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VALUE IN HEALTH CARE

Colorado's All Payer Claims Database (APCD)

**Update to the General
Assembly
March 1, 2012**



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APCD Purpose and Uses

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Why an APCD?



- As a patient, would you like to know how much a medical procedure will cost you before you get it?
- As a buyer of insurance, would you like to know how the physicians in one health plan's network compare on cost and quality measures with those in another?
- As a Colorado taxpayer, would you like to know how new initiatives from Medicaid, CHP+ and public health are affecting health outcomes and costs?



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Bipartisan Support



National Governors Association, Feb. 2011 –

"Statewide Strategies to Control Health Care Costs" (excerpt)

- Collect data on medical claims from all payers in the state.
 - *"This is imperative. Without an understanding of the cost of medical services reimbursed by all payers...it is almost impossible to implement effective cost containment."*
- Analyze the data and publicize cost and quality information.
 - *"Collecting information of the cost of health care services is important, but it means nothing if the data cannot be analyzed and sorted to produce information useful to the public [and] policymakers..."*

Republican Governors Association, Feb. 2012 –

- Appoints UT Gov. Gary Herbert co-chair of Health Care Subcommittee
 - *"The Republican Governors Association selected Governor Herbert for this assignment due to his leadership on health care reform, including the implementation of the Utah Health Exchange, the creation of All Payer Claims Database and major reforms for Utah's Medicaid system."* (Office of the Governor, press release, Feb. 24, 2012)



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What an APCD is

- A tool for empowering informed decision-making by consumers and business purchasers
- A gateway to transparency that is necessary for bending the cost curve
- Market economics at its best: creates the transparency of pricing and quality that our health care system currently lacks, and that all of us need to make good decisions about our care



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What an APCD is Not

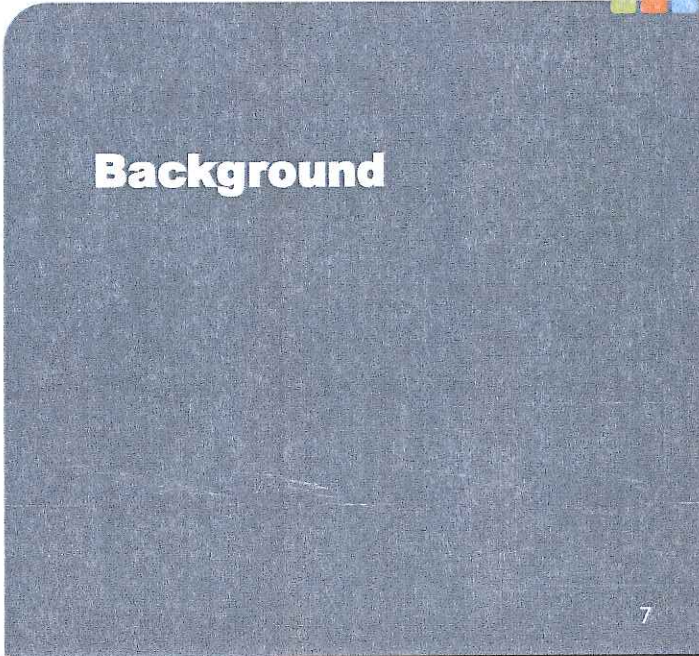
- A centralized electronic medical record
- A tool to see individual health records
- A means of controlling or denying care for individuals



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Background

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About CIVHC

- Independent, nonpartisan nonprofit
 - Recommended by 208 Commission
- Focused on improving quality and controlling costs through data/transparency, delivery system redesign and payment reforms
- Multi-stakeholder Board of Directors with statewide representation

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Colorado APCD – Policy History



- 208 Commission recommendation
- HB 10-1330, enacted as CRS 25.5-1-204
 - Directs HCPF to convene a broadly representative APCD Advisory Committee to develop APCD guidance and appoint APCD Administrator
 - Provides no state funds; requires that private funding be secured to establish the APCD
 - Sets Jan. 2013 deadline for APCD to be operational
 - Requires annual updates to General Assembly and Governor
- HCPF appointed CIVHC as Administrator Aug. 2010



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Colorado's APCD: 2011 Milestones, Next Steps

