All-Payer Claims Databases: State Progress and Federal Integration

June 16, 2011
Denise Love
Presented to the National Committee on Vital and Health Statistics, Washington, DC

Topics

- Background
- National Partnership Activities
- Usage Examples From Other States
- Experiences and Lessons Learned
- Standardization
- Cost and Funding for APCDs
- Questions and Answers

Background

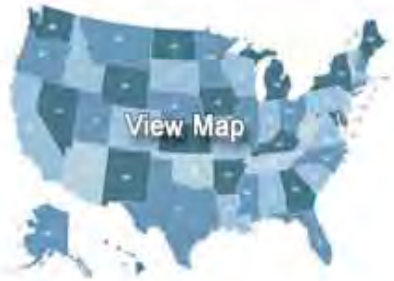
APCD All-Payer Claims Database COUNCIL

September 14, 2010 Contact Us

Home | Initiatives | Calendar | Resources | Interactive State Map | Projects

Interactive State Reports Map

Click on a state to find out about the APCD in that state.



States: As information about the APCD changes in your state, please contact ashley.peters@unh.edu, so that we can keep the state profiles current.

Welcome to the APCD Council!

The APCD Council, formerly known as the Regional All Payer Healthcare Information Council (RAPHIC), is a federation of government, private, non-profit, and education organizations focused on improving the development and deployment of state-based all payer claims databases (APCD). The APCD Council is convened and coordinated by the Institute of Health Policy and Practice (IHPP) at the University of New Hampshire (UNH) and the National Association of Health Data Organizations (NAHDO).

RAPHIC was first convened in 2006 by UNH, IHPP staff with the goal of engaging future users of the Maine and New Hampshire APCDs in a discussion about multi-state collaboration. Soon after, states across the country joined the group. Currently, there is participation from nearly a dozen states. NAHDO was established in 1986 to promote the uniformity and availability of health care data for cost quality and access purposes. In 2007, NAHDO forged a collaboration with RAPHIC to expand APCD data initiatives beyond the north east region and to lead fund raising for APCD products and conference support. Together, NAHDO and RAPHIC have been coordinating a multistate effort to support state APCD initiatives and shape state reporting systems to be capable of supporting a broad range of information needs.

In response to a shift from a regional to nationwide focus, RAPHIC has changed its name to the APCD Council. The APCD Council will continue to work in collaboration with states to promote uniformity and use of APCDs.

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Definition of APCDs

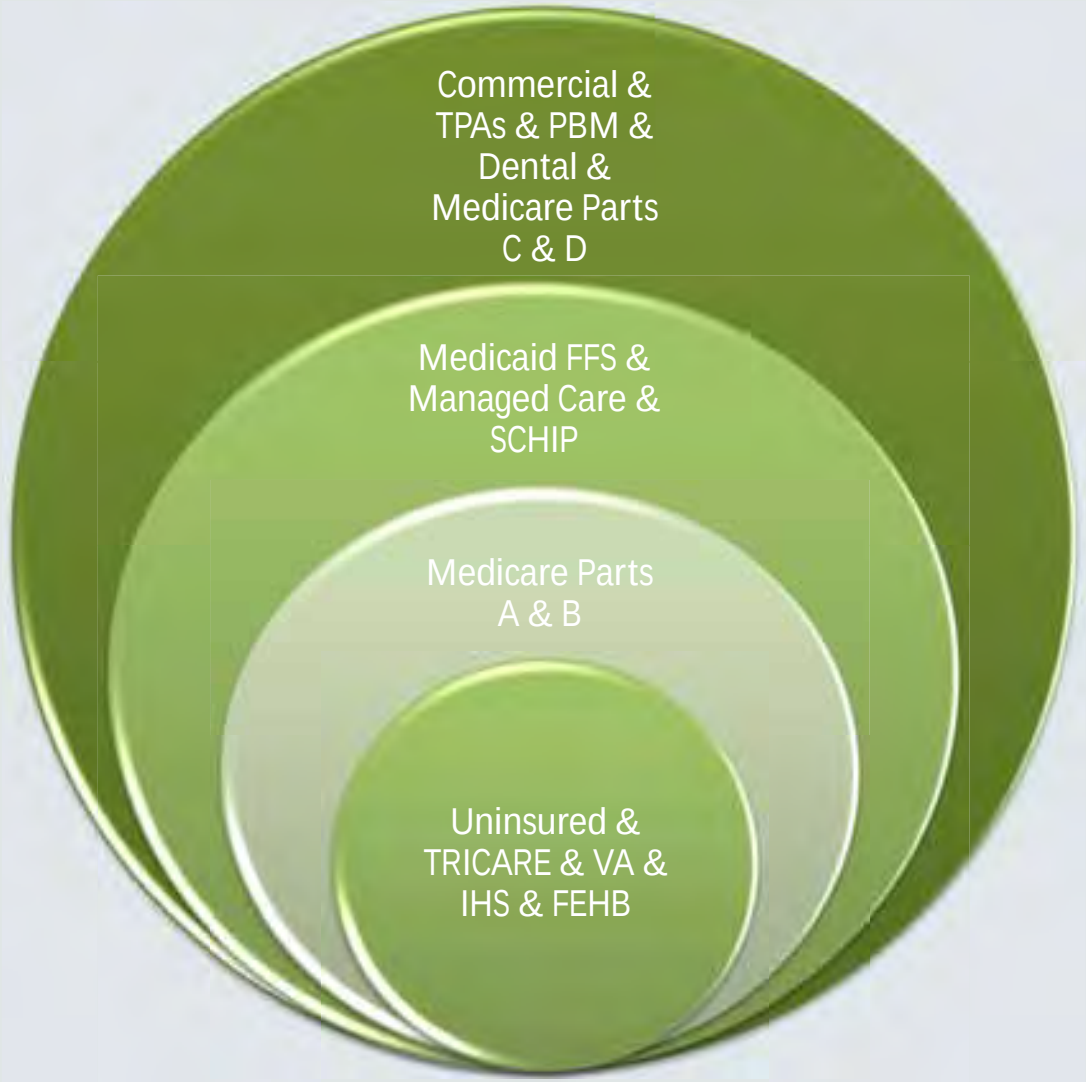
- Databases, created by state mandate, that typically include data derived from *medical, pharmacy, and dental claims with eligibility and provider* files from private and public payers:
  - Insurance carriers (medical, dental, TPAs, PBMs)
  - Public payers (Medicaid, Medicare)
- *Augmenting (not replacing)* hospital discharge, Medicaid, Medicare, registries, and other datasets

5

APCDs Are About Transparency

- What does a back MRI cost by provider by payer?
- In what geographies is public health improving?
- What percentage of my employees have had a mammogram?
- If emergency room usage in Medicaid is higher than the commercial population, what are the drivers?
- What is the average length of time people are using antidepressant medications?
- How far do people travel for services? Which services?
- Hundreds of additional questions have been asked….

Sources of APCD Data



Typically Included Information

- Encrypted social security
- Type of product (HMO, POS, Indemnity, etc.)
- Type of contract (single person, family, etc.)
- Patient demographics(date of birth, gender, residence, relationship to subscriber)
- Diagnosis codes (including E-codes)
- Procedure codes (ICD, CPT, HCPC, CDT)
- NDC code / generic indicator
- Revenue codes
- Service dates
- Service provider (name, tax id, payer id, specialty code, city, state, zip code)
- Prescribing physician
- Plan payments
- Member payment responsibility (co-pay, coinsurance, deductible)
- Date paid
- Type of bill
- Facility type

Typically Excluded Information

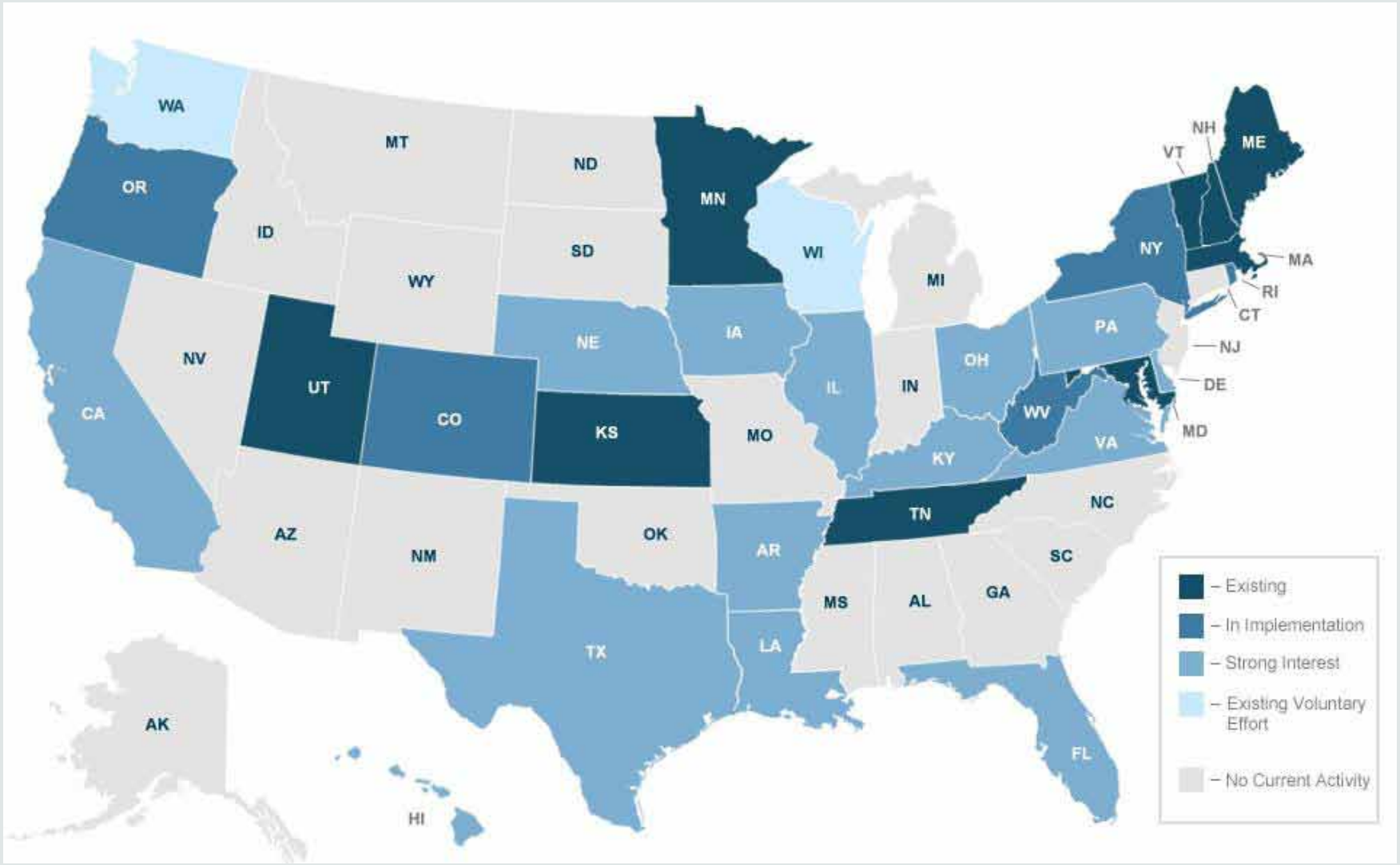
- Services provided to uninsured (few exceptions)
- Denied claims
- Workers' compensation claims
- Referrals
- Test results from lab work, imaging, etc.
- Provider affiliation with group practice
- Provider networks
- *Premium information*
- *Capitation fees*
- *Administrative fees*
- *Back end settlement amounts*
- *Back end P4P or PCMH payments*

