ALL-PAYER CLAIMS DATABASES

December 10, 2010
Denise Love, National Association of Health Data Organizations
Presentation Outline

- What are APCDs
- Why are states implementing APCDs?
- Lessons learned
- APCD standardization
- Claims data applications
What are APCDs?

- Large-scale databases
- Systematically collect health care data from a variety of payer sources
- Include claims from most health care providers
About APCDs:

- Typically created by a state mandate*
- Generally include data derived from public and private payer files:
  - Medical claims
  - Pharmacy claims
  - Eligibility files
  - Physician and facility files
  - Dental claims

*In states without a legislative mandate, voluntary APCD reporting may occur through employer coalitions, Chartered Value Exchanges, or other organizations.
Sources of APCD Data

- Commercial & TPAs & PBM & Dental & Medicare Parts C & D
- Medicaid FFS & Managed Care & SCHIP
- Medicare Parts A & B
- Uninsured & TRICARE & FEHB

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# Typically Included in APCDs

## Patient/Clinical
- Social Security Number (encrypted)
- Type of product (HMO, PPO, FFS, etc.)
- Type of contract (single person, family, etc.)
- Patient demographics (DOB, gender, residence, relationship to subscriber)
- Diagnosis codes (including E-codes)
- Procedure codes (ICD, CPT, HCPCs)
- NDC code /generic indicator

## Financial
- Revenue codes
- Service dates
- Service provider (name, tax ID, payer ID, specialty codes, location)
- Prescribing physician
- Plan payments
- Member payment responsibility (co-pay, co-insurance, deductible)
- Date paid
- Type of bill
- Facility type
Typically Excluded Information

- Services provided to uninsured (few exceptions)
- Denied claims
- Workers Compensation Claims
- Premium Information
- Capitation Fees
- Administrative Fees
- Back-end Settlement Amounts
- Referrals
- Test results from lab, imaging, etc.
- Provider affiliation with group practice
- Provider Networks
APCDs and other Public Health Data Sets

- APCDs are unique and provide information on cost and outpatient services.
- APCDs are early in their development and do not replace existing data systems such as hospital discharge data systems.
- E.g. Hospital-based discharge data provide a complete picture of hospital-based utilization (including emergency care and ambulatory surgery) in a state or jurisdiction.
- Discharge data systems are uniform and well-established.
- Both databases, in tandem, have the potential to enhance the utility of the information for market and policy uses.
Statewide Hospital Inpatient Data Programs
Prepared by NAHDO 2010

Legislative mandate
- ND has a mandate-no collection since 2005

Voluntary collection

No collection
Why are states implementing APCDs?

- Transparency: Which hospitals have the highest prices?
- In what geographies is public health improving?
- What percentage of my employees are receiving preventive services?
- Is ED use higher in Medicaid than in commercial plans?
- How does anti-depressant use compare between Medicaid and commercial enrollees?
- How far do people travel for outpatient services? Which ones?
Something for all Stakeholders

- Consumers
- Employers
- Health plans/payers
- Providers
- Researchers (public policy/academic)
- State government (policy makers, Medicaid, public health, insurance department, etc.)
- TBD---federal government
Changing Landscape 2005-10

- Transparency Initiatives
- Employer Coalitions
- Payment Reform
  - Patient-centered Medical Home
  - Accountable Care Organizations
- Health Information Exchange (HITECH)
- Health Care Reform (federal and state)
APCD Implementation Framework

Considerations for Critical Components to Build and Sustain APCDs

Engagement
- Stakeholder Identification
- Education
- Partnerships
- Advocates
- Privacy
- Reporting burden

Governance
- Governance Model
- Structure
- Rules for Collection and Release
- Standards Adoption

Technical Build
- Vendor Decision
- Maintenance
- Linkage to Other Data Sources
- Data Quality

Analysis & Application Development
- Reporting
- Applications and Uses
- Meta Data

Systems Cost
- Build and Maintenance cost’s
- Revenue Model
State APCD Implementation Considerations

- Location of state authority by statute
- Funding
- Collection rules/regulation specifications:
  - Covered populations
  - Submission frequency
  - Thresholds and exclusions
- APCD data release rules
- Location of data management/processing
- Payer relationships
- Multi-stakeholder issues and engagement
APCD Challenges