2011 Milestones



- Completed rulemaking to guide data submissions (August)
 - Collaborative process with payers
 - Framework set by APCD Advisory Committee
- Sufficient funding obtained from The Colorado Health Foundation to create database (October)
- HCPF ED notified revisor of statutes that sufficient funding is in place to create database (December)
- The Colorado Trust gave preliminary approval for bridge funding for the APCD (December), contingent upon action by The Colorado Health Foundation
- Contracted with database manager, Treo Solutions, after competitive procurement process (December)



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2012 Plan of Work



- Database created and ready to accept test data -- February
- Test data due March 31
- 3 years historic data due June 30
- First 6 months 2012 data due August; monthly reporting thereafter
- First APCD reports generated late 2012



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Data Submission Flow



- 2012 data submitters – approx. 40% of Colorado's covered lives
 - Commercial fully insured (Individual, large group)
 - Medicaid
- 2013-2014 (anticipated)
 - Small group
 - Medicare
 - Large group self-insured

By 2014, we expect the APCD will have collected claims data for 90% of Colorado's 4.2 million insured individuals



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Sample Reports



Out-of-Pocket Cost Estimates

Detailed estimates for Colonoscopy (outpatient)

Procedure: [Colonoscopy \(outpatient\)](#)

Insurance Plan: Anthem - NH, Point of Service (POS)

Within: 20 miles of 03301

Deductible and Coinsurance Amount: \$1,000.00 / 20%

| Lead Provider Name | Estimate of What you Will Pay | Estimate of What Insurance Will Pay | Estimate of Combined Payments | Precision of the Cost Estimate | Typical Patient Complexity |
|--------------------------------------|-------------------------------|-------------------------------------|-------------------------------|--------------------------------|----------------------------|
| SPEARE MEMORIAL HOSPITAL | \$1083 | \$335 | \$1418 | MEDIUM | MEDIUM |
| DARTMOUTH HITCHCOCK SOUTH | \$1086 | \$344 | \$1430 | HIGH | LOW |
| FRANKLIN REGIONAL HOSPITAL | \$1426 | \$1707 | \$3133 | LOW | MEDIUM |
| LAKES REGION GENERAL HOSPITAL | \$1153 | \$613 | \$1766 | LOW | MEDIUM |

SOURCE: New Hampshire APCD

Facility Cost/Quality Comparison

For Physicians & Providers For Insurers & Employers

MyHealthCareOptions™

A Health Care Resource Provided by the Commonwealth of Massachusetts Health Care Quality and Cost Council

For Patients & Families About The Ratings Frequently Asked Questions Resources & Tools About Us Feedback

These three hospitals are within 4 miles of one another.

Comparison of Providers

Start New Search

Return to Search Results

Bookmark

Choose a Topic

Patient Safety

Influenza Vaccination

Patient Safety

Serious Reportable Events

Surgical Care

Patient Experience

Patient Experience

Bone and Joint Care

Back Procedure

Hip Fracture

Hip Replacement

Knee Replacement

Cardiovascular Disease

Angioplasty

Bypass Surgery

Cardiac Screening Tests

Heart Attack

Heart Failure

Heart Valve Surgery

Stroke

Digestive System

Gall Bladder

Intestinal Surgery

Weight-loss Surgery

Obstetrics

Cesarean Section

Normal Newborn

Ultrasound

Vaginal Delivery

Bypass Surgery

Bypass surgery involves transplanting a blood vessel from your leg or chest to the heart to get around (or "bypass") a blockage in the heart's blood supply. (more)

Diagnostic classification: Coronary Bypass with cardiac catheterization (APR-DRG 165); Coronary Bypass only (APR-DRG 166)

Summarized Report

View Detailed Report

View Statewide Procedure Costs

Quality of Care

(more)

| | Beth Israel Deaconess Medical Center | Massachusetts General Hospital | Tufts Medical Center |
|--------------------------|--|--|--|
| Quality Rating | ★★★ | ★★★ | ★★★ |
| Statistical Significance | Not Different from State Average Quality | Not Different from State Average Quality | Not Different from State Average Quality |