Backdrop 2005-2011

- Increased Transparency Efforts
- Employer Coalitions
- Payment Reform
  - Patient Centered Medical Home
  - Accountable Care Organizations
- Health Information Exchange (HITECH)
- Health Reform (PPACA)

National Partnership Activities

June 2011 State Progress Map



National Activities

- Standards Development
- Technical Assistance
- Web Resources
- Publications and Issue Briefs
- Annual Conference
- AHRQ USHIK Database
- Partners: APCD Council, NAHDO, States, Carriers, AHRQ, AHIP, NCPDP, AcademyHealth State Coverage Initiatives, Commonwealth Fund, NGA, NAIC

Technical Advisory Panel

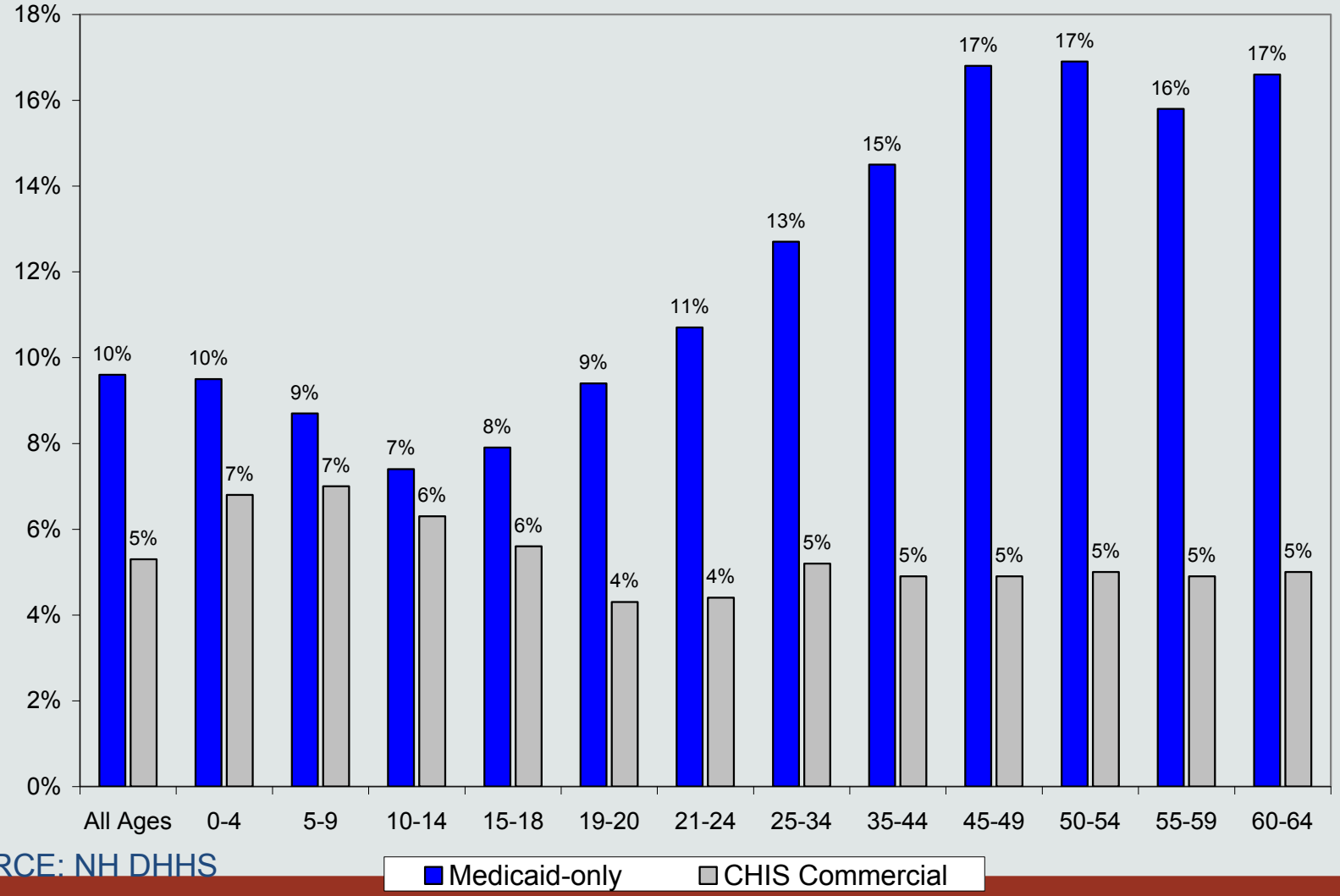
- Agency for Healthcare Research and Quality (AHRQ)
- All-Payer Claims Database Council (APCD Council)
- America's Health Insurance Plans (AHIP)
- Individual Payers (e.g., Aetna, Cigna, Harvard Pilgrim Healthcare, Humana, United Health Care)
- Centers for Disease Control and Prevention, National Center for Health Statistics (CDC NCHS)
- Centers for Medicare and Medicaid Services (CMS)
- National Association of Health Data Organizations (NAHDO)
- National Association of Insurance Commissioners (NAIC)
- National Conference of State Legislatures (NCSL)
- National Governors Association (NGA)
- Office of the Assistant for Planning and Evaluation (ASPE)
- State Health Plan Associations - various

Usage Examples

Something for Everyone

- Consumers
- Employers
- Health Plans/Payers
- Providers
- Researchers (public policy, academic, etc.)
- State government (policy makers, Medicaid, public health, insurance department, etc.)
- TBD (Federal government, etc.)

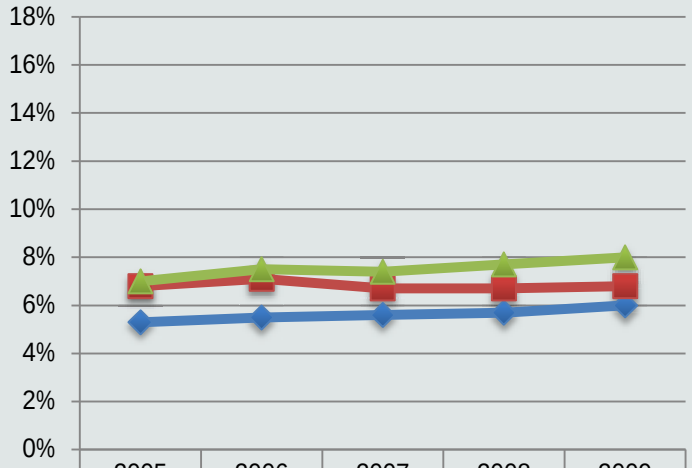
Prevalence of Asthma by Age, NH Medicaid (non-Dual) and NH Commercial Members, 2005



SOURCE: NH DHHS

Prevalence of Asthma by Age, NH Medicaid and Commercial Members, 2005-2009

NH Commercial Asthma Prevalence 2005-2009



	2005	2006	2007	2008	2009
Total Asthma Prevalence	5.3%	5.5%	5.6%	5.7%	6.0%
Age 0-4 Prevalence	6.8%	7.1%	6.7%	6.7%	6.8%
Age 5-9 Prevalence	7.0%	7.5%	7.4%	7.7%	8.0%

