

The Rhode Island APCD

Analytics Approach for State Power Users



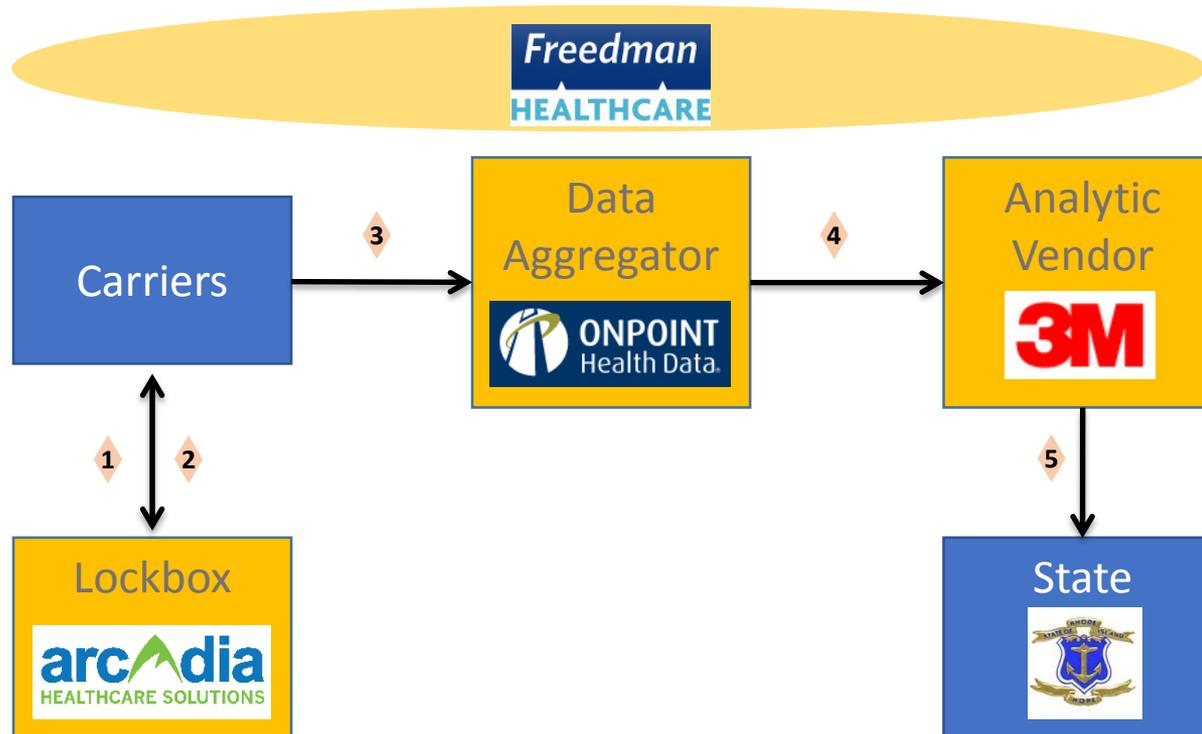
Origins of RI APCD

- Strong interest in using data – small state, early support for EHRs, PCMH
- Silo'd state agency data collection – Medicaid data warehouse not optimized for analysis, hospital discharge data limited in scope
- APCD data collection funding first requested as part of HIX development -- driving change overall, supplemented by Rate Review
- APCD = **4 agency collaboration** so need to address diverse needs all at once
- Types and nature of analysis varied by state agency – ***something for everyone***

Structure

- Central repository of all claims, 15+ feeds
- Includes commercial, **self-insured**, Medicare, Medicaid for entities >3000 lives
- Membership, medical & pharmacy claims, providers, 2011-onward
- **No PII**- elaborate privacy scheme, opt-out
- Value adds: risk adjustment, episode grouper
- Analytic layer with BI for flexible analysis and visualization