- Completeness of population captured
- Provider as unit of analysis
- Retroactive payment adjustments
- Future potential payment methodologies
- Ability to link to other data sources
- State revenue models for funding APCDs
- Federal engagement (or lack thereof)
- Standardization / uniformity across state APCDs
Status of State Government Administered All Payer / All Provider Claims Databases
Lessons Learned (so far)

- Be transparent and document
- Transactional versus non-transactional uses of APCDs
- Integration and linkage opportunities
- Payer relationships critical
- Understand data across payers/platforms
- Local user consortiums make a difference
- Data management and data analytic contracting options to leverage capacity
Areas for Standardization

- Data collection/submission alignment with HIPAA X12N standards facilitates efficiencies in metadata, reporting, analysis, and application development
- Collection of patient identifiers
- Data release and access policies are political and state-driven
National Standards Development

- Core APCD data set under development for national standards.
National Standards Technical Advisory Panel

- Agency for Healthcare Research and Quality
- All-Payer Claims Database Council
- America’s Health Insurance Plans
- Individual Payers
  - Aetna, Humana, United Health Care
- Centers for Disease Control and Prevention/NCHS
- Centers for Medicare and Medicaid Services
- National Association of Health Data Organizations
- National Association of Insurance Commissioners
- National Conference of State Legislatures
- National Governors Association
- Office of the Assistant for Planning and Evaluation/DHHS
- State Health Plan Associations (various)
Example APCD Applications
Prevalence of Adult Coronary Artery Disease by Age in NH

NH Medicaid (non-Dual) and NH CHIS Commercial Members, 2005
**Detailed estimates for Arthroscopic Knee Surgery (outpatient)**

**Procedure:** Arthroscopic Knee Surgery (outpatient)  
**Insurance Plan:** Anthem-HMO, Within 50 miles of 03301, Deductible and Coinosurance Amount: $50.00 / 10%

<table>
<thead>
<tr>
<th>Lead Provider Name</th>
<th>Estimate of What you Will Pay</th>
<th>Estimate of What Insurance Will Pay</th>
<th>Estimate of Combined Payments</th>
<th>Precision of the Cost Estimate</th>
<th>Typical Patient Complexity</th>
<th>Contact Info</th>
</tr>
</thead>
<tbody>
<tr>
<td>SALEM SURGERY CENTER</td>
<td>$363</td>
<td>$2822</td>
<td>$3185</td>
<td>HIGH</td>
<td>VERY LOW</td>
<td>603.898.3610</td>
</tr>
<tr>
<td>CONCORD HOSPITAL</td>
<td>$383</td>
<td>$3006</td>
<td>$3389</td>
<td>MEDIUM</td>
<td>MEDIUM</td>
<td>603.228.7145</td>
</tr>
<tr>
<td>DARTMOUTH HITCHCOCK SOUTH</td>
<td>$398</td>
<td>$3135</td>
<td>$3533</td>
<td>LOW</td>
<td>MEDIUM</td>
<td>603.650.5000</td>
</tr>
<tr>
<td>LAKES REGION GENERAL HOSPITAL</td>
<td>$469</td>
<td>$3776</td>
<td>$4245</td>
<td>LOW</td>
<td>MEDIUM</td>
<td>603.527.7171</td>
</tr>
<tr>
<td>MARY HITCHCOCK MEMORIAL HOSPITAL</td>
<td>$509</td>
<td>$4135</td>
<td>$4644</td>
<td>HIGH</td>
<td>MEDIUM</td>
<td>603.650.5000</td>
</tr>
<tr>
<td>SOUTHERN NH MEDICAL CENTER</td>
<td>$522</td>
<td>$4254</td>
<td>$4776</td>
<td>MEDIUM</td>
<td>MEDIUM</td>
<td>603.577.2000</td>
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<tr>
<td>WENTWORTH DOUGLAS HOSPITAL</td>
<td>$524</td>
<td>$4266</td>
<td>$4790</td>
<td>MEDIUM</td>
<td>HIGH</td>
<td>603.742.5252</td>
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<tr>
<td>PORTSMOUTH REGIONAL HOSPITAL - HCA AFFIL</td>
<td>$548</td>
<td>$4483</td>
<td>$5031</td>
<td>MEDIUM</td>
<td>MEDIUM</td>
<td>603.436.5110</td>
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<tr>
<td>PORTSMOUTH AMBULATORY SURGERY CENTER</td>
<td>$596</td>
<td>$4918</td>
<td>$5514</td>
<td>HIGH</td>
<td>MEDIUM</td>
<td>603.433.0941</td>
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<tr>
<td>ST JOSEPH HOSPITAL</td>
<td>$619</td>
<td>$5129</td>
<td>$5748</td>
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<td>MEDIUM</td>
<td>603.882.3000</td>
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<td>FRISBIE MEMORIAL HOSPITAL</td>
<td>$670</td>
<td>$5587</td>
<td>$6257</td>
<td>MEDIUM</td>
<td>MEDIUM</td>
<td></td>
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<tr>
<td>MONADNOCK COMMUNITY HOSPITAL</td>
<td>$701</td>
<td>$5867</td>
<td>$6568</td>
<td>LOW</td>
<td>HIGH</td>
<td>603.924.7191</td>
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<tr>
<td>EXETER HOSPITAL</td>
<td>$731</td>
<td>$6131</td>
<td>$6862</td>
<td>HIGH</td>
<td>MEDIUM</td>
<td>603.778.7311</td>
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<tr>
<td>FRANKLIN REGIONAL HOSPITAL</td>
<td>$816</td>
<td>$6898</td>
<td>$7714</td>
<td>MEDIUM</td>
<td>MEDIUM</td>
<td>603.527.7171</td>
</tr>
<tr>
<td>NEW LONDON HOSPITAL</td>
<td>$828</td>
<td>$6988</td>
<td>$7814</td>
<td>MEDIUM</td>
<td>VERY LOW</td>
<td>603.526.2911</td>
</tr>
</tbody>
</table>
# Procedure Payments for the Insured

