

# Healthcare Price & Quality Transparency & State Health Data Systems

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National Association of Health Data  
Organizations

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# NAHDO's Journey.....

- Established by the Washington Business Group on Health in 1986
  - 25 state data commissions
- Shared vision:
  - Uniformity and comparability across state hospital data systems
  - Market transparency through publicly available data
  - Facilitate use of data while protecting patient privacy

# Willis Goldbeck

## NAHDO Award of Excellence, 1995



*What we assumed in 1985 about waste, about variations, about the benefits of volume in terms of practice, about the damages in terms of morbidity and mortality of not doing things correctly or in the appropriate volume, of social disparities . . . those assumptions are now known. They are true..*

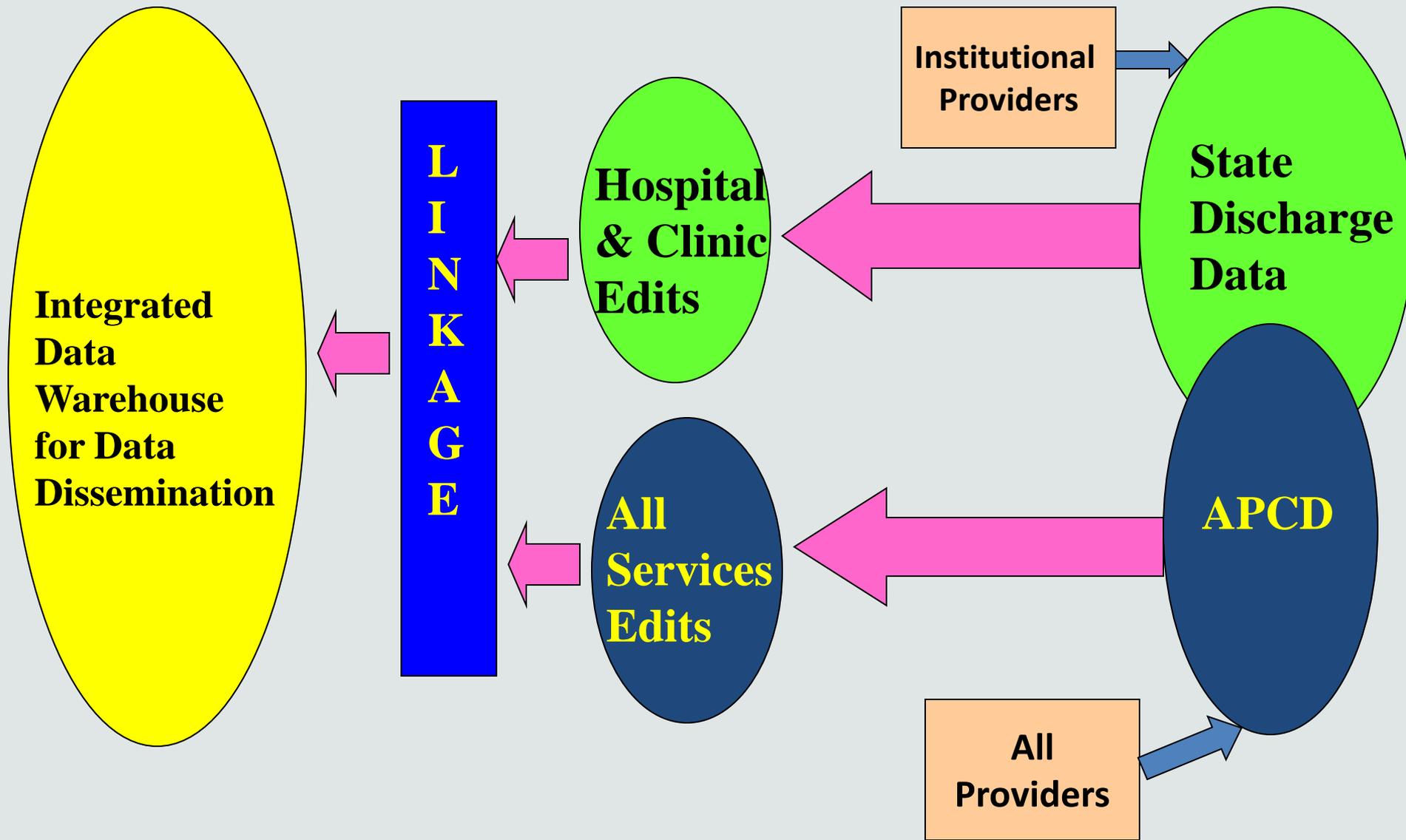
# Cornerstones of NAHDO's Mission

- Advocacy/Data Policies
- National standards for public health, research applications
- Technical assistance to improve existing and establish new data systems
- Promote use of health care data for public health and market applications

# Outline

- Statewide health care databases
  - Hospital discharge (inpatient, ambulatory surgery, Emergency Department)
  - All Payer Claims Databases
- Utility of Statewide Health Care Databases
- Lessons Learned