Data Collection and Analysis Process



1. Carriers send identifiable member information to Lockbox
2. Lockbox attaches unique member ID to all members, and returns to Carriers
3. Carrier uses this unique member ID to submit all healthcare claims to data aggregator (no identifiable information)
4. Data aggregator compiles all claims from all carriers and sends quarterly extract to analytic vendor
5. Analytic vendor produces reports and sends to state

Role of APCD Reporting

- Provide essential all-payer risk adjustment
- Longitudinal tracking of health data trends
- Identify cost drivers and strategies for containment
- Enable consumer decision support
- Evaluate access and barriers to care
- Measure the effect of reforms on Rhode Island's health care system
- Analyze population health trends and monitor public health indicators
- Identify areas for improvement in spending, disease management, and program effectiveness

Project Timeline

- Law passed in 2008
- First real funding opportunity in late 2012
- Long stakeholder review process with ACLU & others 11/2012- 5/2013
- Regs approved in 7/2013
- First data submitted 5/15/2014 (membership)
- Claims data due 6/16/2014, 10/15/2014, then qtrly
- Analytic vendor 3M now producing first real reports

Data Flow Timeline

50 base reports in *five packages*:

1. 12/2014: First statewide summary data
2. 4/2015: TCOC, utilization, readmissions, payment variation
3. 6/2015: chronic disease, hospital cost and quality, Medicaid utilization, alternative payment
4. 9/2015: behavioral health, opioid/lead, end of life
5. 12/2015: referral patterns, substance abuse, duals

3-5 also include reports specific to agency needs:
Health, OHIC, EOHHS, Exchange

RIAPCD Analytic Approach

- **Separate aggregation and analytics-** pros and cons
- **Self-serve** approach using Business Intelligence system (3M flavor of Microstrategy)
- 3M Episode Groupers and Risk Adjustment
- State analysts as Power Users, Users
- Validate at every juncture!



New Dashboard

Create... ▶

Search

Shared Reports

Baseline

Data Info

RIAPCD

Base Reports

Dashboards

Payer Validation

Reporting Package

Reporting Package

RI Report Package

Linked Reports

RIAPCD

My Reports

My Objects

History List

My Subscriptions

Name	Owner	Modified	Description	Actions
Report 10: Preventative Procedures	Administrator	9/28/15 11:28:30 AM	Rate of preventative procedures by geographic area an...	
Report 3: CTC	Administrator	8/31/15 11:32:40 AM	undefined	
Report 3: CTC Analysis Cohort	Administrator	8/31/15 11:32:40 AM	undefined	
Report 3: CTC Indicator Dashboard	Administrator	10/7/15 9:10:34 AM	undefined	
Report 4: Total Cost of Care	Administrator	10/2/15 12:56:47 PM	undefined	
Report 5: Inpatient Payment Variation	Administrator	9/28/15 12:19:46 PM	Differences in payment totals by payer; uses 3M APRDR...	
Report 5: Outpatient Payment Variation	Administrator	9/29/15 4:53:34 PM	Differences in payment totals by payer. Uses 3M EAPGs...	
Report 6: 3M Potentially Preventable Rea...	Administrator	9/28/15 12:12:18 PM	Detailed report on readmissions	
Report 6: All Cause Readmissions	Administrator	9/25/15 2:47:52 PM	Detailed report on readmissions	
Report 7: Churn Report	Administrator	8/31/15 11:38:11 AM	Detailed enrollment report with ability to view how pop...	
Report 7: Churn Report Detail	Administrator	8/31/15 11:38:11 AM	Detailed enrollment report with ability to view how pop...	
Report 8: Emergency High Utilizers	Administrator	8/31/15 11:38:11 AM	Detailed report showing differences among populations ...	
Report 8: Inpatient High Utilizers	Administrator	8/31/15 11:38:11 AM	Detailed report showing differences among populations ...	
Report 8: Pharmacy High Utilizers	Administrator	8/31/15 11:38:11 AM	Detailed report showing differences among patients hav...	
Report 9: Out of State Healthcare Migrati...	Administrator	8/31/15 11:38:11 AM	undefined	