**Selection Summary**

- **Procedure:** Colonoscopy (cpt4:45378)
- **Insurer:** Anthem Blue Cross and Blue Shield with Preferred Provider Organization (PPO)
- **Search Radius:** The Entire State
- **Data used for report:** 12/01/2005 through 11/30/2007

If you wish to modify your criteria, click [Here](#). To PRINT this report, click [Here](#).

<table>
<thead>
<tr>
<th>Lead Provider</th>
<th>Estimate of Combined Payments</th>
<th>Precision of the Estimate</th>
<th>Patient Complexity</th>
<th>Distance to Provider</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mercy Hospital</td>
<td>$559</td>
<td>Very Low</td>
<td>High</td>
<td>30.69 miles from 04333</td>
</tr>
<tr>
<td>Northern Maine Ambulatory Endoscopy</td>
<td>$761</td>
<td>Very High</td>
<td>Very Low</td>
<td>105.10 miles from 04333</td>
</tr>
<tr>
<td>Portland Endoscopy Center</td>
<td>$828</td>
<td>Very High</td>
<td>Very Low</td>
<td>50.69 miles from 04333</td>
</tr>
<tr>
<td>Maine Medical Center</td>
<td>$833</td>
<td>Very Low</td>
<td>Medium</td>
<td>51.61 miles from 04333</td>
</tr>
<tr>
<td>Central Maine</td>
<td></td>
<td></td>
<td></td>
<td>16.57</td>
</tr>
</tbody>
</table>
# Statewide Procedure Payments

**Description:** The chart below contains statewide pricing information across all insurance carriers and all medical providers. The chart provides average total charge and payment information, and the individual professional and facility components.