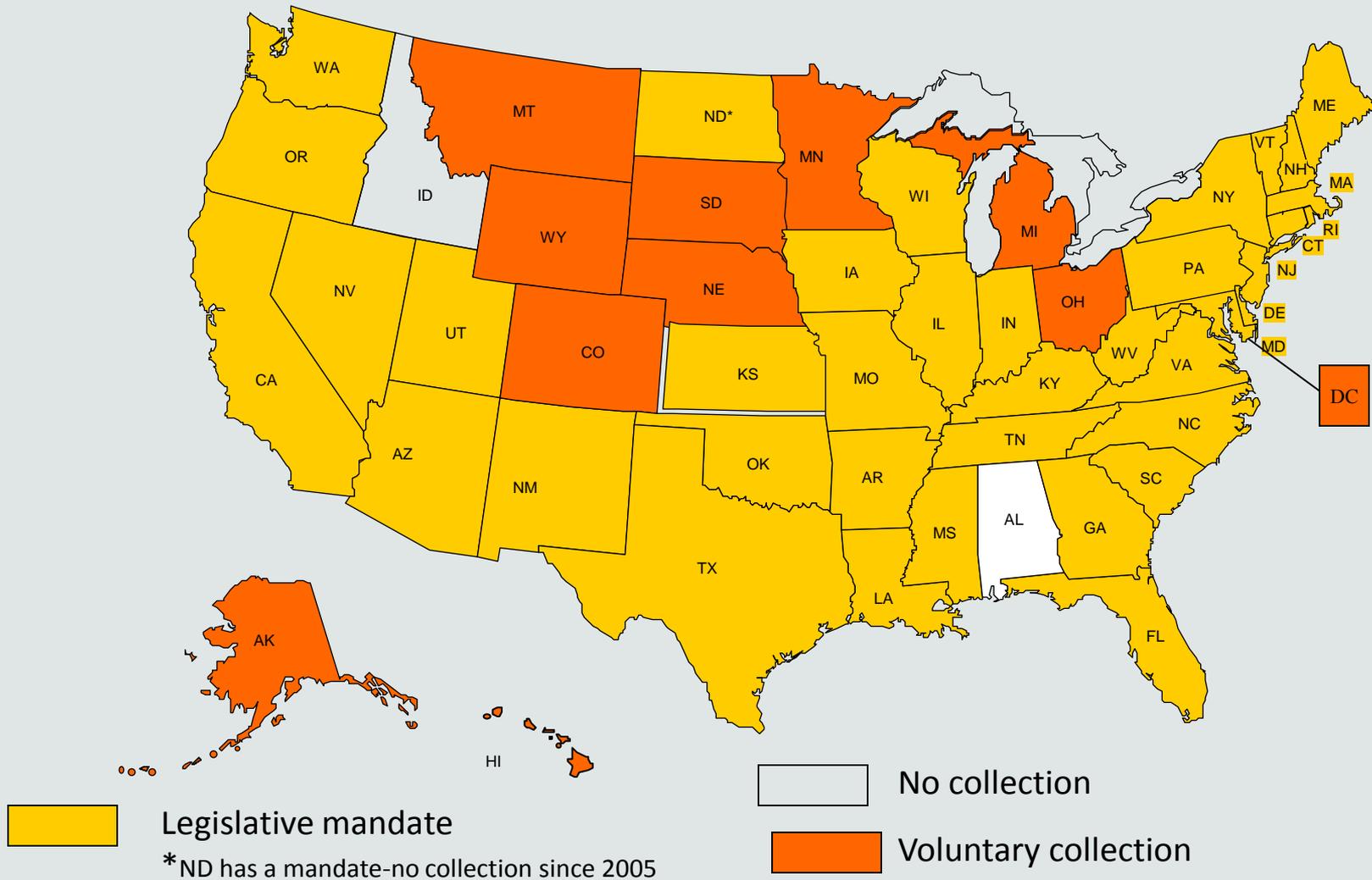
# State Health Care Data Infrastructure



Inpatient, Ambulatory Surgery, Emergency Department

# **HOSPITAL DISCHARGE DATABASES**

# Statewide Hospital Inpatient Data Programs



# Wide Range of Database Uses

(National Opinion Research Center/AHRQ/NAHDO Report)

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- Public safety, injury surveillance & prevention
- Disease surveillance, public health registries
- Health planning – CON, community needs assessments, hospital conversions / closures
- Market share analyses, hospital strategic planning
- Quality assessments and improvement, patient safety, outcomes studies
- Public reporting, informed purchasing (outcomes and charges)

# Hospital Data Bases

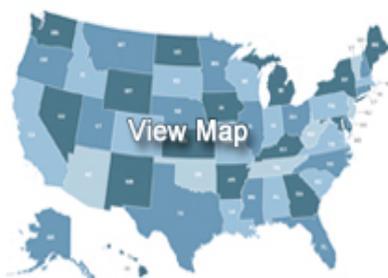
Strengths	Limitations
Full census of admitted patients	Lack of payment information
Comparable	Lack of physician, ancillary, outpatient services
Affordable	Lacks clinical results (lab, vitals)
Available	Coding practices vary across providers
Represents sickest, highest cost patients	
Robust diagnostic/procedure information	