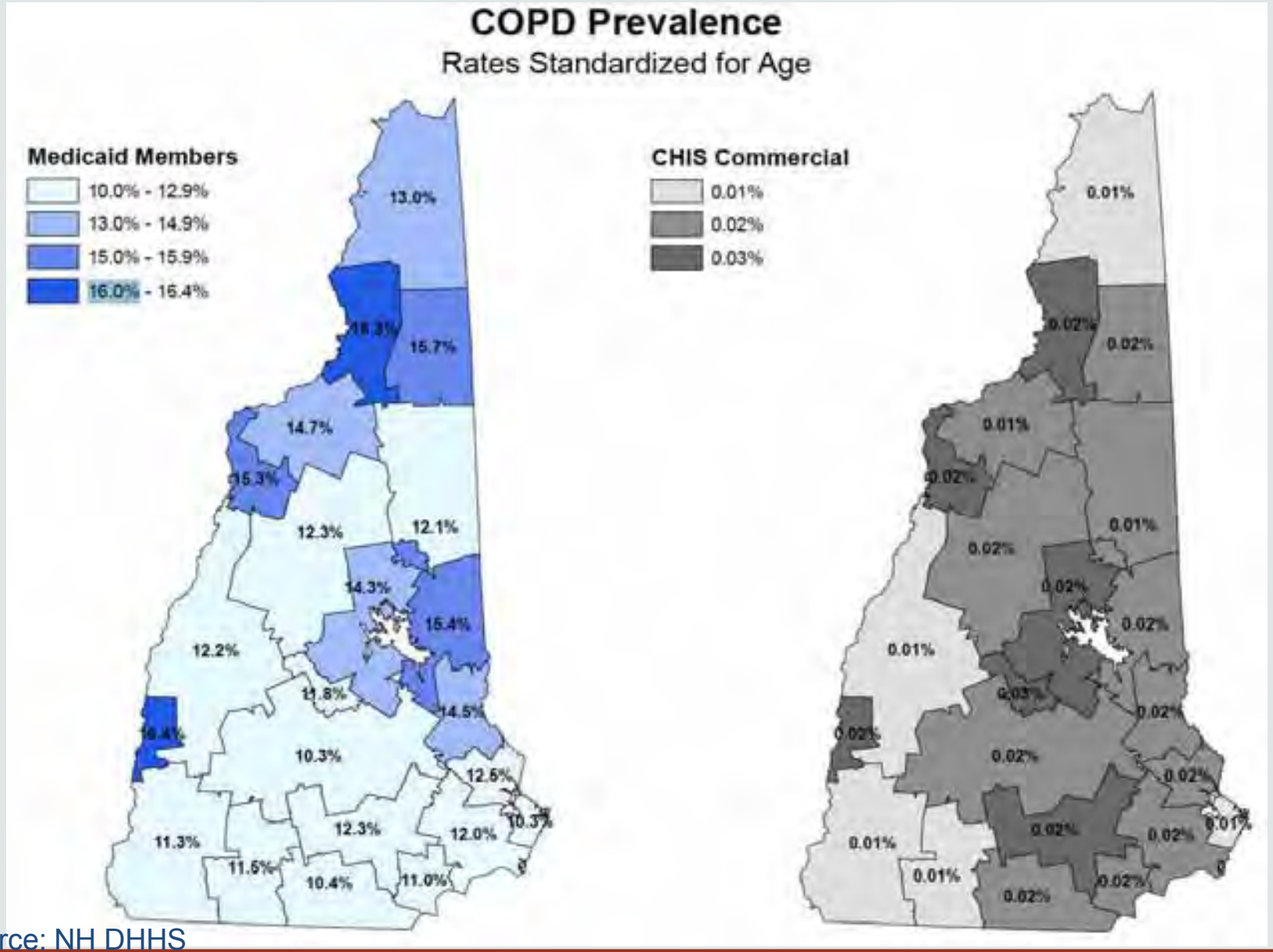
NH Medicaid Asthma Prevalence 2005-2009

	2005	2006	2007	2008	2009
Total Asthma Prevalence	9.6%	9.9%	10.2%	10.4%	10.6%
Age 0-4 Prevalence	9.5%	9.5%	9.5%	9.7%	9.3%
Age 5-9 Prevalence	8.7%	8.7%	8.9%	9.2%	9.7%
Age 55-59 Prevalence	15.8%	17.0%	15.4%	16.3%	16.8%