**Data used for report:** 12/01/2005 through 12/27/2007

<table>
<thead>
<tr>
<th>Procedure Description</th>
<th>CPT4 Procedure Code</th>
<th>Average Professional Charges</th>
<th>Average Professional Payments</th>
<th>Average Facility Charges</th>
<th>Average Facility Payments</th>
<th>Average Total Charges</th>
<th>Average Total Payments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arthroscopic Knee Surgery (Outpatient) <em>View Histogram</em></td>
<td>29881</td>
<td>$2,998</td>
<td>$1,493</td>
<td>$4,221</td>
<td>$3,698</td>
<td>$7,219</td>
<td>$5,191</td>
</tr>
<tr>
<td>Biopsy - Breast (Auto Vacuum) <em>View Histogram</em></td>
<td>19103</td>
<td>$1,475</td>
<td>$671</td>
<td>$2,502</td>
<td>$2,190</td>
<td>$4,977</td>
<td>$2,861</td>
</tr>
<tr>
<td>Bronchoscopy <em>View Histogram</em></td>
<td>31622</td>
<td>$4,333</td>
<td>$2,203</td>
<td>$7,304</td>
<td>$6,559</td>
<td>$11,643</td>
<td>$6,762</td>
</tr>
<tr>
<td>Carpal Tunnel Release <em>View Histogram</em></td>
<td>64721</td>
<td>$1,729</td>
<td>$898</td>
<td>$2,341</td>
<td>$2,034</td>
<td>$4,073</td>
<td>$2,932</td>
</tr>
<tr>
<td>Colonoscopy <em>View Histogram</em></td>
<td>45373</td>
<td>$751</td>
<td>$349</td>
<td>$1,223</td>
<td>$1,054</td>
<td>$2,374</td>
<td>$1,492</td>
</tr>
<tr>
<td>Colonoscopy With Biopsy <em>View Histogram</em></td>
<td>57454</td>
<td>$619</td>
<td>$255</td>
<td>$271</td>
<td>$250</td>
<td>$889</td>
<td>$613</td>
</tr>
<tr>
<td>CT - Abdomen <em>View Histogram</em></td>
<td>74160</td>
<td>$229</td>
<td>$101</td>
<td>$1,164</td>
<td>$951</td>
<td>$1,452</td>
<td>$1,031</td>
</tr>
<tr>
<td>CT - Chest <em>View Histogram</em></td>
<td>71260</td>
<td>$289</td>
<td>$93</td>
<td>$1,140</td>
<td>$568</td>
<td>$1,429</td>
<td>$1,061</td>
</tr>
<tr>
<td>CT - Head (Without Contrast Material) <em>View Histogram</em></td>
<td>70540</td>
<td>$179</td>
<td>$55</td>
<td>$797</td>
<td>$562</td>
<td>$974</td>
<td>$718</td>
</tr>
<tr>
<td>CT - Pelvis <em>View Histogram</em></td>
<td>72193</td>
<td>$251</td>
<td>$90</td>
<td>$1,042</td>
<td>$552</td>
<td>$1,293</td>
<td>$942</td>
</tr>
<tr>
<td>Gallbladder Removal <em>View Histogram</em></td>
<td>47502</td>
<td>$3,442</td>
<td>$1,907</td>
<td>$7,573</td>
<td>$4,043</td>
<td>$11,016</td>
<td>$8,051</td>
</tr>
<tr>
<td>Hernia Repair (Outpatient) <em>View Histogram</em></td>
<td>46505</td>
<td>$3,117</td>
<td>$1,232</td>
<td>$4,908</td>
<td>$4,358</td>
<td>$7,115</td>
<td>$5,681</td>
</tr>
<tr>
<td>Kidney Stone Removal <em>View Histogram</em></td>
<td>50590</td>
<td>$3,653</td>
<td>$1,465</td>
<td>$6,585</td>
<td>$5,789</td>
<td>$9,619</td>
<td>$7,044</td>
</tr>
<tr>
<td>Mammogram (Screening) <em>View Histogram</em></td>
<td>76092, 72057, 00202</td>
<td>$81</td>
<td>$50</td>
<td>$140</td>
<td>$127</td>
<td>$221</td>
<td>$177</td>
</tr>
<tr>
<td>MRI - Back <em>View Histogram</em></td>
<td>72148</td>
<td>$318</td>
<td>$117</td>
<td>$1,288</td>
<td>$1,048</td>
<td>$4,606</td>
<td>$1,166</td>
</tr>
<tr>
<td>MRI - Knee <em>View Histogram</em></td>
<td>73721</td>
<td>$293</td>
<td>$109</td>
<td>$1,162</td>
<td>$873</td>
<td>$2,146</td>
<td>$1,083</td>
</tr>
<tr>
<td>MRI - Spine <em>View Histogram</em></td>
<td>73721</td>
<td>$293</td>
<td>$109</td>
<td>$1,162</td>
<td>$873</td>
<td>$2,146</td>
<td>$1,083</td>
</tr>
</tbody>
</table>