# All-Payer Claims Databases: State Progress and Future of APCDs



## 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](mailto: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.

# Backdrop 2005-2011

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

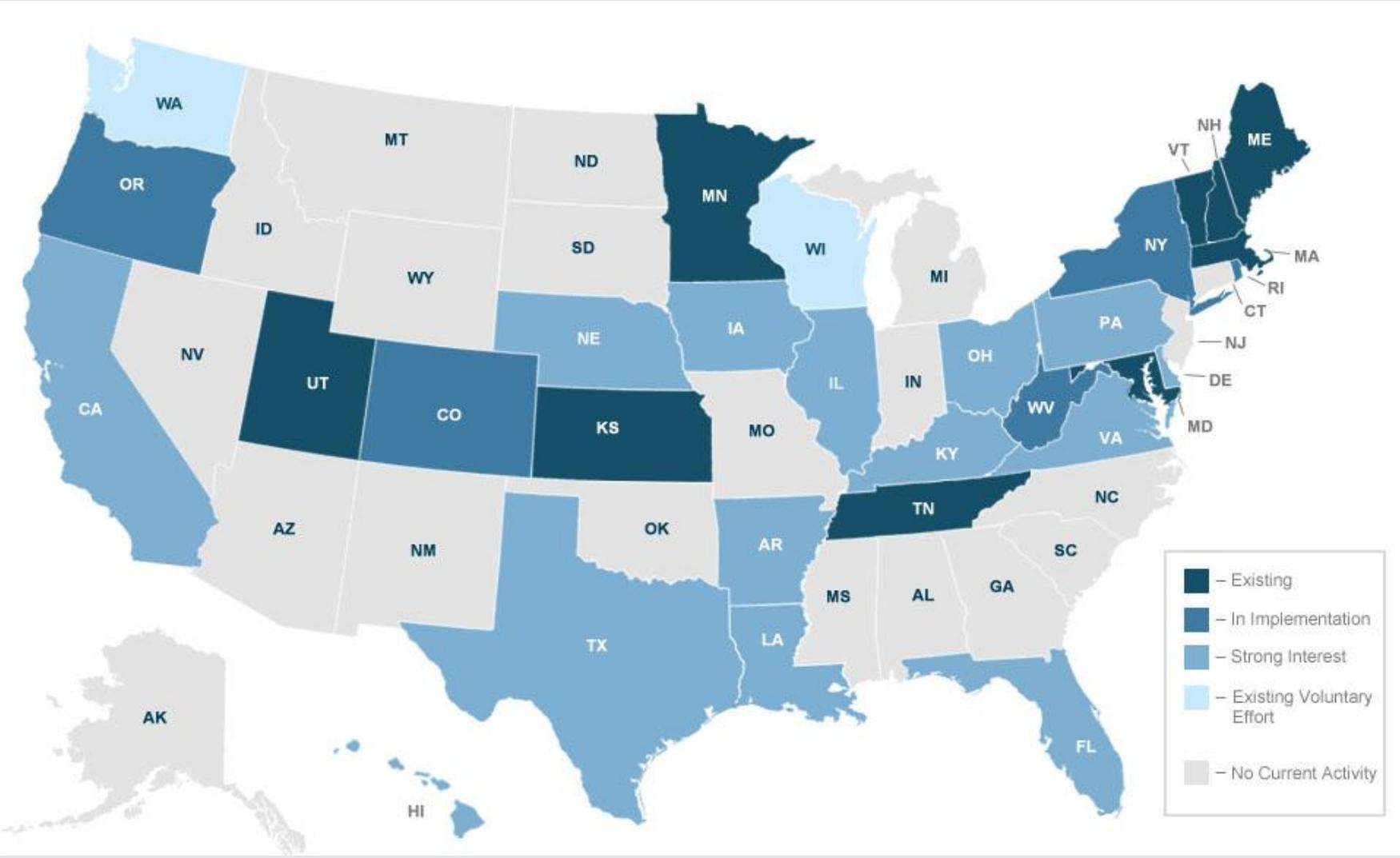
# Definition of APCDs

- 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

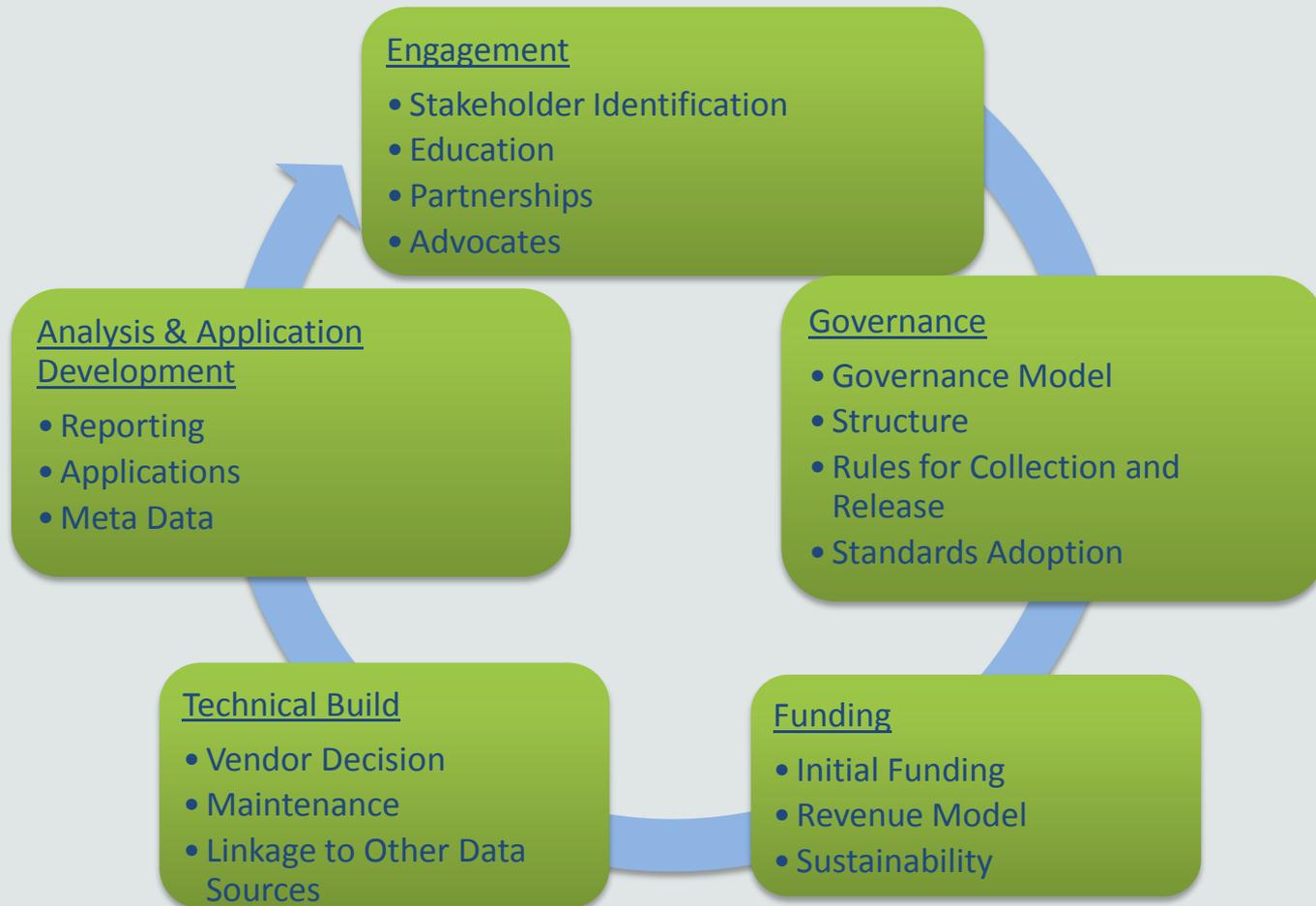
# APCDs Are About Transparency

- 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....

