How New Policy Approaches Can Redefine Data Needs: An Example from State Health Spending

2018 Annual Conference of the Association of Public Data Users

7/18/2018
Today we’ll talk with three leaders at the vanguard of using administrative data for programmatic analysis and evaluation.

These leaders will share with us their experiences collecting, using, and analyzing data to inform policy decision-making at the state-level.
Agenda

• Introductions: Topic and Panelists
• Nora Hoban: Senior Vice President, Maryland Hospital Association
• Donald Nichols: Managing Researcher, The American Institutes for Research
• Emily Sullivan: Deputy Director, National Association of Health Data Organizations
• Questions
• Concluding Remarks
How New Policy Approaches Can Redefine Data Needs

• A 2017 article in Health Affairs, “Health Spending by State 1991-2014: Measuring Per Capita Spending by Payers and Programs” took a close look at per capita health care spending by state.

• Health care spending, along with year over year growth, varies considerably by region.

• States grapple with critical policy decisions to optimize spending and meet the specific needs of their respective residents.

• Our panelists represent three perspectives on state-level actions to use data to inform policy decisions to optimize health spending.
• Nora Hoban leads the Maryland Hospital Association’s Policy & Data Analytics team.

• Before joining MHA, she spent 6 years at Avalere Health, a DC-based consulting firm. As a Senior Vice President, she ran the Data Analytics Practice and managed a diverse portfolio of private and public sector clients focusing on payment and health system redesign.

• Nora also spent 20 years with the federal government. As a Senior Analyst with the Government Accountability Office (GAO), Nora designed studies resulting in recommendations adopted by CMS as it revamped both the inpatient hospital and ambulatory surgical center payment systems.

• Prior to GAO, she served as a Technical Advisor for Medicare payment policy at the Centers for Medicare & Medicaid Services (CMS). While at CMS, she developed and launched Medicare prospective payment systems for hospital outpatient departments and inpatient rehabilitation facilities and provided analytical and programming expertise on a range of other payment systems.

• Nora has a BS in Psychology from Towson State University and a MPA with a Health Policy concentration from the University of Baltimore.
Donald Nichols

- Donald Nichols, Ph.D. is a managing researcher in the Health Services practice area at AIR. Dr. Nichols has nearly 20 years of health services research experience on projects involving program evaluations, demonstration designs, payment methodologies, performance measures, and economic modeling. He has gained extensive expertise using a wide variety of administrative data, including Medicare standard analytical file claims data, the Maryland Medical Care Data Base, Survey of Income and Program Participation (SIPP) data, and unemployment insurance claims data to evaluate health care delivery systems, payment models, and various programs.

- Dr. Nichols has designed and led evaluations of the state of Maryland’s Multi-Payer Patient-Centered Medical Home (PCMH) Program, the Center for Medicare & Medicaid Services (CMS) implementation of the Medicare Severity Diagnosis Related Group (MS-DRG) payment system, Acute Care Episode (ACE) Demonstration, Community-based Care Transitions Program, Multi-payer Advanced Primary Care Program (MAPCP), and Round 2 of the State Innovation Model (SIM) Initiative.

- Throughout his academic and private sector careers, Dr. Nichols’ research interest in disparities in health and health care has remained constant and has included work related to racial disparities and rural/urban disparities. His independent research has looked at the role of the distribution of patients across hospitals in understanding measured racial disparities in the care and outcome of heart disease patients and at the impact of hospital closures on the racial differences in care.

- While at the Research Triangle Institute Dr. Nichols served as the director for the Health Equity Analytics and Solutions Program. He has also led contracts to develop a program to decrease rural-urban disparities in health care access and outcomes and to design and implement evaluations of the impact of the transformation of health care delivery systems on disparities, the Office of Rural Health Policy’s Frontier Community Health Care Network Coordination Pilot Grant, and a demonstration (Frontier Community Health Integration Project) designed to increase access and integration of care in frontier communities.

- Dr. Nichols earned his doctoral degree in economics from Stanford University.
Emily Sullivan

- Emily Sullivan is the Deputy Director of the National Association of Health Data Organizations (NAHDO), a national nonprofit organization, established in 1986 to improve the collection and use of health care data for public use.