Report Objects ? X

- ▶ Claim
- ▶ Person Ethnicity
- ▶ Person Gender
- ▶ Person Line Of Business
- ▶ Person PPA Age Group
- ▶ Person Payer Family
- ▶ Person SES Category State
- ▶ Person ZIP Code
- ▶ Service Month-Year
- ▶ Service Year
- fx Count (Claim)
- fx Percent to Total (Count (Claim))

12 item(s) found

Report Objects

- All Objects
- Notes
- Related Reports

REPORT DETAILS ? X

Report Filter:
{(ICD 9 Dx) = 08881:Lyme disease} And {(Person State) = RI:Rhode Island}

View Filter:
{Service Year} = 2011, 2012, 2013, 2014

VIEW FILTER Add Condition X Clear All Auto-Apply changes ? X

X Service Year In List (2011, 2012, 2013, 2014)

Data rows: 770 | Data columns: 2

Person ZIP Code	Service Year	Person SES Category State	Percent to Total (Count (Claim))	Count (Claim)
02879 Wakefield	2011	Mid-High SES	5.58%	606
02816 Coventry	2013	Low SES	5.37%	674
02816 Coventry	2011	Low SES	5.16%	561
02857 North Scituate	2013	Mid-High SES	4.98%	626
02852 North Kingstown	2011	Mid-High SES	4.95%	538
02879 Wakefield	2014	Mid-High SES	4.66%	667
02865 Lincoln	2013	Average SES	4.63%	582
02857 North Scituate	2011	Mid-High SES	4.61%	501
02879 Wakefield	2012	Mid-High SES	4.58%	642
02852 North Kingstown	2013	Mid-High SES	4.57%	574
02816 Coventry	2012	Low SES	4.56%	639
02857 North Scituate	2012	Mid-High SES	4.50%	631
02879 Wakefield	2013	Mid-High SES	4.42%	555
02816 Coventry	2014	Low SES	4.37%	625
02852 North Kingstown	2012	Mid-High SES	4.33%	607
02852 North Kingstown	2014	Mid-High SES	4.29%	613
02857 North Scituate	2014	Mid-High SES	4.03%	577
02891 Westerly	2011	Low SES	3.90%	424
02891 Westerly	2012	Low SES	3.73%	522
02896 North Smithfield	2013	Average SES	3.66%	460
02818 East Greenwich	2011	Mid-High SES	3.56%	387
02891 Westerly	2013	Low SES	3.50%	440
02886 Warwick	2014	Low SES	3.48%	498
02864 Cumberland	2014	Average SES	3.44%	492
02891 Westerly	2014	Low SES	3.31%	474
02882 Narragansett	2012	Mid-High SES	3.23%	452
02886 Warwick	2012	Low SES	3.17%	444
02818 East Greenwich	2012	Mid-High SES	3.11%	436
02865 Lincoln	2012	Average SES	3.05%	427
02882 Narragansett	2011	Mid-High SES	3.03%	329
02919 Johnston	2014	Low SES	2.98%	426
02818 East Greenwich	2013	Mid-High SES	2.97%	373
02864 Cumberland	2013	Average SES	2.95%	370
02886 Warwick	2011	Low SES	2.93%	318