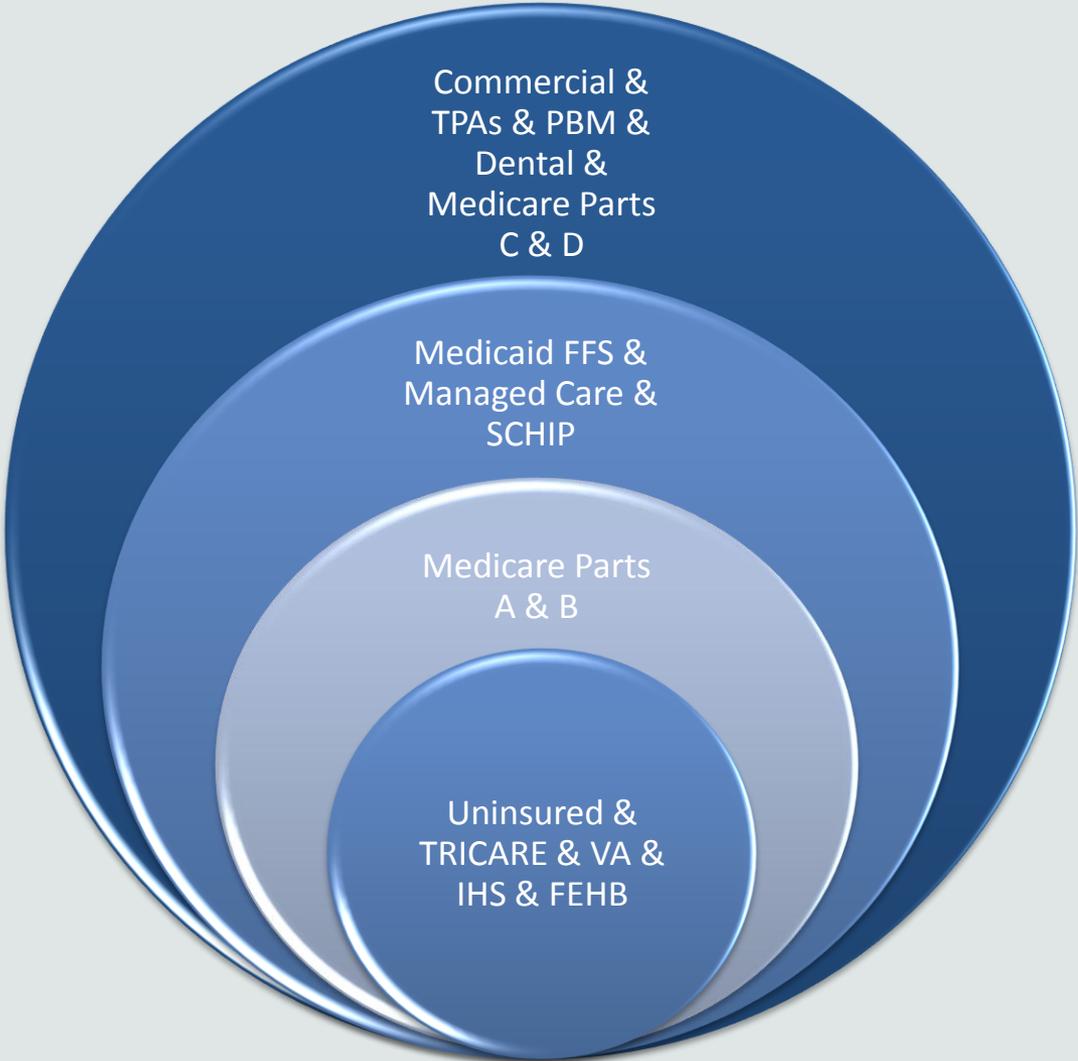
# June 2011 State Progress Map



# All-Payer Road Map



# 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*

# 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

# Usage Examples

# Audiences for APCDs

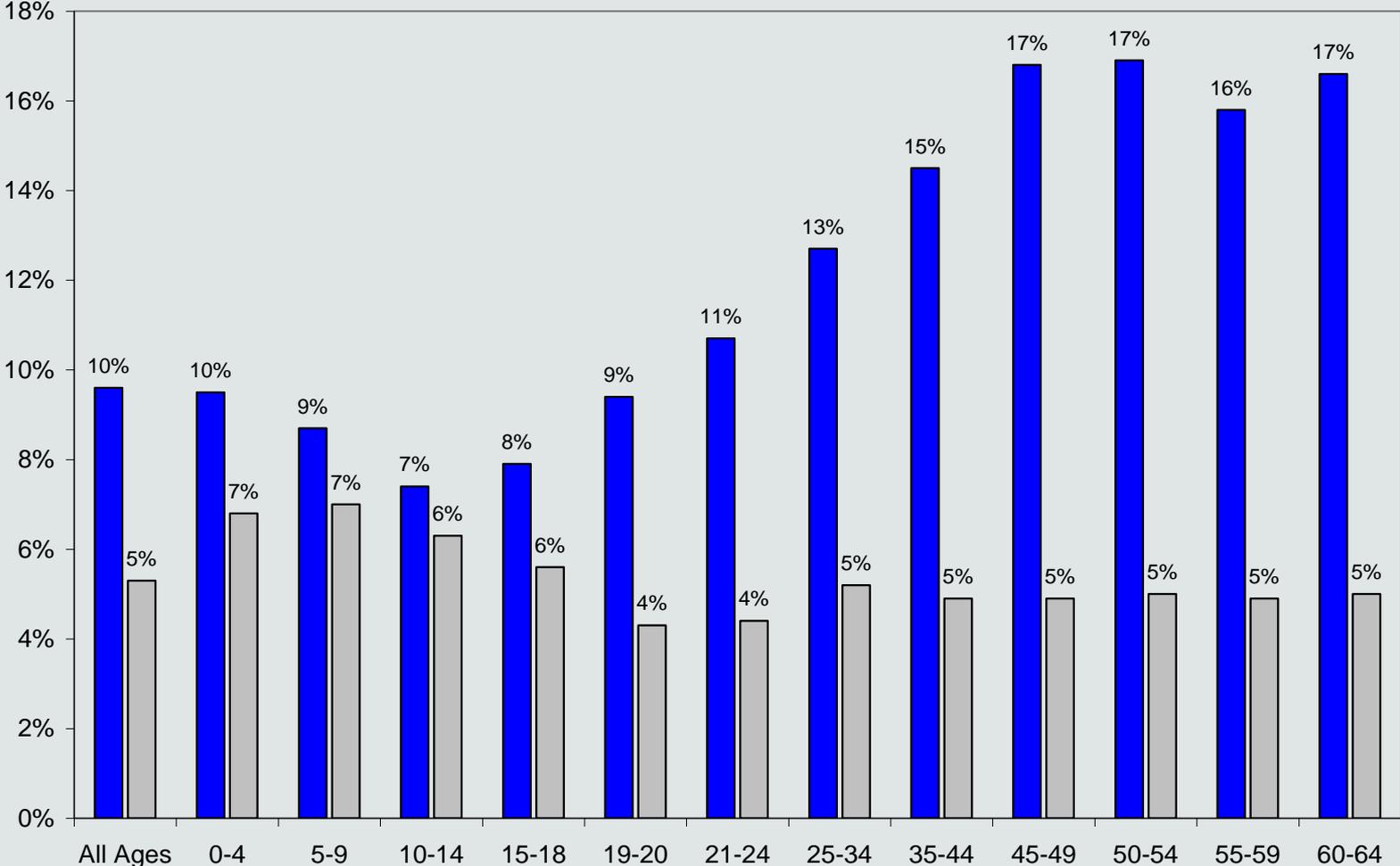
- Consumers
- Employers
- Health Plans/Payers
- Providers
- Researchers (public policy, academic, etc.)
- State government (policy makers, Medicaid, public health, insurance department, etc.)
- Federal government

# The Vermont Healthcare Claims Uniform Reporting and Evaluation System (VHCURES)

The following applications for limited use healthcare claims research data sets to support research and studies have been approved to date:

- [2010-01 Modeling Accountable Care Organizations](#)
- [2010-02 How Affordable Are State Coverage Plans?](#)
- [2010-03 Act 128 Health System Reform Design](#)
- [2011-04 JFO Catamount Health Study](#)
- [2011-05 UVM Center for Clinical Translational Studies](#)

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



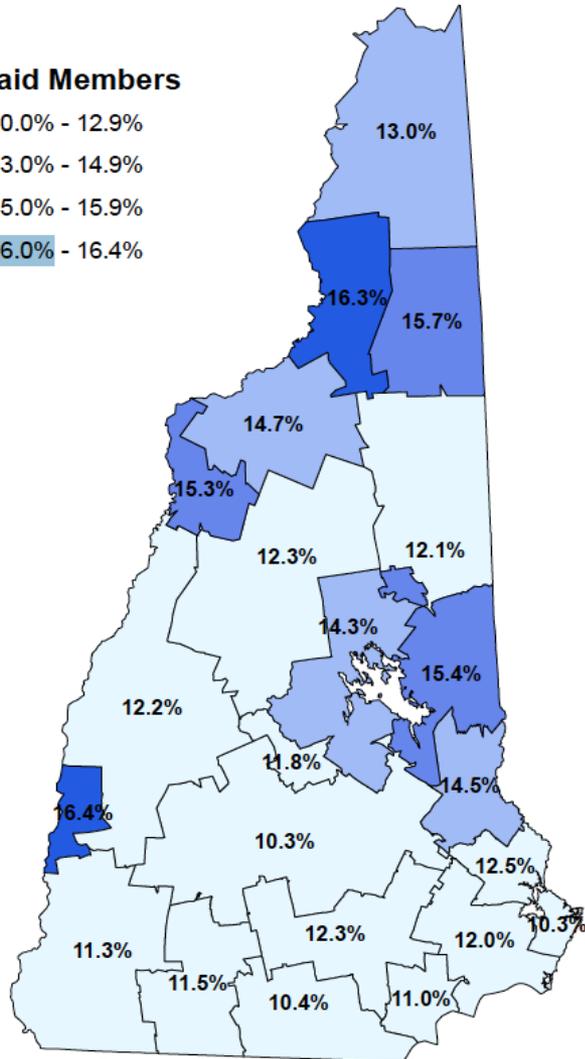
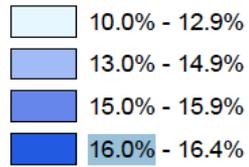
SOURCE: NH DHHS