- Ms. Sullivan provides technical assistance to health data agencies on issues ranging from data policy, collection, analytics, and dissemination. She is also on the leadership team of the All-Payer Claims Databases Council and APCD Learning Network.

- Ms. Sullivan holds a Bachelor of Health Science, MS and MPH.
Anthony Curcio

- Anthony Curcio is a Partner at Summit Consulting, LLC
- Summit is a specialized analytics advisory firm that guides federal agencies, financial institutions, and litigators as they decode their most complex analytical challenges. Summit’s staff of economists, econometricians, and research scientists use quantitative techniques to assist our clients as they model risk, evaluate program performance, and predict future performance.
- Mr. Curcio brings over 17 years of experience in finance and finance-related consulting and policy and is an expert in the Federal Credit Reform Act of 1990.
- Prior to joining Summit, Mr. Curcio served at the Office of Management and Budget (OMB) and in the financial services industry, where he developed a background in all areas of Federal Credit, financial analysis, money and capital markets, and portfolio management.
Key Metrics Under Maryland’s All-Payer Model
Maryland’s All-Payer Model Features

- Implements per capita, value-based payment framework for hospitals – *Global Budgeting*

- Enables **provider-led** efforts to reduce avoidable use, and improve quality and coordination

- Generates **savings to Medicare** without cost shifting

- Fosters State **innovation and flexibility**
## Maryland Waiver Performance Dashboard

### Cumulative Performance – Years 1, 2 and 3

<table>
<thead>
<tr>
<th>Category</th>
<th>Maryland Performance</th>
<th>Cumulative Target</th>
<th>Period</th>
<th>Data Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>All-Payer Hospital Spending Growth Per Capita (compared to base year Maryland – CY 2013)</td>
<td>4.14% spending growth</td>
<td>11.13% spending growth or below</td>
<td>Jan ’14 – Dec ’16 vs. 2016 Ceiling</td>
<td>HSCRC Monthly Financial Data</td>
</tr>
<tr>
<td>Medicare Hospital Spending Growth Per Beneficiary (compared to national)</td>
<td>$538 million in cumulative savings</td>
<td>$132 million in cumulative savings at year 3</td>
<td>Jan ’14 – Dec ’16 vs. 2016 Target</td>
<td>CMS Data¹</td>
</tr>
<tr>
<td>Medicare All-Provider Spending Growth Per Beneficiary (compared to national)</td>
<td>-1.63% spending difference</td>
<td>0% growth limit above the nation in CY 2016</td>
<td>Jan ’17 – Dec ’16 vs. 2016 Target</td>
<td>CMS Data¹</td>
</tr>
<tr>
<td>Medicare Readmission Rate (compared to national)</td>
<td>-6.08% decrease</td>
<td>-4.90% decrease or more</td>
<td>Jan ’14 – Sep ’16 vs. 2013 Base Year</td>
<td>CMS Data, V.6¹</td>
</tr>
<tr>
<td>Maryland Hospital Acquired Conditions Rate (compared to base year Maryland – CY 2013)</td>
<td>43.33% decrease</td>
<td>19.28% decrease or more</td>
<td>Jan ’16 – Jun ’16 vs. Jan ’13 – Dec’13</td>
<td>HSCRC Data</td>
</tr>
</tbody>
</table>

1 Data contain summaries provided by the federal government that have been prepared for Maryland, but are not official federal data. Data are preliminary and contain lags in claims. There may be material differences in results when final data are received.
Medicare, Unadjusted Readmissions Trends

Readmission Rates
CY 2013 – CY 2017

16.6% 16.5% 16.0% 15.7% 15.2%

12.34% 11.95%

Source: The Centers for Medicare & Medicaid Services.

*Hospital-specific Medicare unadjusted data are only available for CY 2016 and CY 2017 through September.
All-Payer, Risk Adjusted Readmissions Trends

Readmission Rates
CY 2013 – CY 2017

The source of readmissions data is Chesapeake Regional Information System for our Patients

1. Adjustments depict impact of performance for Example Hospital on the Readmissions Reduction Incentive Program. The source is HSCRC.