Cost of Care

(more)

| | Beth Israel Deaconess Medical Center | Massachusetts General Hospital | Tufts Medical Center |
|--------------------------|--------------------------------------|--------------------------------|-------------------------|
| Cost Rating | \$\$ | \$\$\$ | \$ |
| Statistical Significance | Not Different from Median State Cost | Above Median State Cost | Below Median State Cost |

Beth Israel Deaconess Medical Center

remove

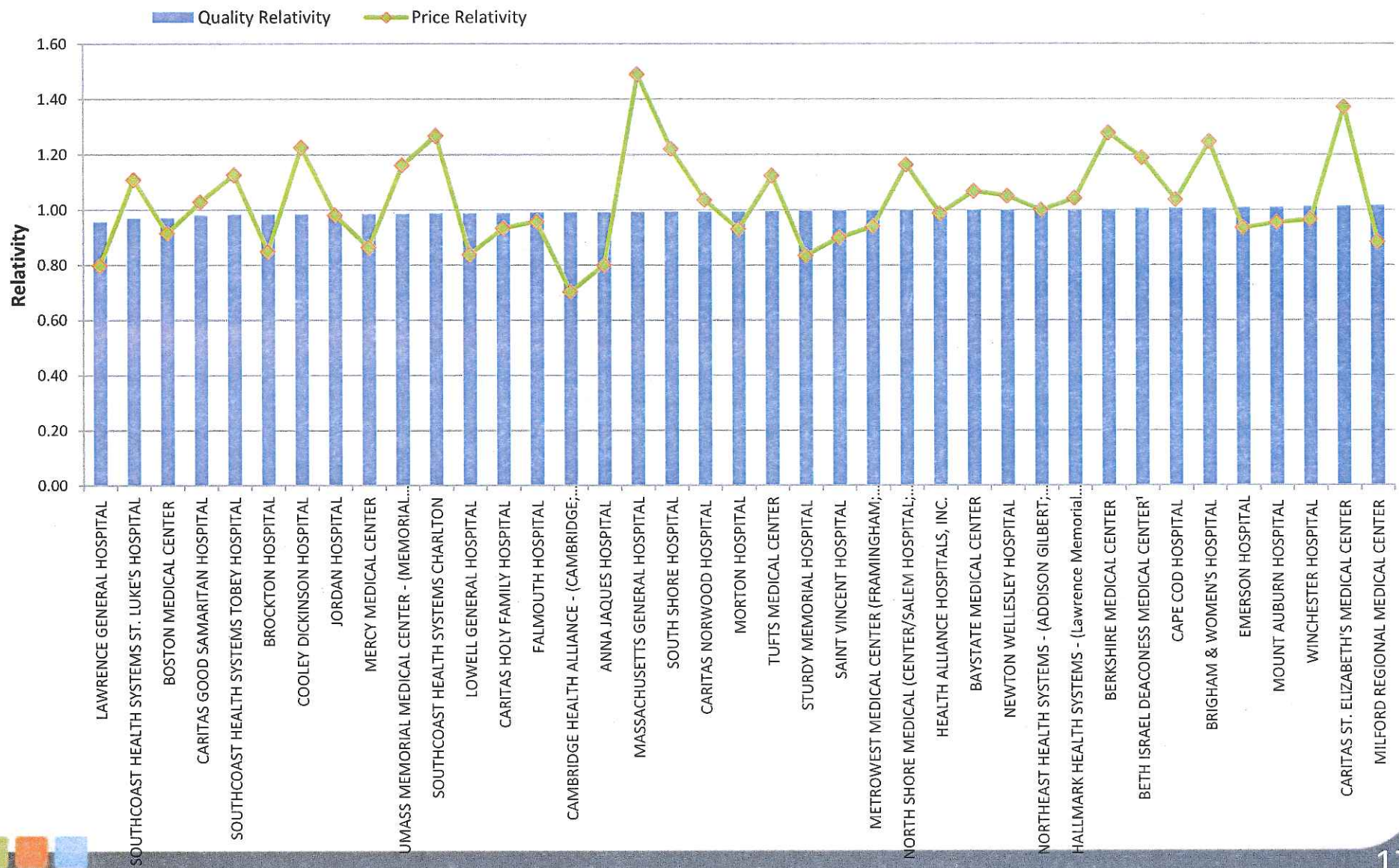
Massachusetts General Hospital

remove

Tufts Medical Center

remove

Facility Cost/Quality Comparison



Health Plan Comparison

Health Costs for Employers - Benefit Index Tool