■ Medicaid-only    □ CHIS Commercial

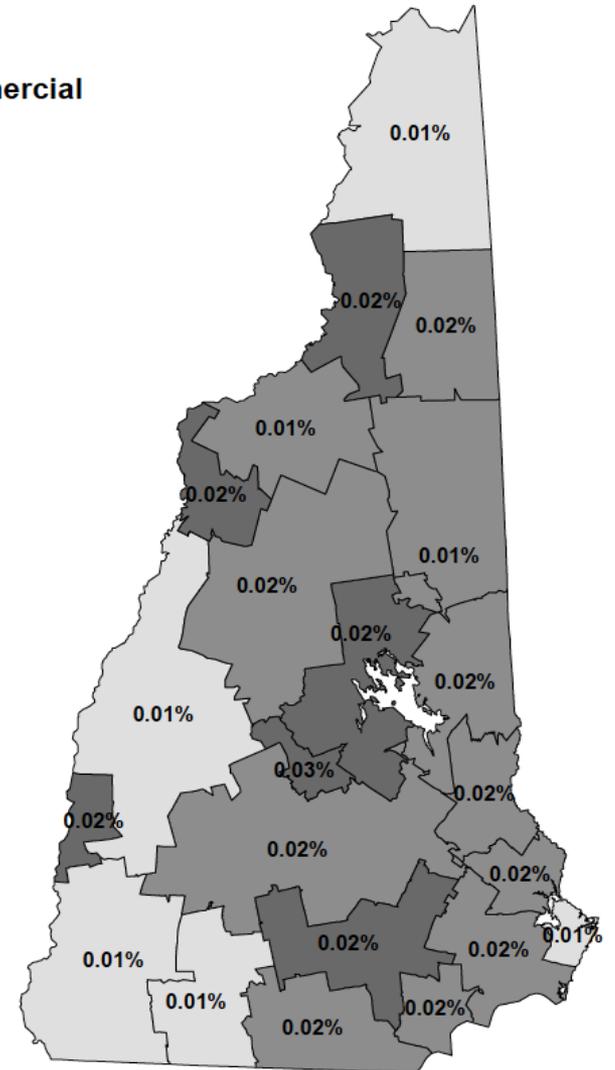
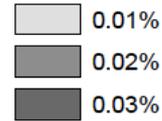
# COPD Prevalence