Total Cost of Care

Filters

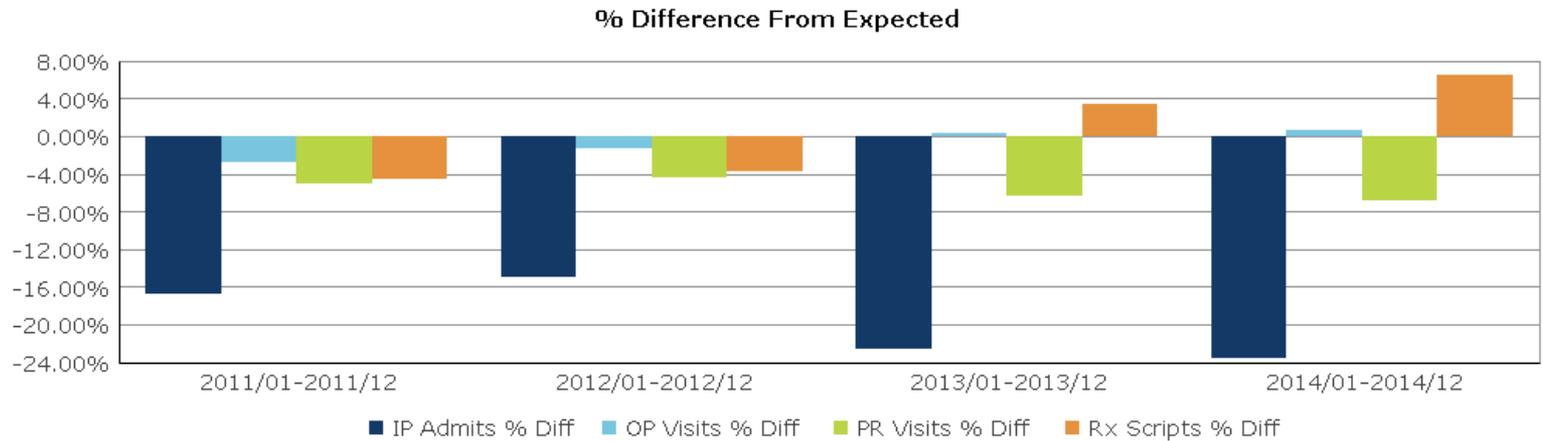
- All Lines of Business
- All Ages
- All Genders
- RI:Rhode Island
- All Counties: Bristol, RI; Kent, RI; Newport, RI; Providence, RI
- All Patient Segments: NA; Non User; Healthy; Stable; At Risk
- All Payers: Aetna Life Insurance Company; Aetna Life Insurance Company (Medicare); Cigna East; Cigna West

Views

- Total Cost of Care
- Inpatient
- Outpatient
- Professional
- Pharmacy

Group By

- Allowed
- Utilization



Person Reporting Period	2011/01-2011/12	2012/01-2012/12	2013/01-2013/12	2014/01-2014/12
Person Count	738,723	762,668	736,857	845,202
IP Admits PKPY	212.5	214.6	185.7	167.2
Expected IP Admits PKPY	255.2	252.4	239.8	218.7
IP Admits % Diff	-16.73%	-14.97%	-22.57%	-23.57%
OP Visits PKPY	2,574.5	2,534.1	2,152.1	2,236.6
Expected OP Visits PKPY	2,649.3	2,566.6	2,143.7	2,221.9