Source: ME Health Data Organization
NH Hospital Acute Care Care Pricing Comparison

2006 Combined Inpatient and Outpatient Cost Index By NH Hospital

Source NH Insurance Department, 2008

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Cardiovascular Disease: 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 105); Coronary Bypass only (APR-DRG 166)

<table>
<thead>
<tr>
<th>Quality of Care</th>
<th>Boston Medical Center</th>
<th>Brigham &amp; Women's Hospital</th>
<th>Massachusetts General Hospital</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summary</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality Rating</td>
<td>⭐⭐</td>
<td>⭐</td>
<td>⭐⭐⭐</td>
</tr>
<tr>
<td>Statistical Significance</td>
<td>Not different from State Average Quality</td>
<td>Not different from State Average Quality</td>
<td>Not different from State Average Quality</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cost of Care</th>
<th>Boston Medical Center</th>
<th>Brigham &amp; Women's Hospital</th>
<th>Massachusetts General Hospital</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summary</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost Rating</td>
<td>$</td>
<td>$</td>
<td>$$$</td>
</tr>
<tr>
<td>Statistical Significance</td>
<td>Below Median State Cost</td>
<td>Not Different from Median State Cost</td>
<td>Above Median State Cost</td>
</tr>
</tbody>
</table>

Quality of Care - State Legend
- Below State Average Quality
- Not Different from State Average Quality
- Above State Average Quality
- N/A
- Insufficient Information Reported

Choose a Topic
- Patient Safety
- Patient Experience
- Bone and Joint Care
- Bone and Joint Care
- Digestive System
- Digestive System
- Obstetrics
- Obstetrics
- Outpatient Diagnostic
- Outpatient Diagnostic

Additional Topics
- Angioplasty
- Angioplasty
- Bypass Surgery
- Bypass Surgery
- Cardiac Screening Tests
- Cardiac Screening Tests
- Heart Attack
- Heart Attack
- Heart Failure
- Heart Failure
- Heart Valve Surgery
- Heart Valve Surgery
- Stroke
- Stroke
## Payment Rate Benchmarking

<table>
<thead>
<tr>
<th>Procedure Code</th>
<th>Average Payment Including Patient Share, 2006</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Health Plan 1</td>
</tr>
<tr>
<td>99203 Office/Outpatient Visit New Patient, 30min</td>
<td>$124</td>
</tr>
<tr>
<td>99212 Office/Outpatient Visit Established Patient, 10min</td>
<td>$51</td>
</tr>
<tr>
<td>99391 Preventive Medicine Visit Established Patient Age &lt;1</td>
<td>$111</td>
</tr>
<tr>
<td>90806 Individual psychotherapy in office/outpatient, 45-50min</td>
<td>$72</td>
</tr>
</tbody>
</table>

SOURCE: NH DHHS
Prevalence of Asthma by Age, NH Medicaid (non-Dual) and NH Commercial Members, 2005

SOURCE: NH DHHS
Figure 2. Emergency Department Visit Rates by Age: Medicaid Compared to NH Commercial Members, 2005  
Note: age 65 and older not shown, no comparative commercial population

SOURCE: NH DHHS
Change in Distribution of Costs by Insurance Type: Concord

<table>
<thead>
<tr>
<th>Year</th>
<th>PPO</th>
<th>POS</th>
<th>HMO</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>72%</td>
<td>19%</td>
<td>9%</td>
</tr>
<tr>
<td>2006</td>
<td>72%</td>
<td>18%</td>
<td>10%</td>
</tr>
<tr>
<td>2007</td>
<td>59%</td>
<td>21%</td>
<td>19%</td>
</tr>
</tbody>
</table>

SOURCE: UNH

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Percentage of Medical Service Encounters Leaving Home
Health Analysis Area, Inpatient Services, CY 2006

Percent of Services
- 13 - 25%
- 26 - 37%
- 38 - 49%
- 50 - 61%
- 62 - 73%
- N/A

1Franklin HAA omitted due to hospital merger with Lakes Region.