Rates Standardized for Age

## Medicaid Members



## CHIS Commercial



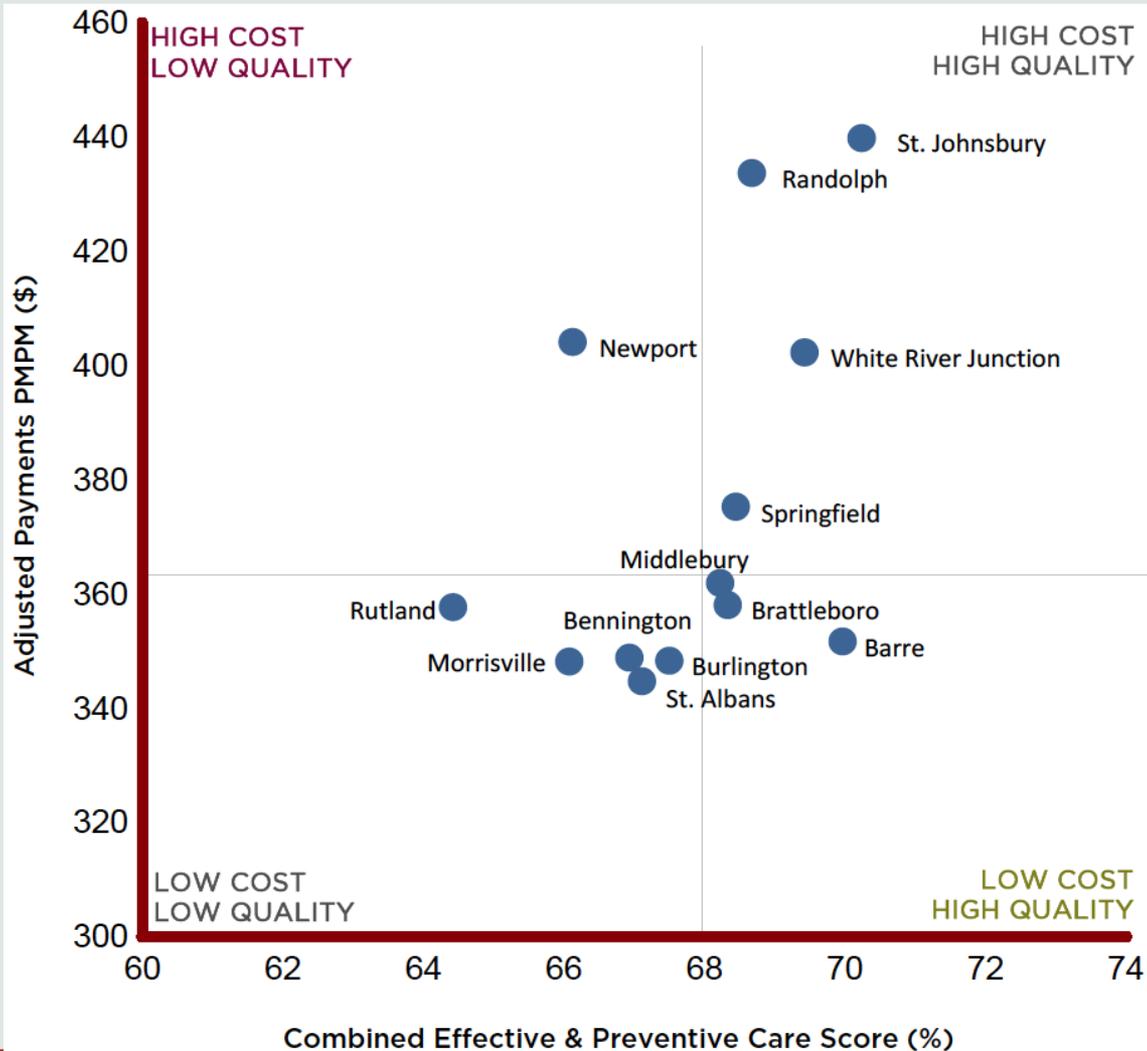
Source: NH DHHS

# 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

SOURCE: VT BISHCA

# 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.

SOURCE: VT BISHCA

# 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 DATA

# Medicaid Payment Rate Benchmarking

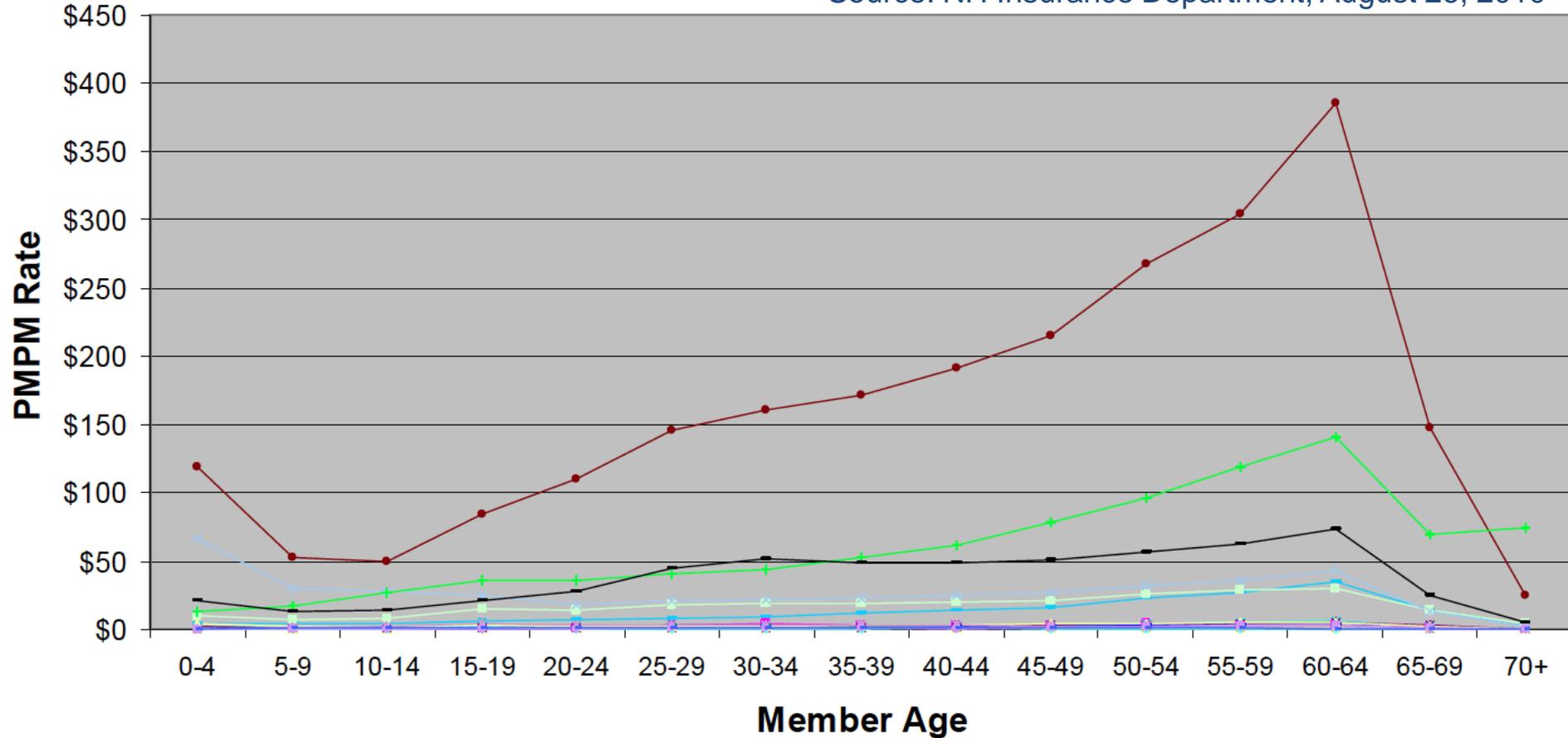
## Average Payment Including Patient Share, 2006

<b>Procedure Code</b>	<b>Health Plan 1</b>	<b>Health Plan 2</b>	<b>Health Plan 3</b>	<b>NH Medicaid</b>
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

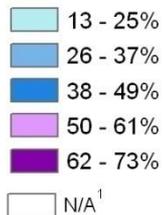
# 2009 PMPM Rates by Age Group and Service Type

Source: NH Insurance Department, August 26, 2010

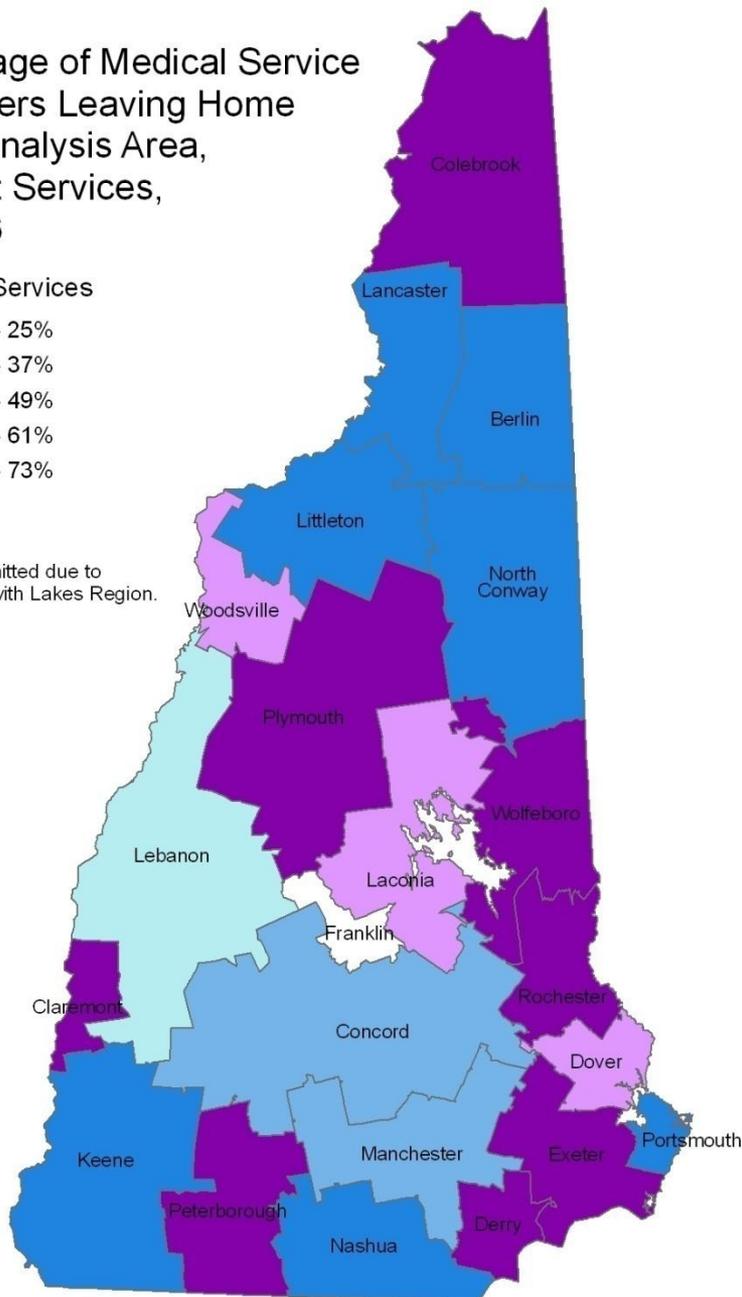


# Percentage of Medical Service Encounters Leaving Home Health Analysis Area, Inpatient Services, CY 2006

## Percent of Services

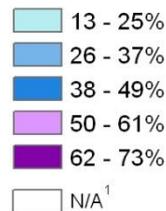


<sup>1</sup>Franklin HAA omitted due to hospital merger with Lakes Region.