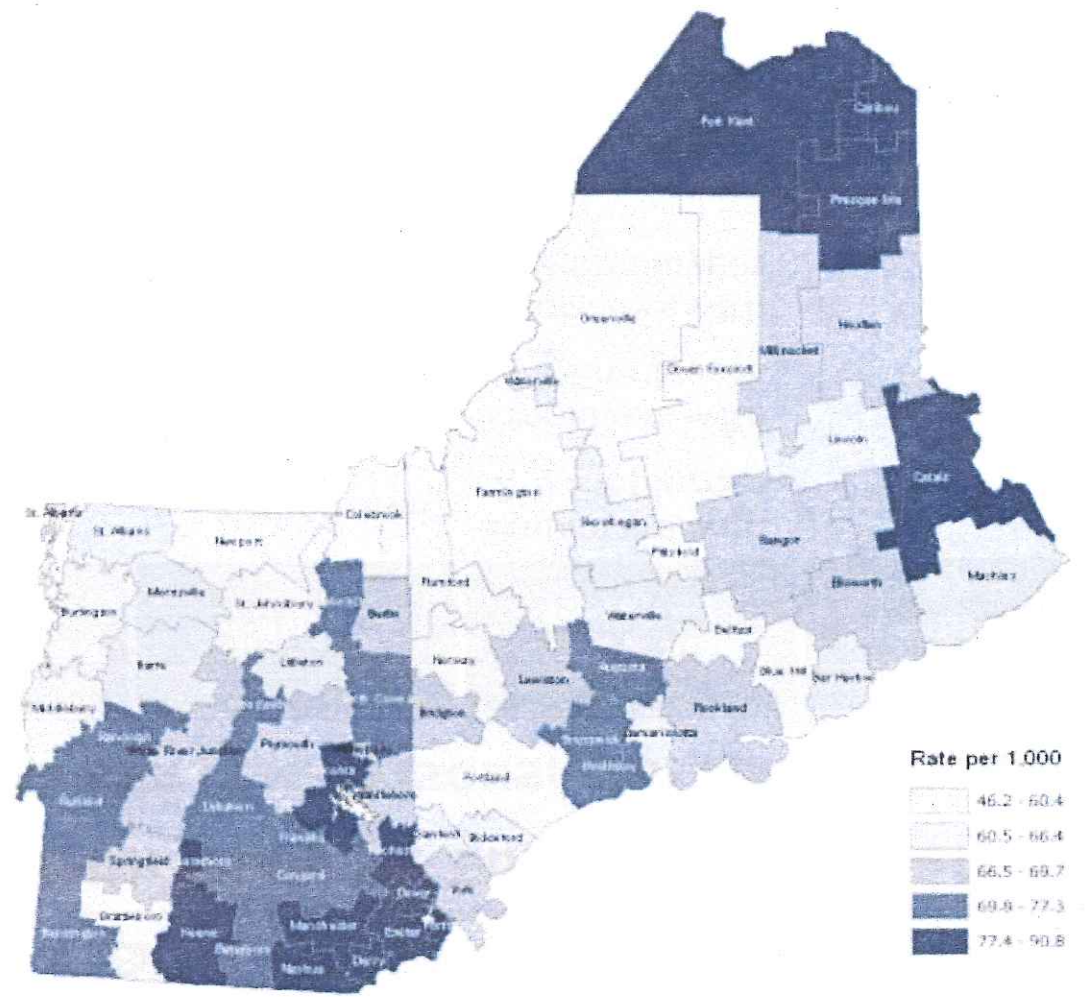
CARRIER COMPARISONS: Plan Type: PPO

| Plan Type | Carrier | Group Size Detailed | Average Premium (\$) | Benefit Richness |
|-----------|-----------------------------|------------------------------|----------------------|------------------|
| PPO | Anthem-NH | Employers with 2-9 Employees | 401 | 0.59 |
| PPO | Conn Gen Life Ins | Employers with 2-9 Employees | 413 | 0.66 |
| PPO | Guardian Life | Employers with 2-9 Employees | 826 | 0.73 |
| PPO | Harvard Pilgrim Health Care | Employers with 2-9 Employees | 402 | 0.64 |
| PPO | John Alden | Employers with 2-9 Employees | 169 | 0.31 |
| PPO | United | Employers with 2-9 Employees | 312 | 0.74 |