SOURCE: NH DHHS

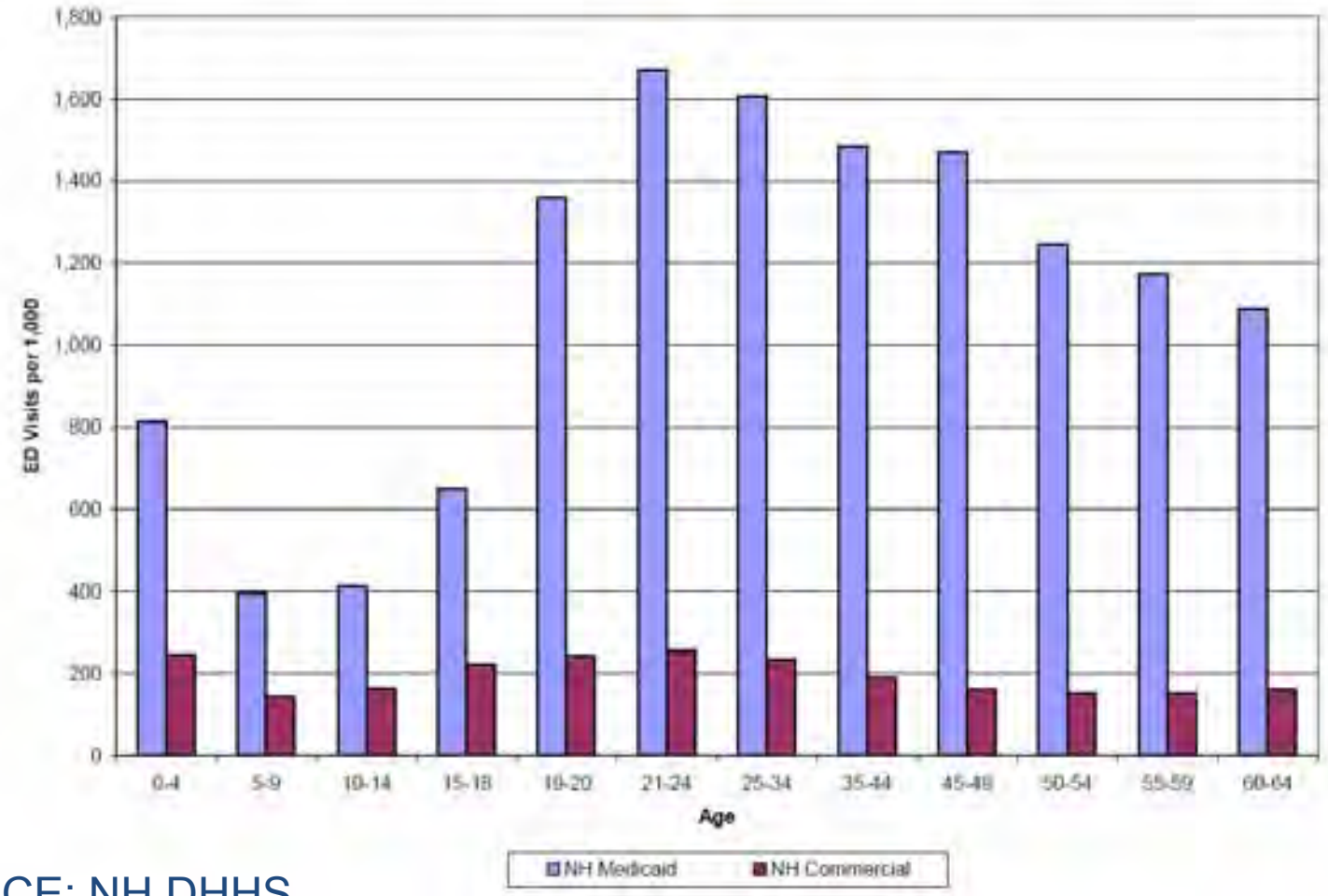
COPD Prevalence

Rates Standardized for Age



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*

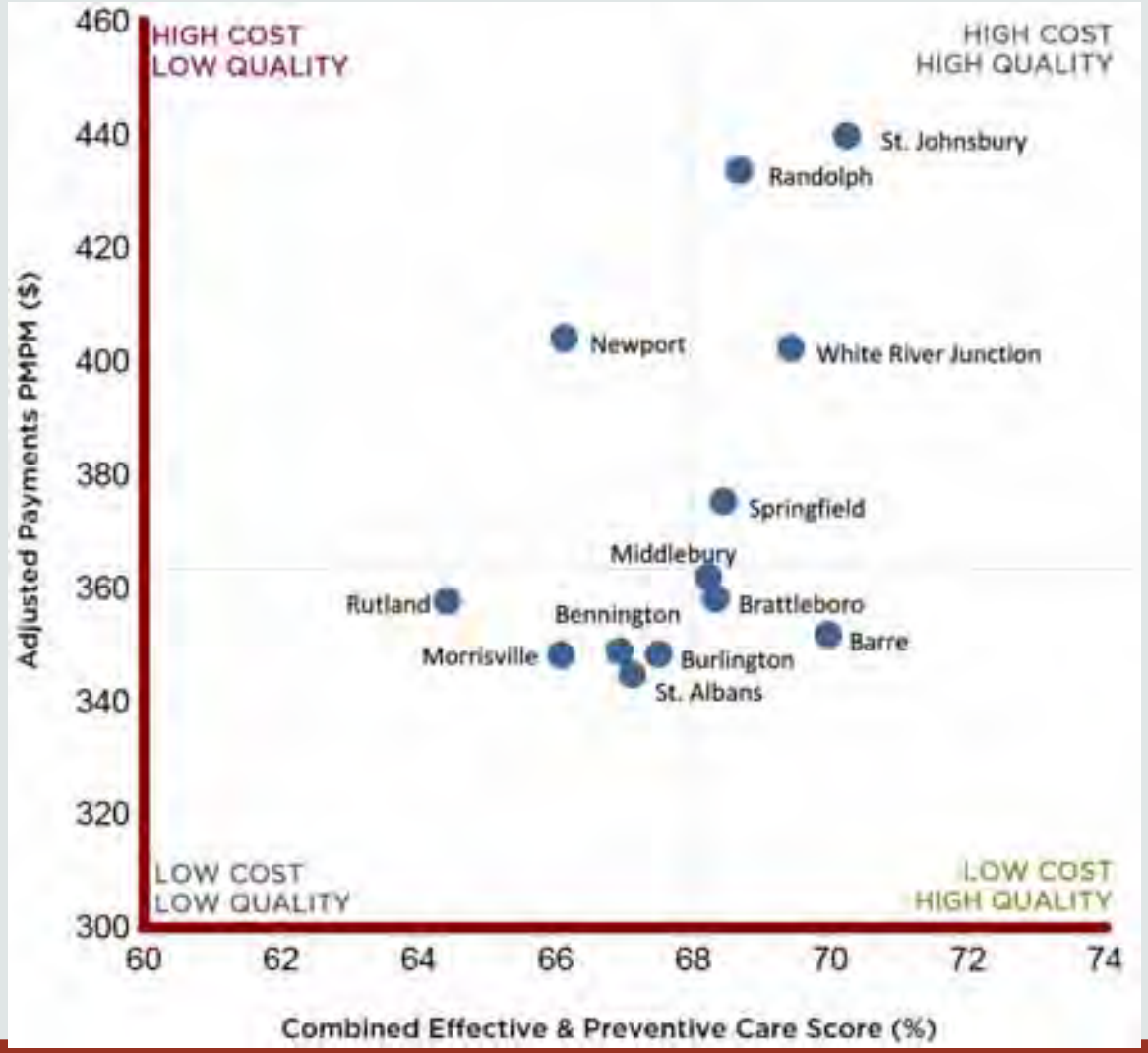


SOURCE: NH DHHS

Selected Prevalence Conditions – Vermont Commercial Population – 2007-2009

Major Disease Category	Rate/1,000 Members	Rate/1,000 Members	Rate/1,000 Members
	2007	2008	2009
Cancers			
Breast Cancer	6.3	6.3	6.6
Lung Cancer	1	1	1
Colorectal Cancer	1.2	1.1	1.2
Digestive System Diseases	101	99.5	101.1
Heart & Other Circulatory Diseases			
Coronary Heart Disease	13.2	12.9	13.5
Stroke	4.8	4.9	5.2
Congestive Heart Failure	2.3	2.3	2.2
Genitourinary System Disorders	160.5	156.3	156.0
Respiratory System Disorders	263.3	255.5	261.1

Vermont Comparative Costs and Quality by Region



The scattergraph shows the relationship between the rate of payments and the rate of effective and preventive care. The graph's vertical axis displays the rate of payment per member per month (PMPM) adjusted for differences in age, gender, and health status of the population. The graph's horizontal axis displays the combined effective and preventive care score. The crosshair lines display the statewide average for each axis; subpopulations are classified into quadrants based on comparison to the statewide average.

ETGs for Benign Conditions of the Uterus

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

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

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 D ATA

Medicaid Payment Rate Benchmarking

Procedure Code	Average Payment Including Patient Share, 2006 Health Plan 1	Health Plan 2	Health Plan 3	NH Medicaid
99203 Office/Outpatient Visit New Patient, 30min	$124	$115	$130	$42
99212 Office/Outpatient Visit Established Patient, 10min	$51	$48	$52	$30
99391 Preventive Medicine Visit Established Patient Age <1	$111	$102	$107	$61
90806 Individual psychotherapy in office/outpatient, 45-50min	$72	$71	$71	$61

SOURCE: NH DHHS

- Pricing of Health Care Services
  - A Deeper Exploration
- Health Costs for Insured Patients
- Health Costs for Uninsured Patients

Detailed estimates for Arthroscopic Knee Surgery (outpatient)

Procedure: Arthroscopic Knee Surgery (outpatient)
Insurance Plan: Anthem - NH, Health Maintenance Organization (HMO)
Within: 20 miles of 03301
Deductible and Coinsurance Amount: $500.00 / 10%

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	Contact Info
CONCORD AMBULATORY SURGERY CENTER	$769	$2429	$3198	HIGH	MEDIUM	
CAPITAL ORTHOPAEDIC SURGERY CENTER	$815	$2844	$3659	HIGH	LOW	
DARTMOUTH HITCHCOCK SOUTH	$841	$3077	$3918	MEDIUM	MEDIUM	DARTMOUTH HITCHCOCK SOUTH 800.238.0505
LAKES REGION GENERAL HOSPITAL	$897	$3574	$4471	LOW	HIGH	LAKES REGION GENERAL HOSPITAL 603.527.7171
SPEARE MEMORIAL HOSPITAL	$949	$4046	$4995	HIGH	LOW	SPEARE MEMORIAL HOSPITAL 603.536.1120
FRANKLIN REGIONAL HOSPITAL	$975	$4276	$5251	HIGH	LOW	FRANKLIN REGIONAL HOSPITAL 603.527.7171
CATHOLIC MEDICAL CENTER	$980	$4328	$5308	LOW	LOW	CATHOLIC MEDICAL CENTER 800.437.9666

Lead Provider This is the single entity that all health care procedure costs are assigned to in HealthCost. Even when separate payments are made to a physician and a hospital, the estimated payment amount is the combined total amount paid. When a Lead Provider is not listed in the results, we do not have sufficient data to calculate an estimate.

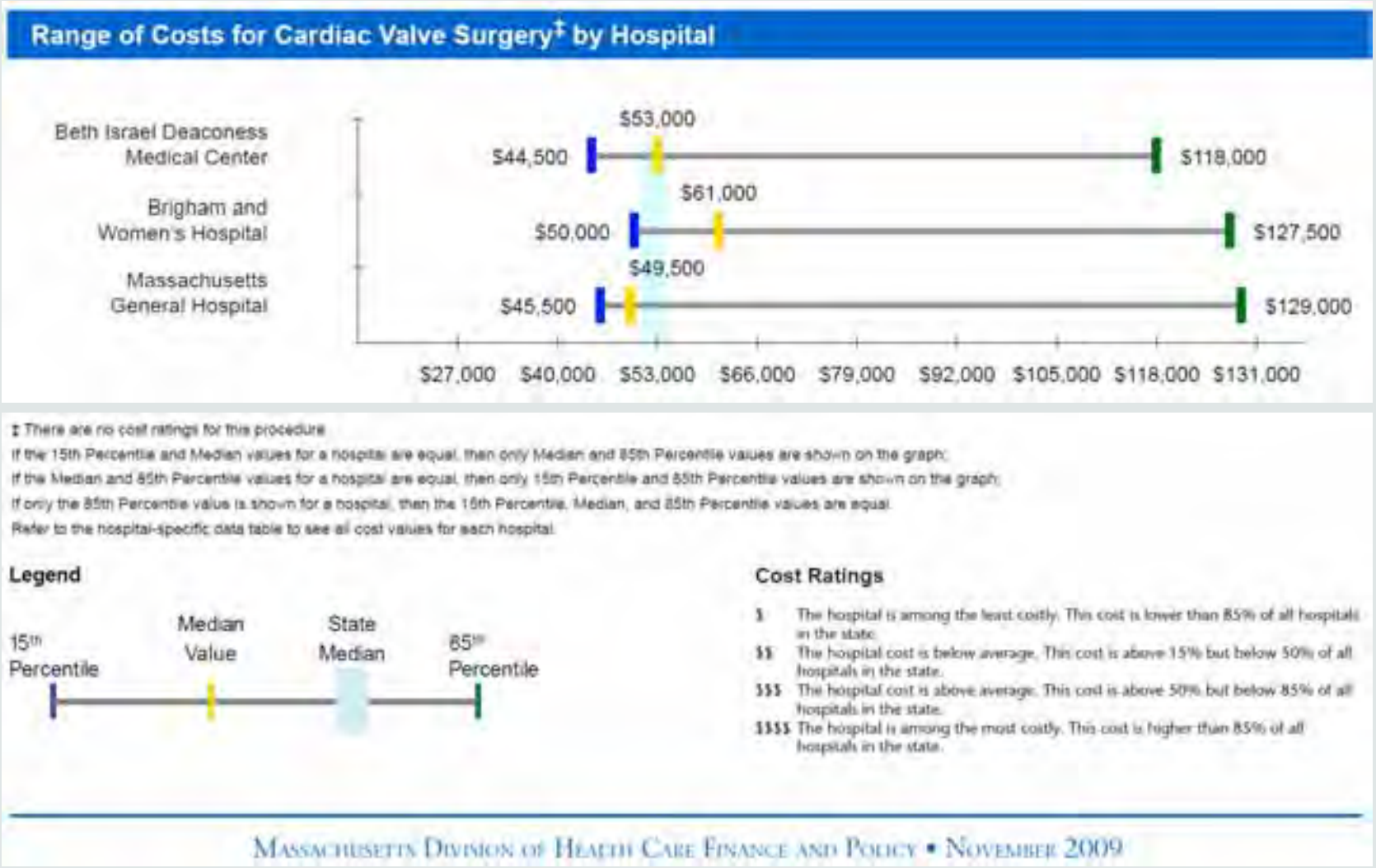
Estimate of What You Will Pay – This figure represents out of pocket payments you may be required to pay based upon your health coverage, your deductible, and your coinsurance. Deductibles and co-insurance are paid after the service is provided.

Estimate of What Insurance Will Pay – This figure represents the payment made by your insurance company to the health care provider.

Estimate of Combined Payments – This figure represents the combined amount that the health care provider receives from you as a patient and from your insurance company.

Precision of the Cost Estimate – This is an indication of how accurate, based upon statistical analysis and historical experience, the cost estimate is. A lower precision means that there is a greater likelihood that the amount of your bill will differ from the cost estimate. A high precision means that the amount of your bill will have a greater likelihood of being close to the cost estimate. Some estimates are more precise than others because the amount charged for the procedure across all patients is more uniform. When the amount charged for a procedure or services across all patients varies considerably, it is more difficult to estimate an expected cost for the procedure or service, and as result, the cost estimate is less precise.

Typical Patient Complexity – This is an indication of how healthy or sick the patients are that are seen for this particular procedure at this health care provider. Some health care providers see sicker patients, or patients that are more complex, and thus there may be more costs associated with treating them.