Healthcare-Associated Infections

Example Hospital Performance Relative to Previous Period and Quality Based Reimbursement Thresholds

*Note: CAUTI = Catheter-Associated Urinary Tract Infections, CLABSI = Central Line-Associated Bloodstream Infections, SSI Colon = Surgical Site Infections Related to Colon Surgery, SSI Hysterectomy = Surgical Site Infections Related to Abdominal Hysterectomy.

Source: The Centers for Disease Control and Prevention’s National Healthcare Safety Network. The performance period for QBR FY 2020 is Q4 2017 to Q3 2018. See Appendix for additional data notes.
Maryland Hospital Acquired Conditions

CY 2017 Observed-to-Expected Ratio by Hospital for All Potentially Preventable Complications and RY 2019 Inpatient Revenue Adjustments

Source: HSCRC. CY 2017 is the performance period for the RY 2019 Maryland Hospital Acquired Conditions Program.
Medicare Mortality Measures

30-Day, Risk-Adjusted, Medicare Mortality Score by Measure for Nation and Example Hospital


Note: AMI = Acute myocardial infarction, COPD = Chronic obstructive pulmonary disease, CABG = Coronary artery bypass graft surgery, and HF = Heart failure.
Total and Medicaid Inpatient Admissions for Example Hospital and Maryland

Example Hospital Inpatient Admissions

<table>
<thead>
<tr>
<th>Year</th>
<th>All-Payer</th>
<th>Medicaid</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2014</td>
<td>31,688</td>
<td>4,194</td>
</tr>
<tr>
<td>FY 2015</td>
<td>30,909</td>
<td>4,454</td>
</tr>
<tr>
<td>FY 2016</td>
<td>31,801</td>
<td>4,628</td>
</tr>
<tr>
<td>FY 2017</td>
<td>31,865</td>
<td>4,537</td>
</tr>
</tbody>
</table>

Statewide Inpatient Admissions

<table>
<thead>
<tr>
<th>Year</th>
<th>All-Payer</th>
<th>Medicaid</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2014</td>
<td>652,398</td>
<td>148,188</td>
</tr>
<tr>
<td>FY 2015</td>
<td>632,922</td>
<td>158,489</td>
</tr>
<tr>
<td>FY 2016</td>
<td>615,254</td>
<td>148,977</td>
</tr>
<tr>
<td>FY 2017</td>
<td>607,567</td>
<td>150,621</td>
</tr>
</tbody>
</table>

Change in total admissions from FY 2014 to FY 2017

- Example Hospital: 0.6%
- Maryland: -6.9%

Change in Medicaid admissions from FY 2014 to FY 2017

- Example Hospital: 8.2%
- Maryland: 1.6%

Medicaid proportion of total admissions in FY 2014

- Example Hospital: 13.2%
- Maryland: 22.7%

Medicaid proportion of total admissions in FY 2017

- Example Hospital: 14.2%
- Maryland: 24.8%

Source: MHA analysis of HSCRC inpatient claims data.
Note: Holy Cross Germantown Hospital excluded from statewide analysis as it didn’t open until Q4 2014.
Total and Medicaid Emergency Department Visits for Example Hospital and Maryland

Source: MHA analysis of HSCRC outpatient claims data. Note: Holy Cross Germantown Hospital excluded from statewide analysis as it didn’t open until Q4 2014. ED visits include only those cases where patients were treated and either discharged from the ED or placed on observation status. It does not include those cases where patients were admitted.

<table>
<thead>
<tr>
<th></th>
<th>Example Hospital</th>
<th>Maryland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change in total ED visits from FY 2014 to FY 2017</td>
<td>2.9%</td>
<td>-2.1%</td>
</tr>
<tr>
<td>Change in Medicaid ED visits from FY 2014 to FY 2017</td>
<td>13.7%</td>
<td>4.8%</td>
</tr>
<tr>
<td>Medicaid proportion of total ED visits in FY 2014</td>
<td>20.7%</td>
<td>34.7%</td>
</tr>
<tr>
<td>Medicaid proportion of total ED visits in FY 2017</td>
<td>22.9%</td>
<td>37.1%</td>
</tr>
</tbody>
</table>
Diversion Definitions:

**Yellow Alert**: Emergency Department temporarily requests that no Priority II or III patients are transported to their facility.

**Red Alert**: The hospital has no ECG monitored beds available.

**Reroute**: An advance life support or basic life support unit is being held in the emergency department of a hospital due to lack of an available bed. Reroute status is determined by emergency medical services personnel.