SOURCE: UNH
## Summary Metrics

**COMPANY ABC and NH Benchmark**

<table>
<thead>
<tr>
<th>DEMOGRAPHICS</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>NH BENCHMARK 2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Members</td>
<td>8,736</td>
<td>8,680</td>
<td>8,647</td>
<td>8,786</td>
<td>114,457</td>
</tr>
<tr>
<td>Average Age (Yrs)</td>
<td>36.3</td>
<td>36.7</td>
<td>37.6</td>
<td>37.7</td>
<td>39.2</td>
</tr>
<tr>
<td>Percent Female (%)</td>
<td>46%</td>
<td>53%</td>
<td>52.8%</td>
<td>52.7%</td>
<td>53.0%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MEDICAL CLAIM PAYMENTS</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>NH BENCHMARK 2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Plan Payments (Millions)</td>
<td>$25.8</td>
<td>$30.4</td>
<td>$29.9</td>
<td>$33.7</td>
<td>481.2</td>
</tr>
<tr>
<td>Plan Paid PMPM</td>
<td>$246</td>
<td>$291</td>
<td>$288</td>
<td>$320</td>
<td>$350</td>
</tr>
<tr>
<td>Plan PMPM Trend from Previous Year</td>
<td>NA</td>
<td>19%</td>
<td>-1%</td>
<td>1%</td>
<td>10%</td>
</tr>
<tr>
<td>Member Paid PMPM</td>
<td>$9</td>
<td>$9</td>
<td>$8</td>
<td>$9</td>
<td>$8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PHARMACY PAYMENTS</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>NH BENCHMARK 2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Pharmacy Payments (Millions)</td>
<td>$5.1</td>
<td>$5.9</td>
<td>$6.6</td>
<td>$7.3</td>
<td>NA</td>
</tr>
<tr>
<td>Plan Paid PMPM</td>
<td>$49</td>
<td>$57</td>
<td>$63</td>
<td>$69</td>
<td>NA</td>
</tr>
<tr>
<td>Plan PMPM Trend from Previous Year</td>
<td>NA</td>
<td>17%</td>
<td>12%</td>
<td>8%</td>
<td>NA</td>
</tr>
<tr>
<td>Member Paid PMPM</td>
<td>$13</td>
<td>$14</td>
<td>$14</td>
<td>$13</td>
<td>NA</td>
</tr>
</tbody>
</table>

Pharmacy data for some New Hampshire employers currently is under review.

**SOURCE: NHPGH**

Copyright 2009-2010 APCD Council, NAHDO, UNH
Prevalence of Selected Conditions

COMPANY ABC (2005–2008)

Cases per 1,000

Coronary Heart Disease: 2005 17, 2006 18, 2007 18, 2008 16
Colorectal Cancer: 2005 1, 2006 2, 2007 1, 2008 1

SOURCE: NHPGH
Percent Members Receiving Preventive Services

COMPANY ABC (2005–2008)

SOURCE: NHPGH
Healthcare Plan Payments PMPM by Category

COMPANY ABC (2005–2008)

SOURCE: NHPGH

Copyright 2009-2010 APCD Council, NAHDO, UNH
# ETGs for Joint Degeneration—Spine

Maine Commercial Claims (2006–2007); Full Episodes Outliers Removed
Preference Sensitive Care

<table>
<thead>
<tr>
<th>JOINT DEGENERATION—SPINE</th>
<th>WITH SURGERY</th>
<th>WITHOUT SURGERY</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETG-Subclass</td>
<td>721-08</td>
<td>722-08</td>
</tr>
<tr>
<td>Number of Episodes</td>
<td>802</td>
<td>15,830</td>
</tr>
<tr>
<td>% with MRI</td>
<td>84%</td>
<td>26%</td>
</tr>
<tr>
<td>% with CT-Scan</td>
<td>12%</td>
<td>2%</td>
</tr>
<tr>
<td>% with Standard Musculoskeletal Imaging</td>
<td>82%</td>
<td>36%</td>
</tr>
<tr>
<td>% with Chiropractor</td>
<td>20%</td>
<td>50%</td>
</tr>
<tr>
<td>% with Osteopathic Manipulation</td>
<td>12%</td>
<td>10%</td>
</tr>
<tr>
<td>% with Physical Medicine or Rehab</td>
<td>61%</td>
<td>54%</td>
</tr>
<tr>
<td>Avg. Payment per Episode</td>
<td>$18,088*</td>
<td>$1,605</td>
</tr>
</tbody>
</table>

* The average payment for 272 episodes with spinal fusion was $28,290 compared with $12,853 for 530 episodes with other types of spinal surgery such as laminectomy or diskectomy.