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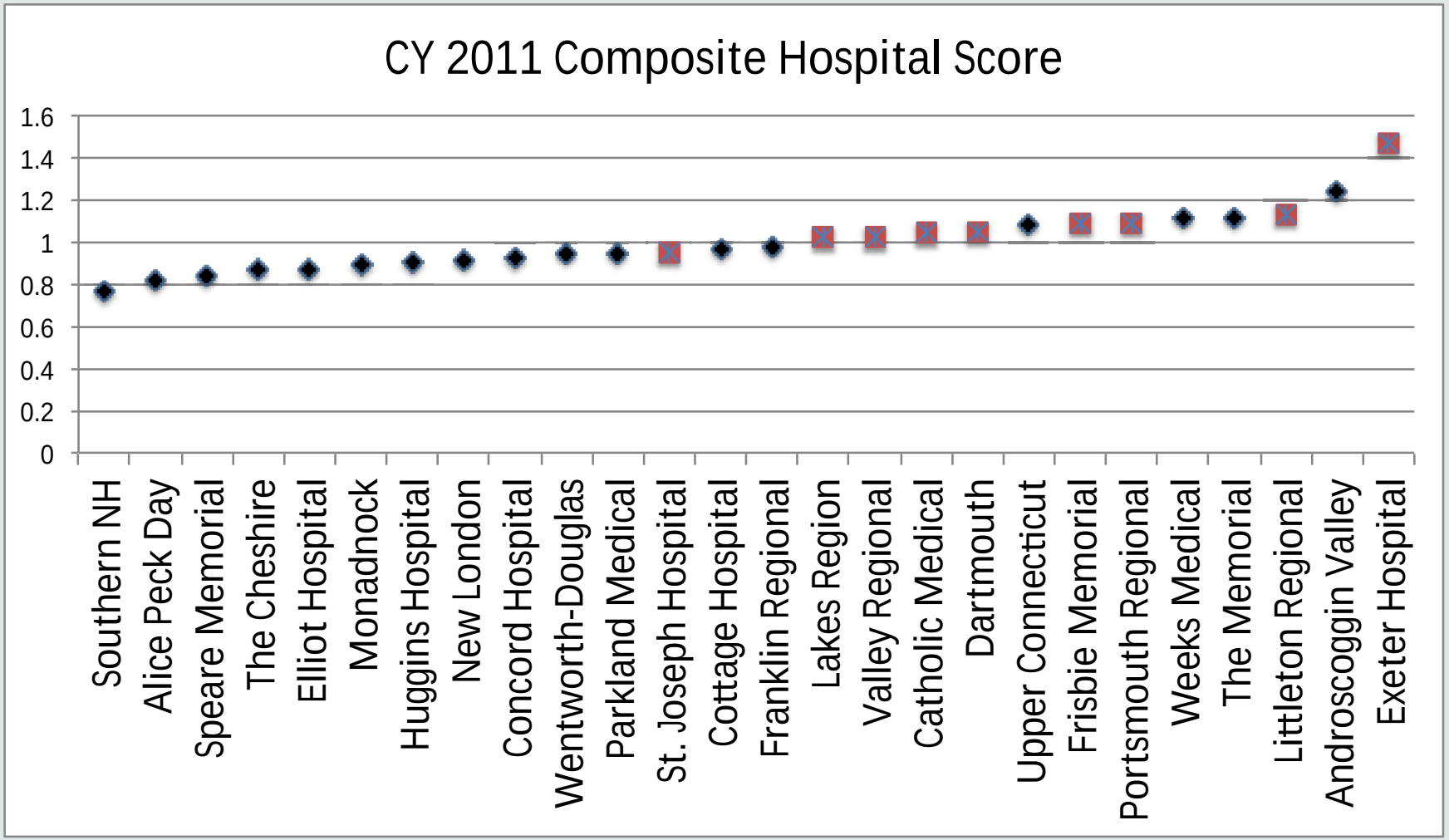
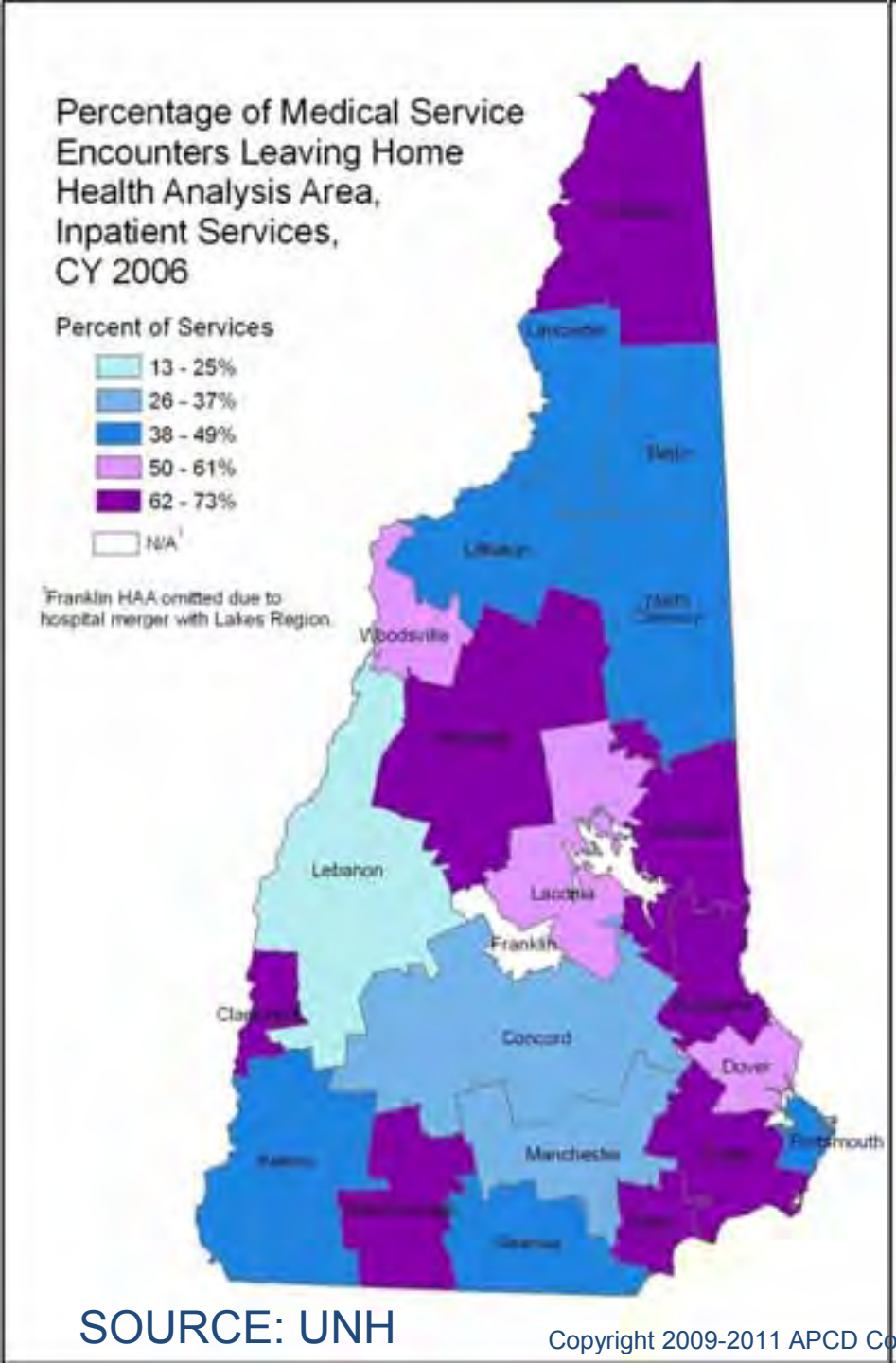