Source: New Hampshire APCD

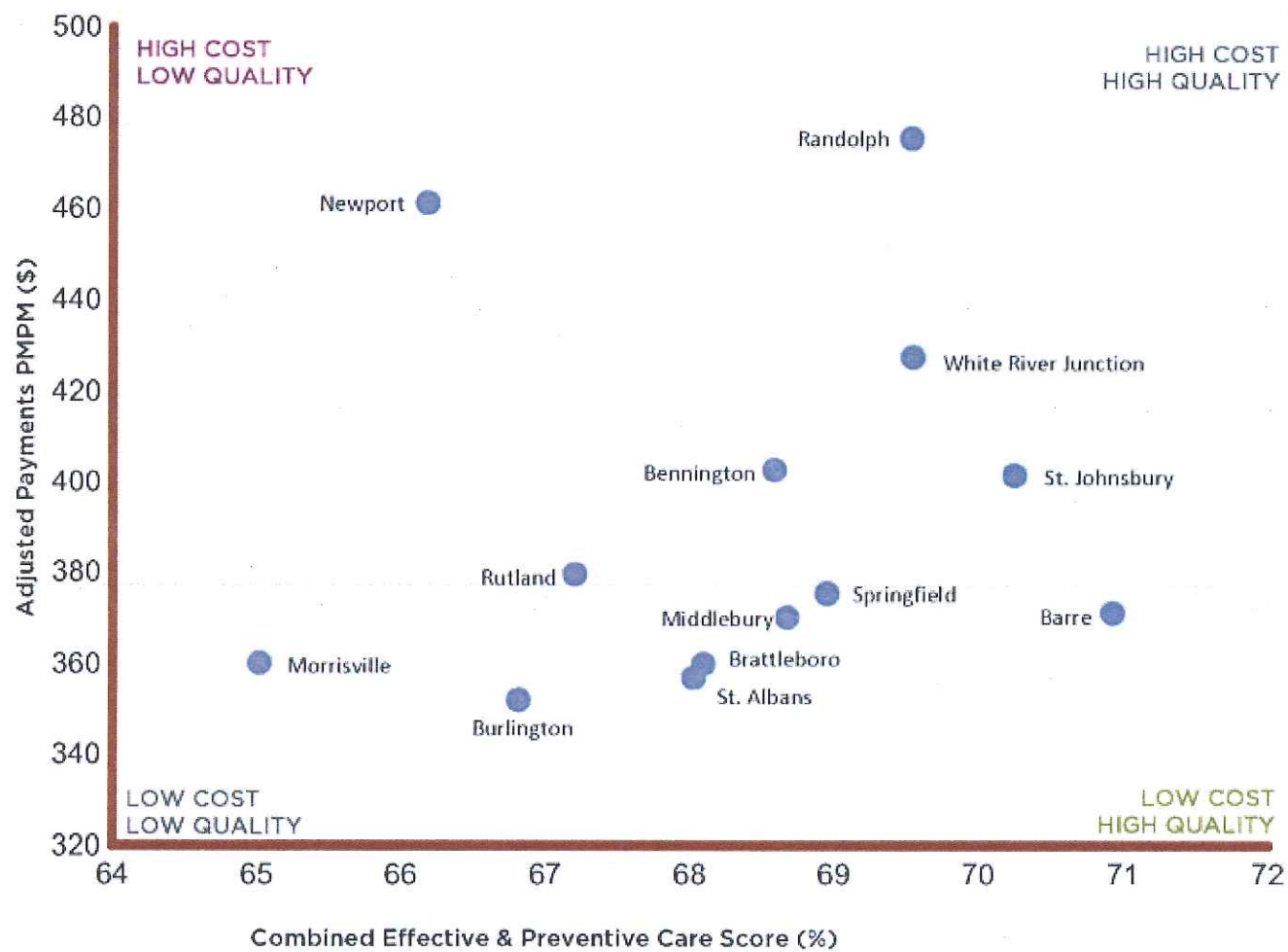
Regional Variations in Utilization


Figure 2. Magnetic Resonance Imaging (MRI)
 Rates per 1,000 members. Commercially insured under age 65. Adjusted for age and gender. 2008 claims data.



