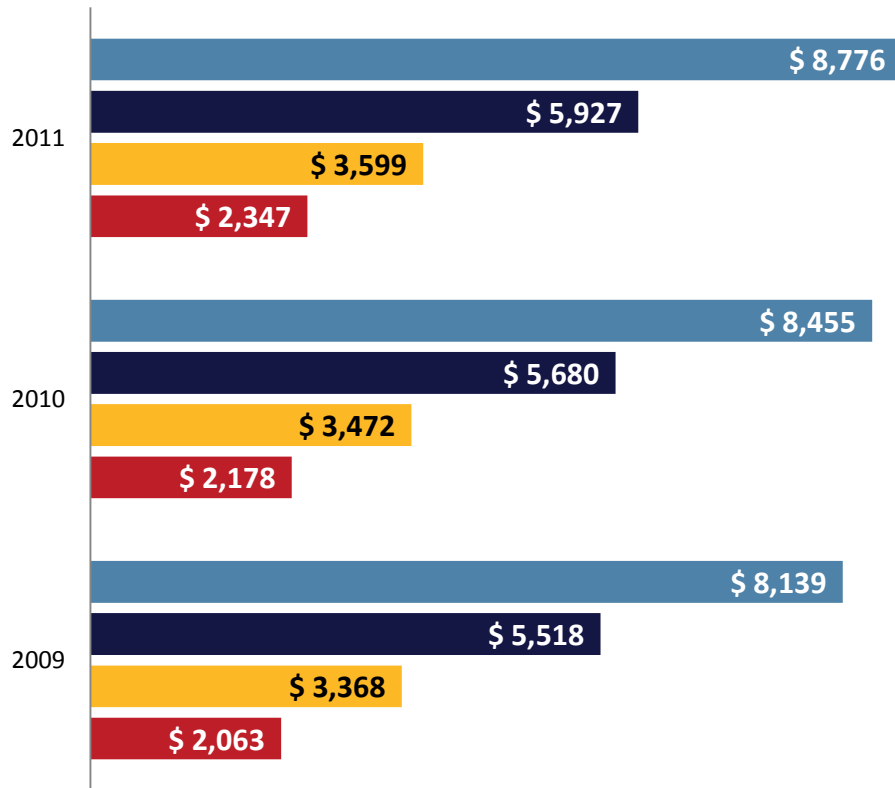
- Depression
- Anxiety
- Attention-Deficit Hyperactivity Disorder

Source: *Children's Health Care Spending Report: 2007-2010*, Health Care Cost Institute, July 2012.

**HCCI** HEALTH CARE COST  
INSTITUTE

# Data and Analytics Can Tell Us Things We Did Not Know

Spending rose with age, but fastest for children



◆ 18 and Under    ■ 19 to 44    ▲ 45 to 54    ● 55 to 64

## A Few Modest Comments and Suggestions - 1

1. Assembling and analyzing data is not easy and not cheap
  - a) there is a limit to the return on data – give thought to how you are going to use the data
  - b) in order to maximize ROI, take advantage of economies of scale and scope; partner with other states and other stakeholders to bring down costs; align methods
2. Do not presume that **if you build it, they will come; if you collect it, it can be used; if you analyze it, it will be useful; or that telling someone a result, will make it actionable or attractive.** It ain't that easy. Driving behavioral change on the part of consumers, providers, and institutions requires more. This is the most difficult part.

## A Few Modest Comments and Suggestions - 2

3. Privacy and data protection is critical and it goes beyond legal requirements (which go beyond HIPAA)
  - a) citizens are correctly concerned about what you are doing with their data
  - b) perhaps more problematic is what licensees may be doing with their data
4. Data can inform decision-making and direct inquiry, however, it does not always provide clear guidance as to how to respond, particularly in complex systems:
  - a) HCCI has been finding high growth in ERs
  - b) HCCI has been finding high growth in kids spending
  - c) HCCI has been finding increased use of psychotropic drugs
  - d) Appropriate policy responses, if any, are not necessarily clear

## **A Few Modest Comments and Suggestions - 3**

- 5. Licensing data is not easy nor is it necessarily a money-maker**
  - a) Are you refreshing data?
  - b) Custom datasets?
  - c) No limit to problems
- 6. Real thought needs to be given to who gets the data and how they may use it; beyond what any statute says, how do you want the data used and what does the public expect**
  - a) Many academics wear “multiple hats”
  - b) What starts as deidentified data needs to remain deidentified
  - c) What gets licensed to one entity needs to stay with that entity
- 7. Easy to do wrong and tough to do right**

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