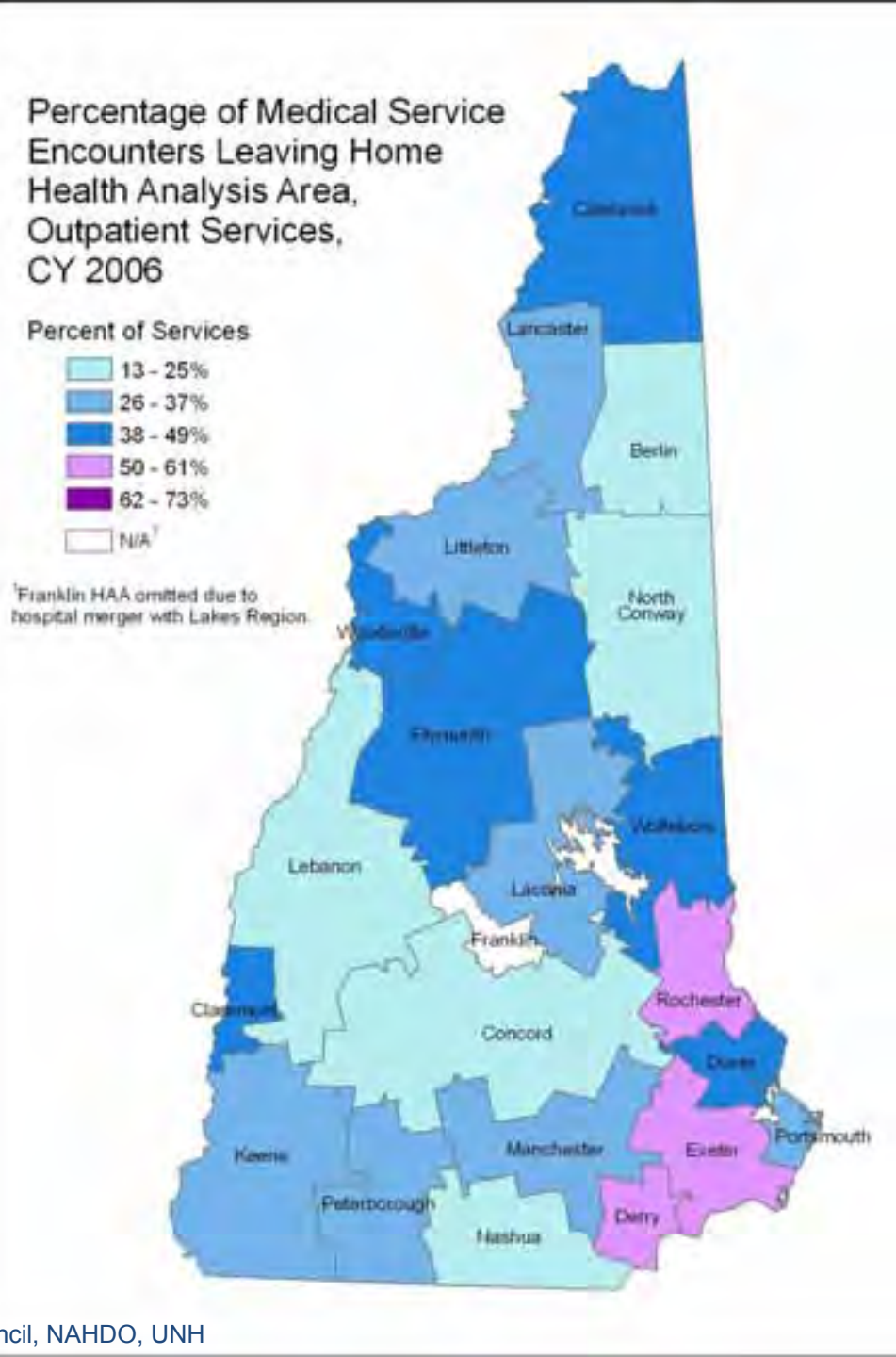
Tier 1=Diamond, Tier 2=Asterisk

Source: NH Insurance Department

Source: http://www.nhpgh.org

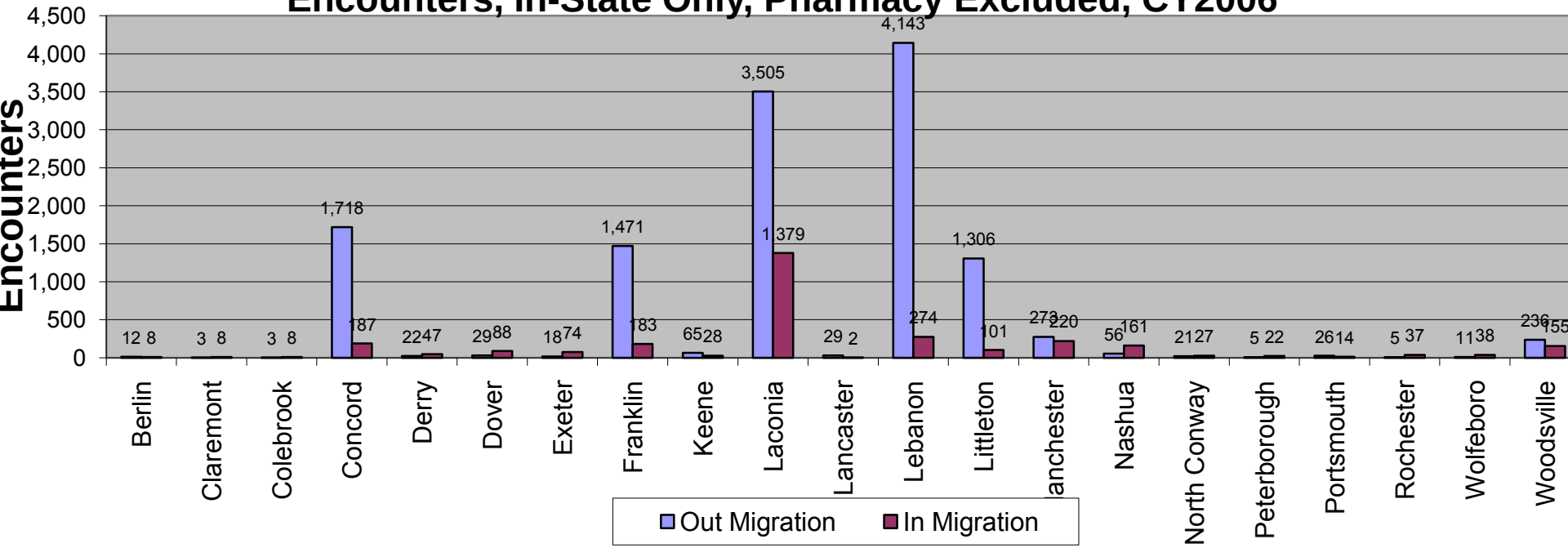
Source: http://www.nhchis.org





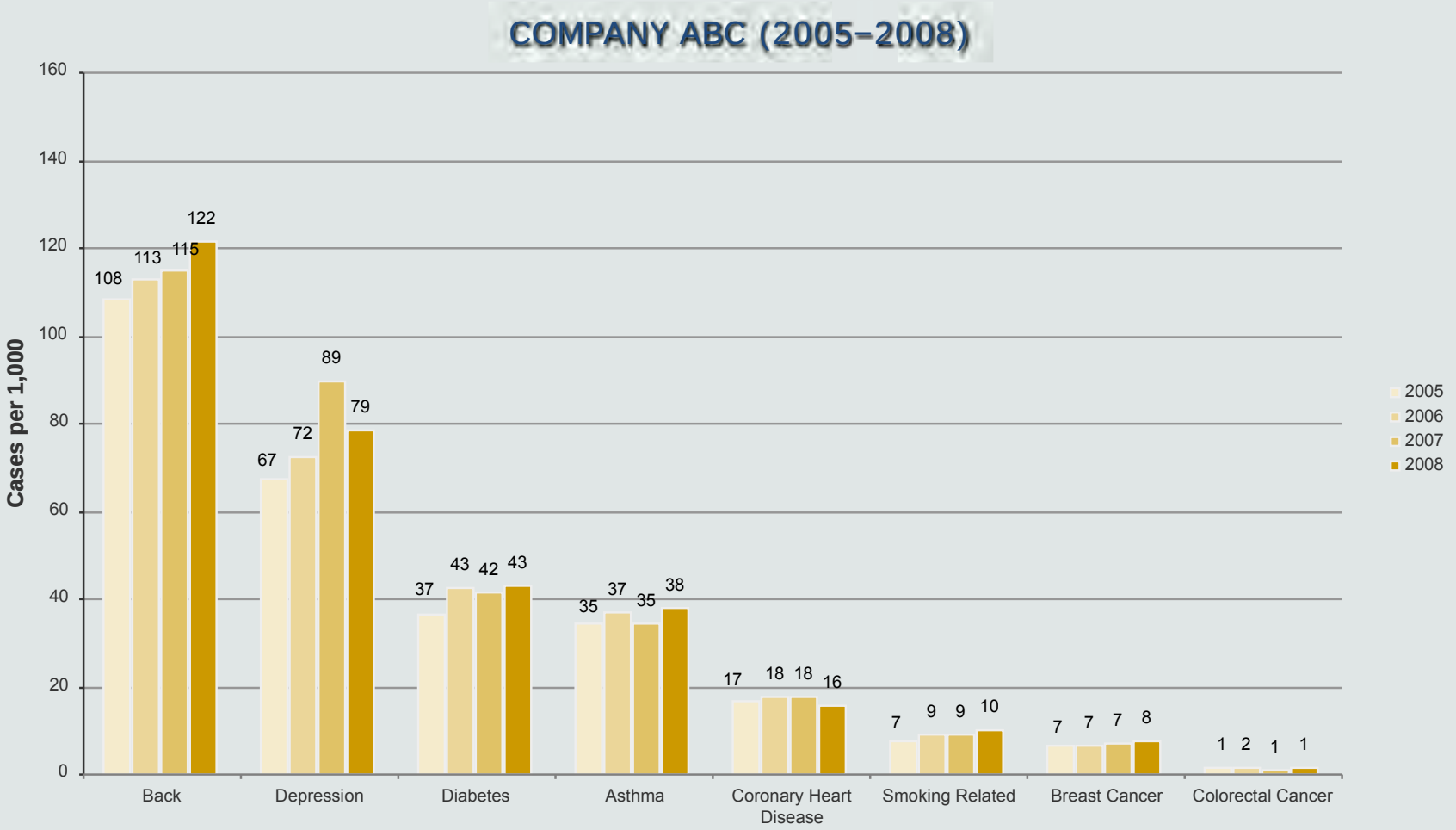
SOURCE: UNH

Figure 3c: Plymouth Out Migration vs. In Migration, Outpatient Facility Encounters, In-State Only, Pharmacy Excluded, CY2006