SOURCE: ONPOINT HEALTH DATA
ETGs for Benign Conditions of the Uterus
Maine Commercial Claims (2006–2007); Full Episodes Outliers Removed
Preference Sensitive Care

<table>
<thead>
<tr>
<th>BENIGN CONDITIONS OF THE UTERUS</th>
<th>HYSTERECTOMY</th>
<th>OTHER SURGICAL PROCEDURES</th>
<th>WITHOUT SURGERY</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETG-Subclass</td>
<td>646</td>
<td>646</td>
<td>647</td>
</tr>
<tr>
<td>Number of Episodes</td>
<td>938</td>
<td>2,183</td>
<td>7,369</td>
</tr>
<tr>
<td>% with CT-Scan</td>
<td>11%</td>
<td>15%</td>
<td>9%</td>
</tr>
<tr>
<td>% with Ultrasound</td>
<td>57%</td>
<td>67%</td>
<td>45%</td>
</tr>
<tr>
<td>% with Hysteroscopy</td>
<td>7%</td>
<td>48%</td>
<td>9%</td>
</tr>
<tr>
<td>% with Colposcopy</td>
<td>1%</td>
<td>2%</td>
<td>17%</td>
</tr>
<tr>
<td>% with Endometrial biopsy</td>
<td>20%</td>
<td>13%</td>
<td>9%</td>
</tr>
<tr>
<td>Average Payment per Episode</td>
<td>$11,074</td>
<td>$7,994</td>
<td>$1,273</td>
</tr>
</tbody>
</table>

The average episode payment for members with abdominal hysterectomy was $11,221, and the average payment for members with vaginal hysterectomy was $10,990. Of members with a hysterectomy, 66% had abdominal and 34% had vaginal hysterectomy. Other surgical procedures included hysteroscopy ablation, laparoscopic removal of lesions, myomectomy, and removal of ovarian cysts.

SOURCE: ONPOINT HEALTH DATA
No correlation between Medicare mix and commercial payments---two data bases: APCD and Hospital Discharge
Maine Acute Care Hospitals
Medicare inpatient

Correlation Between Percent Medicare as Payer and Case Mix Adjusted Average Commercial Paid Amount per Weighted Discharge, Critical Access Hospitals Highlighted, Inpatient and Claims 2007 Data

Source: Maine Health Data Organization
Total IP Adverse Drug Events Discharge, Rate, Total Paid, and Average Paid, 2006-2007 for Maine and New Hampshire

<table>
<thead>
<tr>
<th></th>
<th>IP Discharges</th>
<th>Rate / 1,000 Discharges</th>
<th>Total Paid</th>
<th>Average Paid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maine 2006</td>
<td>747</td>
<td>26.7</td>
<td>$ 11,864,264</td>
<td>$ 15,883</td>
</tr>
<tr>
<td>Maine 2007</td>
<td>770</td>
<td>34.5</td>
<td>$ 13,705,995</td>
<td>$ 17,800</td>
</tr>
<tr>
<td>Total</td>
<td>1,517</td>
<td>30.1</td>
<td>$ 25,570,259</td>
<td>$ 16,856</td>
</tr>
<tr>
<td>% Increase</td>
<td>3%</td>
<td>29%</td>
<td>16%</td>
<td>12%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>IP Discharges</th>
<th>Rate / 1,000 Discharges</th>
<th>Total Paid</th>
<th>Average Paid</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Hampshire 2006</td>
<td>459</td>
<td>22.3</td>
<td>$ 5,712,414</td>
<td>$ 12,445</td>
</tr>
<tr>
<td>New Hampshire 2007</td>
<td>504</td>
<td>25.1</td>
<td>$ 6,719,104</td>
<td>$ 13,332</td>
</tr>
<tr>
<td>Total</td>
<td>963</td>
<td>23.7</td>
<td>$ 12,431,518</td>
<td>$ 12,909</td>
</tr>
<tr>
<td>% Increase</td>
<td>10%</td>
<td>12%</td>
<td>18%</td>
<td>7%</td>
</tr>
</tbody>
</table>