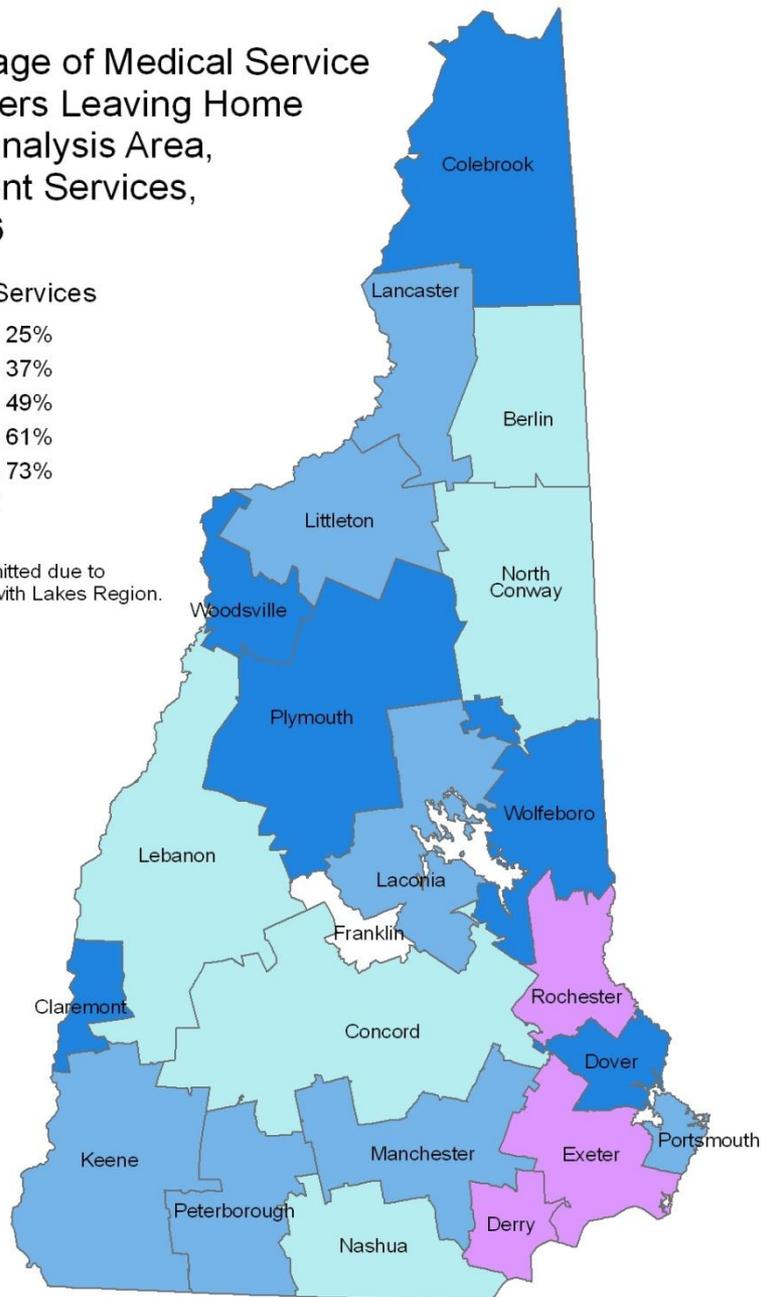


# Percentage of Medical Service Encounters Leaving Home Health Analysis Area, Outpatient Services, CY 2006

## Percent of Services



<sup>1</sup>Franklin HAA omitted due to hospital merger with Lakes Region.



***New Hampshire Purchasers Group on Health***  
***Prepared by UNH Center for Health Analytics***

***Measurement Year=2008 & 2009***

***Report Title: Generic Use by Pharmacy Cost***

***Type of Payer=All***  
***Type of Group=All***  
***Type of Product='Total'***

Generic or Brand	2008					2009					PMPM Percent Change
	# of Fills	PCT VOL	Total Cost	PCT COST	PMPM Cost	# of Fills	PCT VOL	Total Cost	PCT COST	PMPM Cost	
Brand Name	1,399,443	36%	\$241,373,584	76%	\$184	1,317,562	34%	\$247,699,518	76%	\$201	8.8%
Generic	2,533,508	64%	\$77,503,920	24%	\$32	2,526,764	66%	\$77,923,820	24%	\$33	1.3%
	3,932,951	100%	\$318,877,504	100%		3,844,326	100%	\$325,623,337	100%		