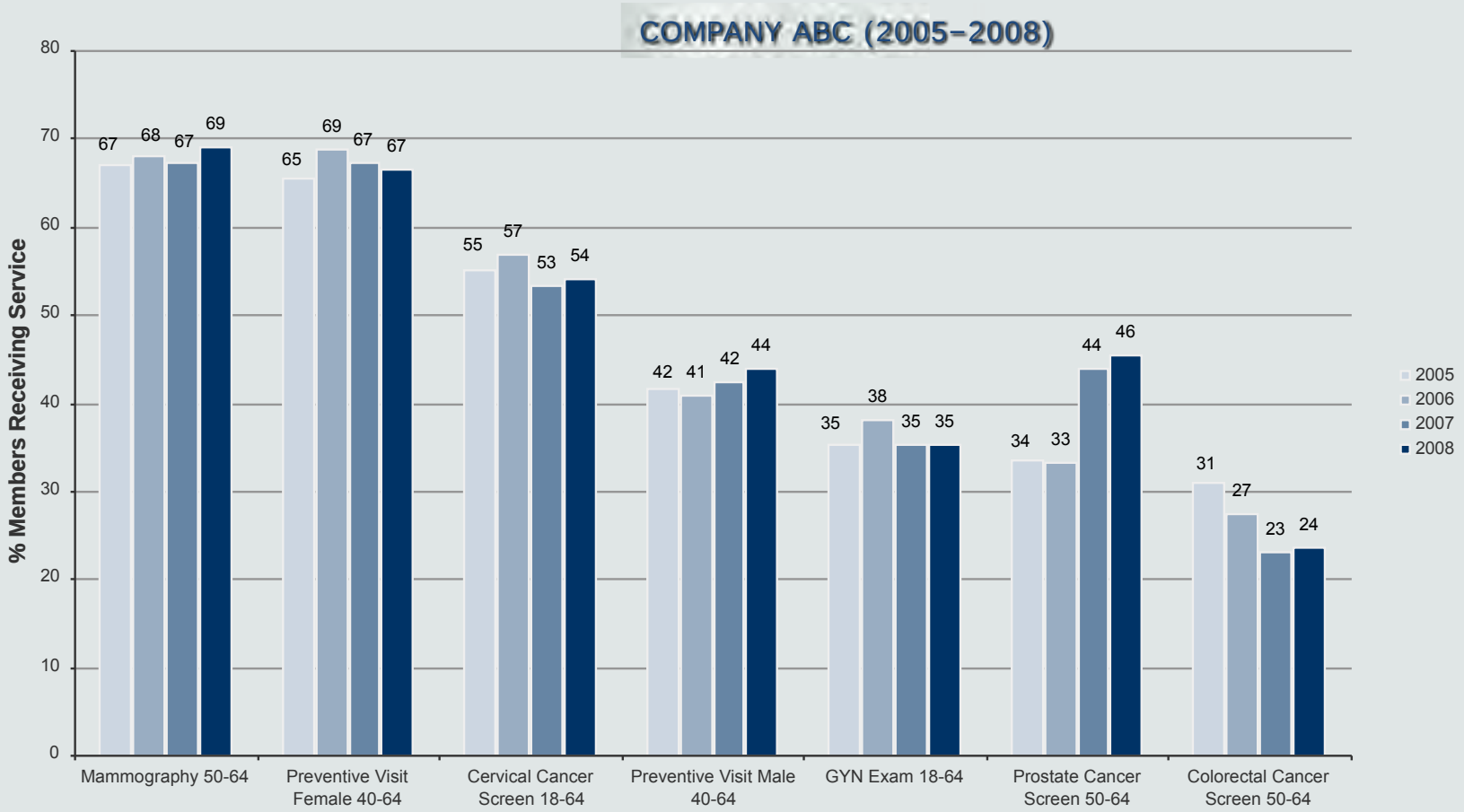
SOURCE: UNH

Prevalence of Selected Conditions



SOURCE: NHPGH

Percent Members Receiving Preventive Services



SOURCE: NHPGH

NH Medical Home Pilot Preliminary Indicators Report
Total Costs by Practice Site vs. Non-Medical Home Sites
July 2009-March 2010 DOS – Commercial Payers

PRACTICE	TOTAL COST	TOTAL PMPM
Site #1	$1,664,702	$81
Site #2	$2,666,268	$104
Site #3	$3,596,334	$147
Site #4	$4,949,153	$74
Site #5	$4,314,375	$135
Site #6	$1,820,459	$148
Site #7	$911,153	$116
Site #8	$1,236,719	$87
Site #9	$2,628,653	$93
Total	$23,787,817	$103
Non-Medical Home Sites	$1,010,233,075	$144

*Notes: Excludes pharmacy, preliminary, not risk adjusted, they were not annualized, and they were further not adjusted for contractual differences

Vermont Utilization Measures -2008 Commercial

Burlington Hospital Service Area: Commercially Insured Under Age 65

Burlington Hospital Service Area Data						Vermont			New Hampshire	Maine	Tri-State Combined
Utilization Measure	Average Members	Number of Services or Procedures	Adj. Rate PER 1,000	95% LCL	95% UCL	Highest VT HSA	Lowest VT HSA	Adj. Rate PER 1,000	Adj. Rate PER 1,000	Adj. Rate PER 1,000	Adj. Rate per 1,000
Computerized Tomography (CT)	91,200	5,085	65.6	63.8	67.3	100.9	63.3	75.86	82.03	85.02	84.8
Magnetic Resonance Imaging (MRI)	91,200	5,180	57.9	56.2	59.4	73.0	53.3	62.39	81.06	68.40	69.5
Inpatient Hospitalizations	91,200	4,025	44.3	42.9	45.7	63.9	41.2	48.07	53.65	51.35	51.3
Inpatient Readmissions Within 30 Days	91,200	302	3.38	3.01	3.79	5.13	3.27	4.73	5.67	6.15	5.78
Inpatient Hospitalizations for Ambulatory Care Sensitive Conditions	91,200	175	1.96	1.68	2.27	6.98	1.96	2.94	4.36	3.57	3.99
Outpatient Emergency Department Visits	91,200	11,478	125.1	122.8	127.4	267.7	125.1	183.15	291.67	245.38	218.2
Potentially Avoidable Outpatient Emergency Department Visits	91,200	1,478	16.1	15.2	16.9	50.8	14.1	38.74	63.35	44.91	41.5
Non-Hospital Outpatient Visits	91,200	435,716	4,799	4,784	4,813	4867	3872	4561.97	5053.43	4512	4705
Office-Clinic Visits	91,200	305,860	3,395	3,383	3,407	3683	2974	3319.45	3757.71	3254.27	3442
Chiropractic or Osteopathic Manipulation	91,200	67,250	745	739	750	745	148	622.91	707.87	875.90	767
Hysterectomy, Females Age 20-64	34,741	141	4.09	3.44	4.83	11.37	3.38	5.75	7.10	6.98	6.75
Back Surgery, Age 20-64	47,350	201	5.01	4.41	5.66	8.32	3.81	5.01	5.81	5.77	5.62

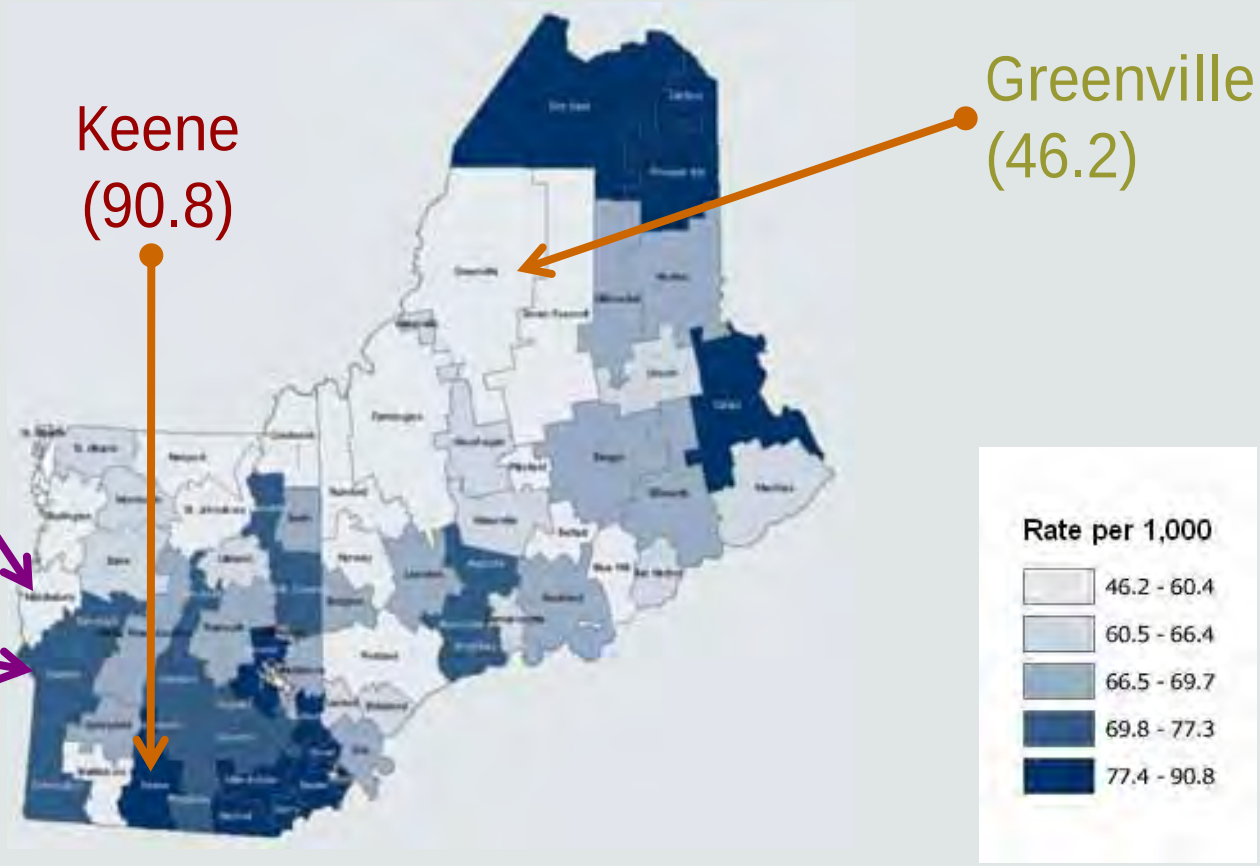
Medical Expenditures (excluding pharmacy claims for prescription drugs)					
Area	Member Months	Payments (millions)	Adjusted PMPM	Hospital/Facility Proportion	Physician/Other Proportion
Burlington HSA	1,094,378	$257.7	$240	50.7%	49.3%
Highest VT HSA	1,094,378	$257.7	$301	49.6%	50.3%
Lowest VT HSA	71,817	$20.1	$240	50.7%	30.2%
Vermont	3,262,897	$869.2	$261	59.5%	40.5%
New Hampshire	5,409,270	$1,694.2	$317	60.0%	40.0%
Maine	7,196,791	$2,067.1	$298	60.3%	39.7%
Tri-State Combined	15,868,288	$4,610.5	$291	60.1%	39.9%

http://www.bishca.state.vt.us/sites/default/files/Act49-Tri-State-Data-Compendium.pdf