Page-by Service Year

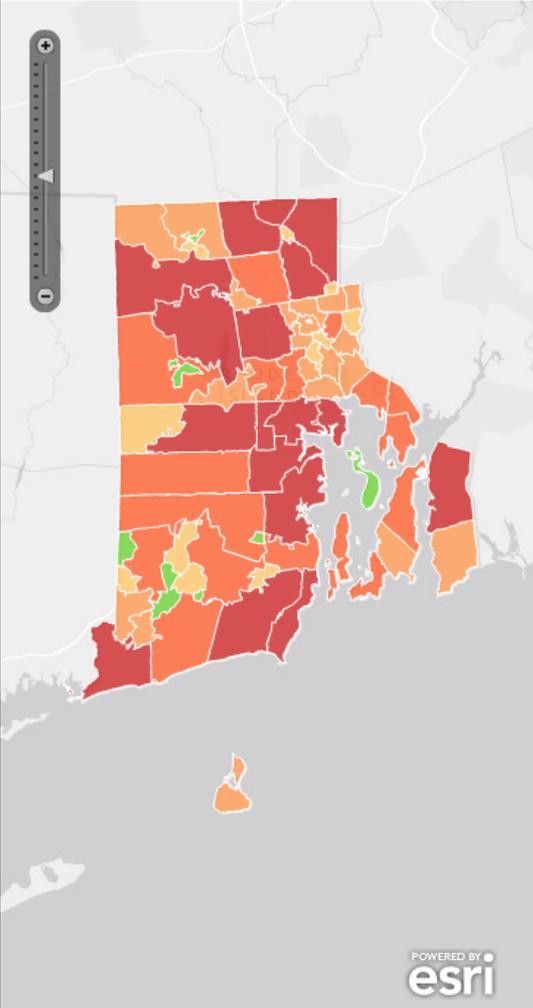
2011

2012

2013

2014

Dx Frequency By Zip Code

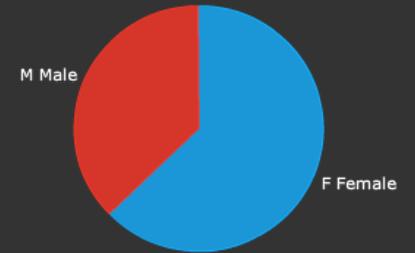


POWERED BY
esri

Details

Person ZIP Code	SES Category State	Gender	Age Group	Dx Count	
02814	Chepachet	Average SES	F Female	36-55	122
02814	Chepachet	Average SES	M Male	36-55	53
02814	Chepachet	Average SES	F Female	18-35	37
02814	Chepachet	Average SES	M Male	56-65	22
02814	Chepachet	Average SES	M Male	18-35	19
02814	Chepachet	Average SES	F Female	0-17	14
02814	Chepachet	Average SES	F Female	56-65	11
02814	Chepachet	Average SES	M Male	0-17	11
02814	Chepachet	Average SES	M Male	66-84	7
02814	Chepachet	Average SES	F Female	66-84	5

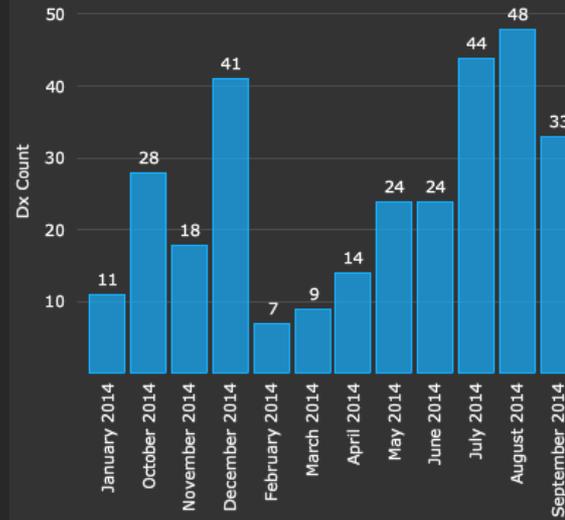
Gender



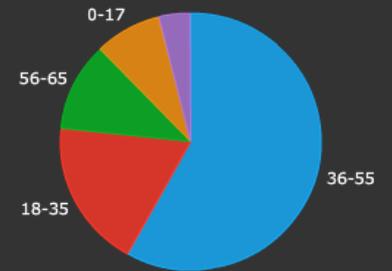
Dx by Month

Person ZIP Code

02814
Chepachet



Age Groups



RI APCD Legislation, § 23-17.17-9-11

- § 23-17.17-9 Health care quality and value database
 - (4) **Compare costs** between various treatment settings and approaches;
 - (5) **Provide information to consumers and purchasers** of health care;
 - (9)(b) The program authorized by this section shall include a consumer health care quality and value information system designed ***to make available to consumers transparent health care price information, quality information and such other information*** as the director determines is necessary to empower individuals, including uninsured individuals, to make economically sound and medically appropriate decisions.

RIAPCD Links

Legislation (last three sections):

<http://webserver.rilin.state.ri.us/Statutes/TITLE23/23-17.17/INDEX.HTM>

Regulations:

<http://sos.ri.gov/documents/archives/regdocs/released/pdf/DOH/7305.pdf>

RIDOH Site with Tech Specs and More:

<http://www.health.ri.gov/partners/collaboratives/allpayerclaimsdatabase/>