# NH Medical Home Pilot Preliminary Indicators Report

## Total Costs by Practice Site vs. Non-Medical Home Sites

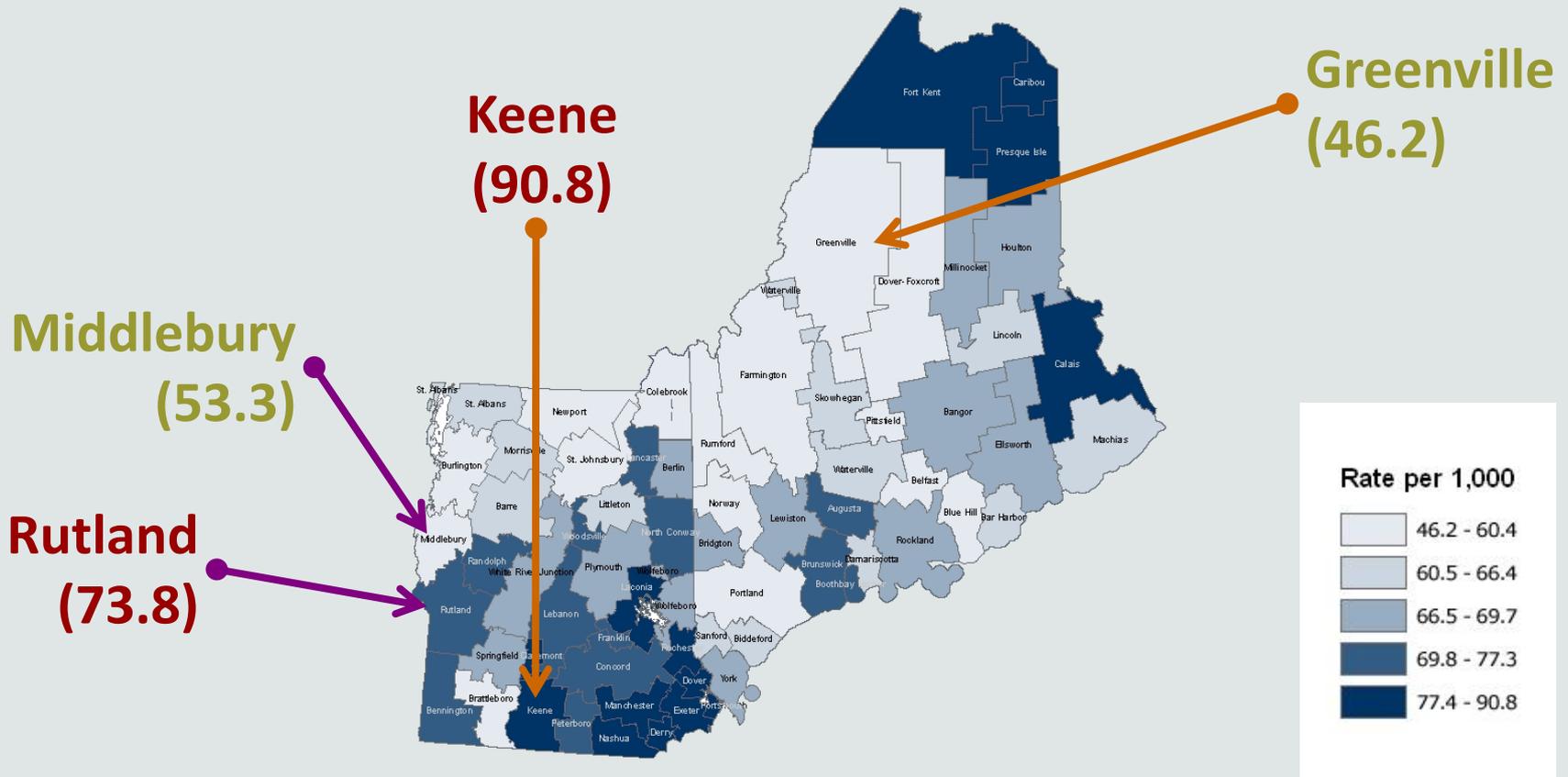
### July 2009-March 2010 DOS – Commercial Payers

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

# Tri-State Variation in Health Services

## Advanced Imaging – MRIs



Source: State of Vermont

# APCD Challenges

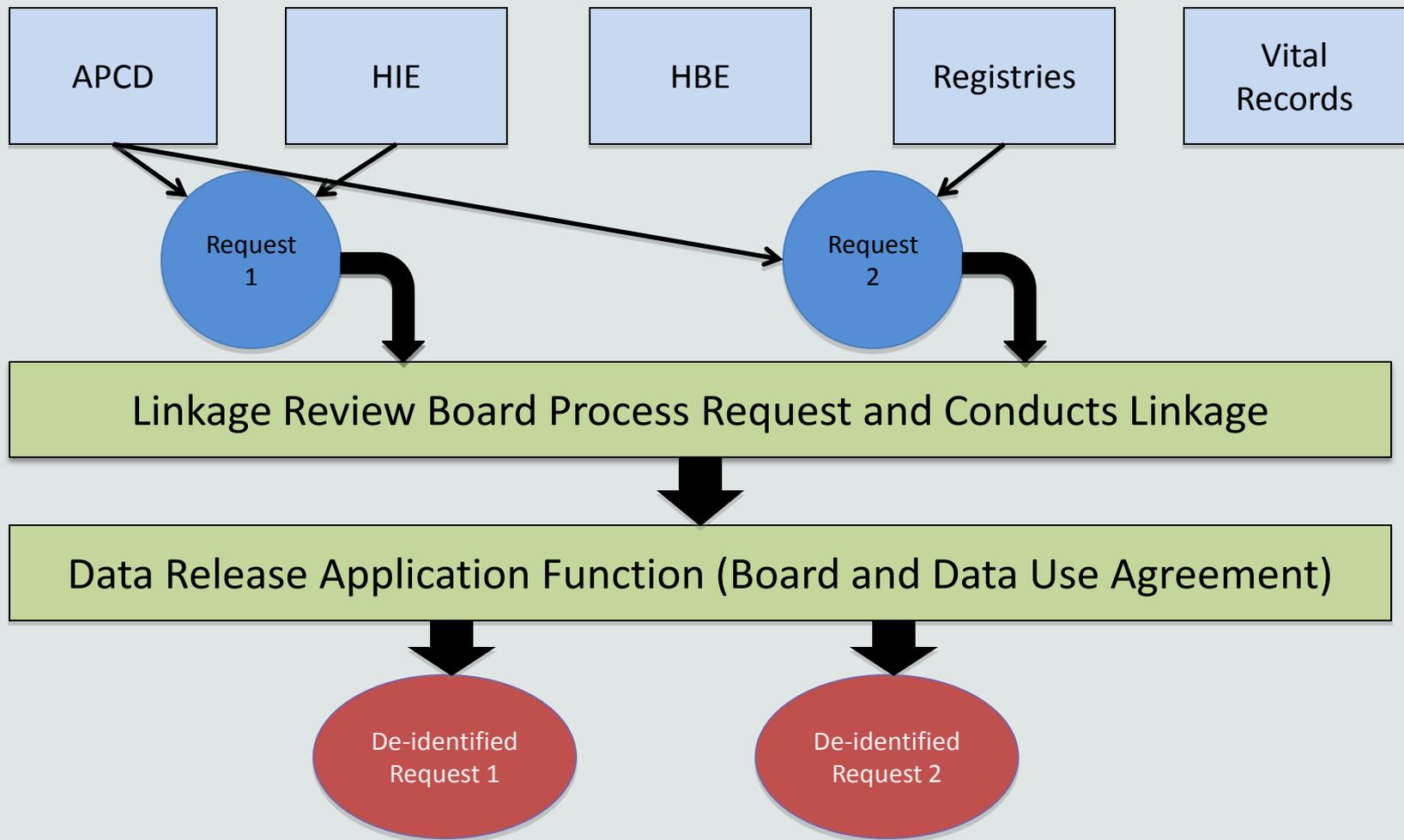
- Completeness of Population Captured
- Collection & Release Standardization
- Provider as Unit of Analysis
- Non-Claim Payment Adjustments
- To-be-Developed Payment Methodologies
- Consistency Amongst State Databases
- Ability to Link to Other Sources
- State Revenue Models
- Federal Engagement

# APCD 2.0

# 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
- Collection of Supplemental Financial File
- Collection of Benefits Information
- Master Provider Index

# Proposed Governance Model for Linkage of Direct Patient Identifiers and Data Release



# Lessons Learned

- Form Data Supplier Relationships
- Be Transparent and Document
- National standards reduce data supplier burden and improve comparability
- Seize Integration & Linkage Opportunities
- Develop Local User Analytic Consortia
- Utility and quality of data improve with broad access and use of the databases

*Data reporting programs take time.*

*Investing today yields tomorrow's essential information.*

# Discussion

## Contact Information

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