Source: State of Vermont

Tri-State Variation in Health Services

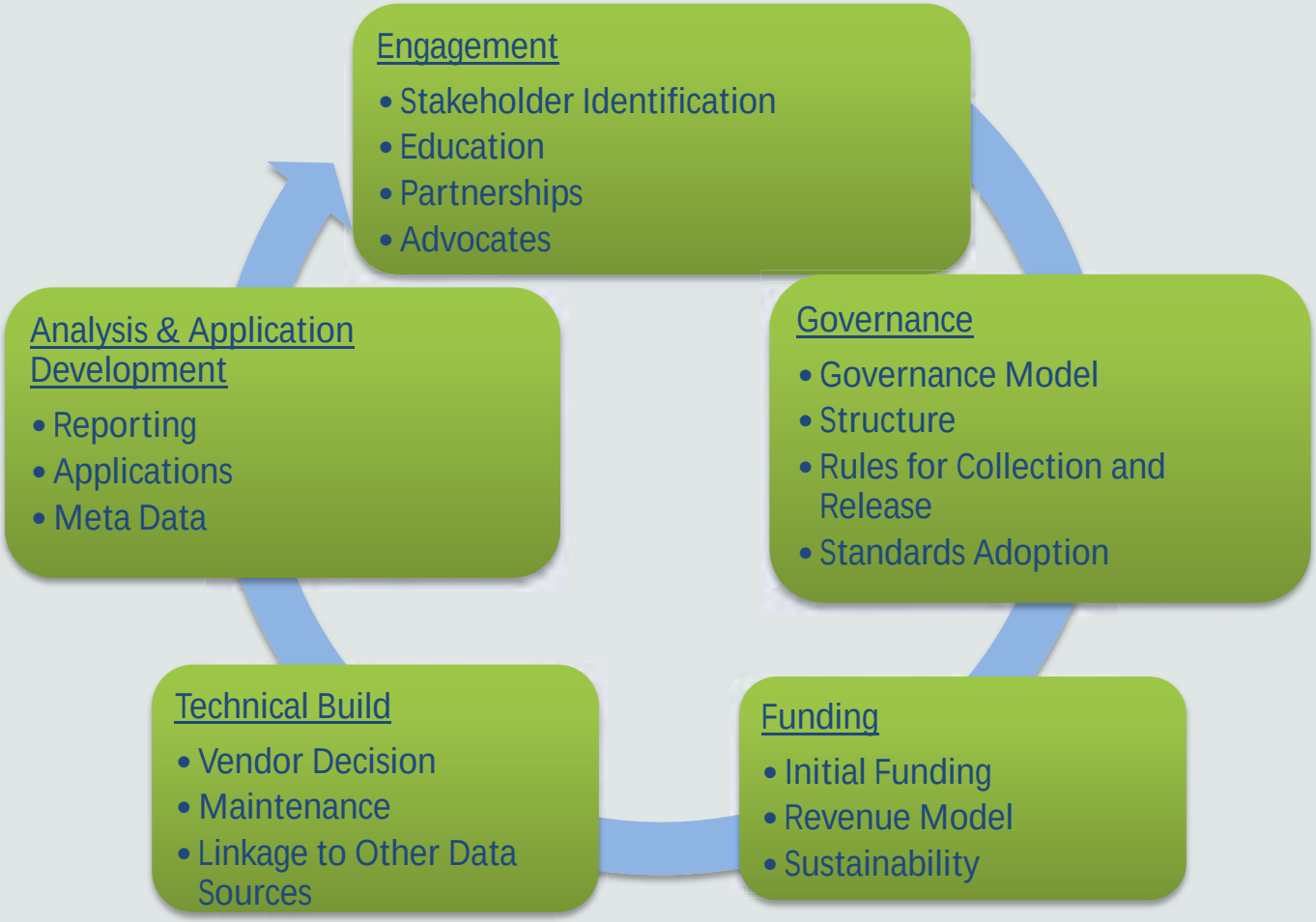
Advanced Imaging – MRIs



Source: State of Vermont

Experiences and Lessons Learned

All-Payer Road Map



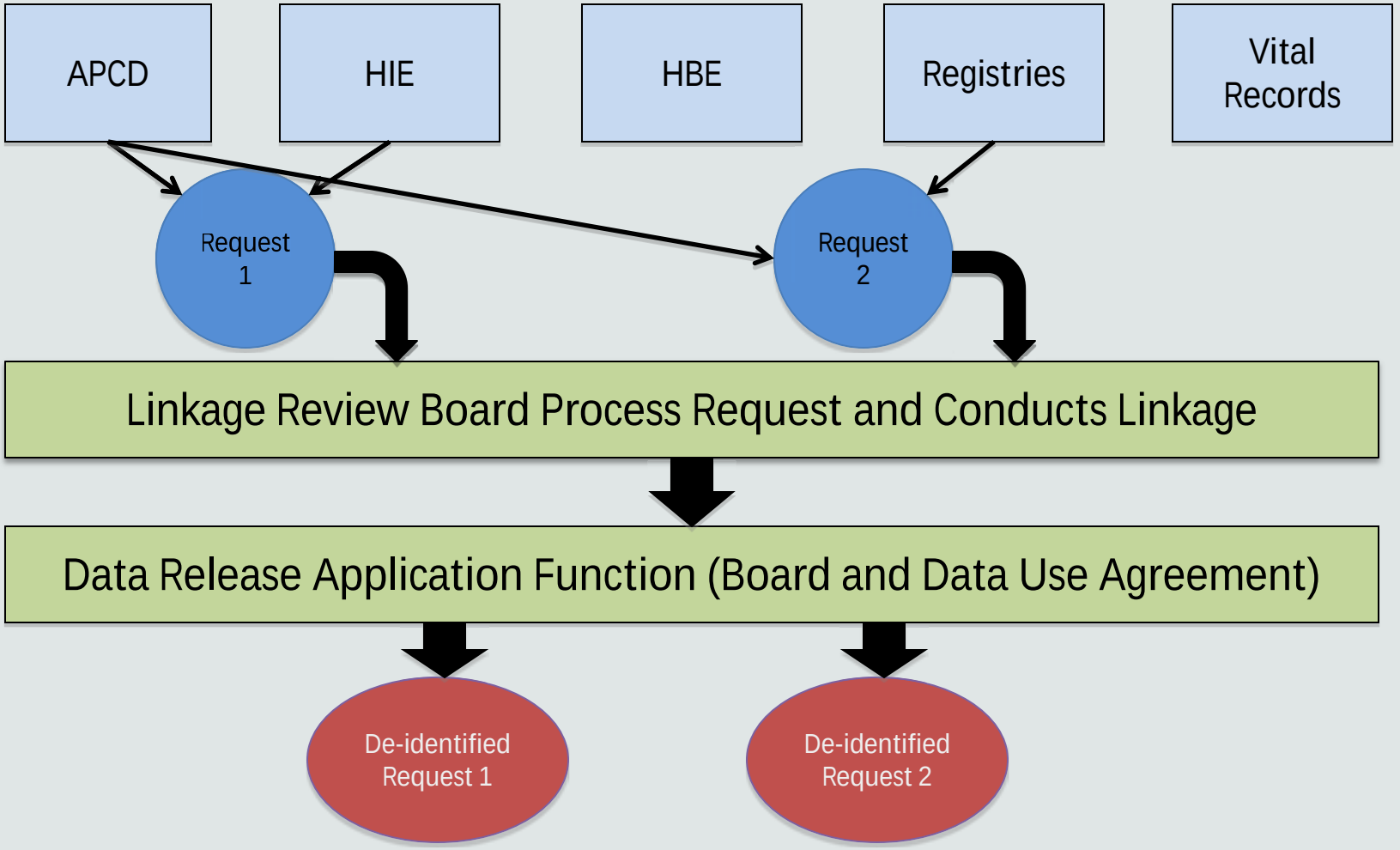
Lessons Learned

- Form Payer Relationships
- Be Transparent and Document
- Understand Uses and Limitations
- Seize Integration & Linkage Opportunities
- Develop Local User Analytic Consortiums
- Determination of Process for Data Management and Data Analytic Contracting

APCD Challenges

- Completeness of Population Captured
- Collection & Release Standardization
- Provider as Unit of Analysis
- Non-Claim Payment Adjustments
- To-be-Developed Payment Methodologies
- Consistency Amongst State Databases
- Ability to Link to Other Sources
- State Revenue Models
- Federal Engagement

Governance Model for Linkage and Release of Direct Patient Identifier Sources



APCD 2.0

- Completeness of Data Sets
- Data Collection Standards
- Data Release Standards
- Collection of Direct Patient Identifiers for Linkage Purposes
- Collection of Premium Information
- Master Provider Index
- Collection of Benefits Information

Standardization

Areas for Standardization

- Data collection / submission
  - Aligning to HIPAA Standards
  - Efficiencies in metadata, reporting, analysis, and application development
- Data release
  - Political
  - State-driven

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Standardization Work Plan

- Comparison of 6 states' APCD data elements for submission is complete; including mapping to HIPAA reference standards for each element
  - Maine
  - New Hampshire
  - Vermont
  - Minnesota
  - Tennessee
  - Massachusetts
- Pharmacy: NCPDP
- Claims and Eligibility: ANSI X12

Standardization Work Plan

- September 2010: Expert consultants reviewing proposed core set of APCD data elements
- October 2010: states will vet proposed temporary core set of elements and method to address state specific elements
- November 2010: APCD Technical Advisory Panel will vet and complete plan for advancing an APCD standard
- January 2011: X12 Introduction
- Mid-2011: NCPDP Sign Off
- 2012(?): X12 Sign Off

Cost and Funding for APCDs

Components of Cost

- Population Covered (size)
- Number of Carrier Feeds
  - Membership Thresholds
- Provider Database
- Data Release / Access
- Analytics, Reporting, Applications

Funding Models

- General Funds
- Assessments (payers, providers)
- Medicaid (various options)
- Private Foundations
- Data Sales (minimal)
- Fines for non-compliance (minimal source of revenue)
- Grants: federal, state, private
- Products/Services: Data aggregation/reporting for required HEDIS activities
- Products/Services: Data aggregation/reporting for P4P programs
- Beacon Community Grant (~~RI~~)

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Unresolved Issues

- Support for ongoing standards development and maintenance
- Increased federal/state collaborative opportunities
- National messaging on the importance of direct patient identifiers for public and community health linkage efforts
- Analytic tool development

Our Team

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Questions and Answers

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