Regional Cost/Quality Comparisons

Figure 8. Combined Effective & Preventive Care Score and Adjusted Payments by HSA






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Security and Privacy in the APCD

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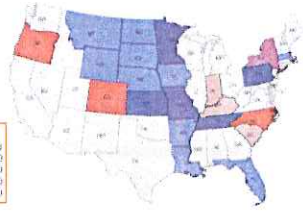


About the APCD vendor

- Treo Solutions clients represent over 38 million covered lives, including 5 million Medicaid lives
 - 26 commercial payers, 3 state Medicaid Programs
 - More than 50 hospital systems across the country
 - Two nationally recognized medical home projects
- Established in 2002
- Has never experienced a breach

States by Tree Data

| | |
|---------------------------------------|------|
| Commercial Claims | (15) |
| Commercial & Medicaid Claims | (2) |
| Commercial & Nonstate Medicaid Claims | (1) |
| Medicaid Claims | (2) |
| Statewide Medicaid Claims | (3) |



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How the APCD Receives the Data



- Data can only be submitted from an Internet address that is unique to each payer using a unique encryption key
- Once submitted, only a combo of keys held by submitter and Treo can make data intelligible
- After submission, data are moved to another server and re-encrypted using a different encryption key; no data are stored on the submission server.
- Complex and lengthy passwords are required; hard to compromise with the "brute force" techniques commonly highlighted in the news
- Attempted connections from unauthorized systems are automatically blocked and logged



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How Encryption Works in the APCD



Un-encrypted Data

Encrypted Data

Name: Jane Doe → 3INDzLjr2SnG8ma4wvLoXw==z

DOB: 1/1/1980 → 5IZB3CeWebVUYm2u9b1+

Gender: F → 9D4QK0mn5hE1/2F5

Admit Date: 2/1/2010 → bF6R7dA9rdz3k2dez

Discharged: 2/5/2010 → s7J51mWcr7WQ4CmN



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Physical Security at the APCD



Located in a secure facility

- Monitored by closed circuit television and security personnel
- Access requires multiple keys and identity card with radio ID chip
- Data is hosted on dedicated equipment in secure enclosures
- Equipment is "hardened" to prevent exploits to physical connections (disabling USB, wireless)



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Electronic Access Controls



- APCD employees only granted access to the minimum number of data elements and technologies (firewalls, physical areas, storage) to perform their function
- Electronic access is carefully monitored and controlled
- Computer and network security staff are located in full view of physical access points during business hours
- Firewalls, intrusion prevention systems, and other technologies maintain constant privacy and separation from the outside world
- No remote access to APCD by Treo employees



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Tracking and Monitoring

- Quarterly penetration (“hacker”) testing and annual code review by experts in the skill sets necessary to secure the APCD
- All secure electronic file transfers are logged and monitored
- Email confirmation of submissions, including detail on the submitter, time, location (IP Address) and file names
- All APCD database accesses are logged and monitored
- CIVHC requires Treo to undergo a periodic security assessment based on industry standards and best practices

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Common Questions

“Is my information safe in transit?”

Yes, all data is encrypted during transfer to the APCD.

“Is my information safe in the database?”

Yes, all data is encrypted while stored in the APCD.

“Will my information be visible on publicly available reports?”

No. Only highly aggregated data will appear in public reports.

“I have a rare condition and live in a rural area. Won’t someone be able to figure out who I am?”

No. Public reports will not contain enough information to allow any individual to be identified.

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“What if a hacker gains access to... ?”



...the Submission?”

The data is encrypted while in transit (in use) and at rest.

...the facility where my data is stored?”

The location is physically and electronically secured at the highest standards of the industry and even if accessed, data is fully encrypted to NIST standards. Data would be undecipherable.

...encrypted data?”

The passwords, and encryption standards used to encrypt data by the APCD, utilize the same standards as the NSA (National Security Agency).

...the Web site's public tool?”

The data located here is aggregated to not contain specifics that may be used to identify a patient.



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Questions and Answers



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