SOURCE: UNH & HEALTHINFONET
Tri-State Variation in Health Services

Advanced Imaging – MRIs

Source: State of Vermont

Greenville (46.2)

Keene (90.8)

Middlebury (53.3)

Rutland (73.8)

Rate per 1,000

46.2 - 60.4
60.5 - 66.4
66.5 - 69.7
69.8 - 77.3
77.4 - 90.8

Tri-State Variation in Health Services Utilization & Expenditures in Northern New England, June 2010
### New Hampshire

**Title of APCD System:** New Hampshire Comprehensive Health Care Information System  
**Why Maintain the System:** NHCHIS reflects a partnership between NH Insurance Department and NH Department of Health and Human Services  
**Website:** [http://www.nhchis.org/](http://www.nhchis.org/)

#### Legal Authority
- **Investment:** Approximately $2M since 2005  
- **Submission Rules:** [http://www.gencourt.state.nh.us/nrs/State_Agencies/06400.html](http://www.gencourt.state.nh.us/nrs/State_Agencies/06400.html)  

**First Year APCD Collected Data:** 2005  
**APCD Snapshot:** The New Hampshire Comprehensive Health Information System began accepting claims submissions in 2005 in response to a need for more transparency in the commercial insurance system. The data was not collected to serve as the basis for insurance rates. The data was provided to third-party administrators to demonstrate the value of claims data, including the provision of a resource for continuous review of health care utilization, expenditures, and performance data by insurers, purchasers, employers, providers, and state agencies. Also expressed was the goal to help consumers and employers make informed and cost-effective health care choices. In addition, data were desired for comparison to Medicare quality, cost, utilization, and price.

**Number of Commercial Sources of Claims Data:** 20

#### Sources and Status of APCD Data Collection

<table>
<thead>
<tr>
<th>Payers</th>
<th>Currently Collected</th>
<th>Planned Collection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial Payers</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Third Party Administrators/Self-Funded</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Medicaid</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Types of Data Collected</th>
<th>Currently Collected</th>
<th>Planned Collection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicaid Claims</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Eligibility</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Dental</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Pharmacy</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td>Also planned is the collection of some form of unlinked claim information</td>
</tr>
</tbody>
</table>

**Primary Users/Uses:** Analysis of cost, HEDIS, system utilization, epidemiological, and geographical differences. Also provides Medicaid payment rate benchmarking and competition within the commercial health market.

**Future Plans:** None at this time.

**Consumer Website:** [www.nhhealthins.org](http://www.nhhealthins.org)

**Contact Information:** For more information please contact Andrew Childrens at andrewchild@dhhs.state.nh.us
Step 1: Getting Started in Your State

Applications of All-Payer Claims Data

The following resources provide a general overview of how APCDs can be applied:

- "Overview of All-Payer Claims Databases" Presentation, Miller 2010
- "Academy Health - All-Payer Claims Databases: An Overview for Policymakers"
- "APCD Development Progress per State"

Utilization of All-Payer Claims Data

The following sites link to reports or web sites that use claims data:

- **VHCRES Reports**
  - 2007-2008 Vermont Healthcare Utilization Profile Highlights
  - 2007-2008 Vermont Healthcare Utilization Profile Report
  - 2008 Vermont Expenditure and Utilization Report

- **NH CHIS** – See “Data and Reports” for examples of reports that the New Hampshire Department of Health and Human Services has released based on claims data analysis.
- **NH Health Cost** - This web site uses the New Hampshire claims data to provide information about the price of medical care in NH.
- **APCD Applications Resources Guide** - This document summarizes many of the projects that use claims data. It provides the project sponsor, a description of the project, and links to project web sites (when available).
- **All-Payer Analysis of Variation in Healthcare in Maine**
- **Maine HealthCost** - This web site uses the Maine claims data to provide information about the price of medical care in Maine
- **West Virginia Compare Cost**
Denise Love (dlove@nahdo.org)

APCDDCouncil.org