Source: Maryland Institute for Emergency Medical Services Systems County/Hospital Alert Tracking System. See Appendix for definitions.
Emergency Department Wait Times

Example Hospital, Maryland, and National Performance on the Two Measures of ED Wait Times Included in QBR, ED-1b and ED-2b

ED-1b = Length of time from ED arrival to when an admitted patient leaves the ED
ED-2b = Length of time from when a decision to admit is made to when an admitted patient leaves the ED

Source: Centers for Medicare & Medicaid Services Hospital Compare. Data reflect performance during FY 2017 (7/2016 to 6/2017).
## Spending by Episode

### Average Spending for Each of the top 15 Conditions by Volume under CMS’ Bundled Payments for Care Improvement (BPCI) Advanced

<table>
<thead>
<tr>
<th>Bundled Payments Condition</th>
<th>Example Hospital</th>
<th>Maryland</th>
<th>Nation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute myocardial infarction</td>
<td>$18,526</td>
<td>$25,707</td>
<td>$20,417</td>
</tr>
<tr>
<td>Cardiac arrhythmia</td>
<td>$10,400</td>
<td>$17,424</td>
<td>$13,616</td>
</tr>
<tr>
<td>Cellulitis</td>
<td>$13,661</td>
<td>$18,256</td>
<td>$15,563</td>
</tr>
<tr>
<td>Chronic obstructive pulmonary disease, bronchitis/asthma</td>
<td>$15,013</td>
<td>$18,725</td>
<td>$14,537</td>
</tr>
<tr>
<td>Congestive heart failure</td>
<td>$17,891</td>
<td>$23,856</td>
<td>$19,838</td>
</tr>
<tr>
<td>Gastrointestinal hemorrhage</td>
<td>$13,687</td>
<td>$17,899</td>
<td>$15,046</td>
</tr>
<tr>
<td>Hip and femur procedures except major joint</td>
<td>$34,850</td>
<td>$41,853</td>
<td>$36,749</td>
</tr>
<tr>
<td>Major bowel procedure</td>
<td>$23,735</td>
<td>$37,733</td>
<td>$29,725</td>
</tr>
<tr>
<td>Major joint replacement of the lower extremity</td>
<td>$22,467</td>
<td>$26,987</td>
<td>$21,433</td>
</tr>
<tr>
<td>Percutaneous coronary intervention</td>
<td>$21,059</td>
<td>$29,842</td>
<td>$22,772</td>
</tr>
<tr>
<td>Renal failure</td>
<td>$19,759</td>
<td>$22,265</td>
<td>$18,289</td>
</tr>
<tr>
<td>Sepsis</td>
<td>$25,348</td>
<td>$27,304</td>
<td>$23,175</td>
</tr>
<tr>
<td>Simple pneumonia and respiratory infections</td>
<td>$15,604</td>
<td>$19,535</td>
<td>$17,350</td>
</tr>
<tr>
<td>Stroke</td>
<td>$19,909</td>
<td>$25,707</td>
<td>$24,402</td>
</tr>
<tr>
<td>Urinary tract infection</td>
<td>$15,596</td>
<td>$19,215</td>
<td>$17,178</td>
</tr>
</tbody>
</table>


1 Data are not risk-adjusted. See Appendix for additional notes.
Appendix

- **Healthcare-Associated Infection Data Notes:**
  - Data are pulled from the Centers for Disease Control and Prevention’s National Healthcare Safety Network (NHSN) portal and made possible by data rights granted by hospitals to MHA.
  - Data reflect standardized infection ratios for hospital performance on the measures that are included in QBR for fiscal year 2020 (FY 2020).
  - There are several ways that standardized infection ratios can be extracted from the NHSN portal. For this report, MHA captured standardized infection ratios under the ‘new’ baselines (2015) as these are the types of data that the HSCRC will use when determining rewards and penalties for FY 2020 for all measures.
  - MHA pulled the data for this report on May 17, 2018.
  - Because data vary depending on how they are extracted from the NHSN portal, and the timing of the extraction, the numbers in these reports may differ from those captured in other sources.
  - Standardized infection ratio data in this report are missing for measures where the predicted value is less than 1 (in which cases no standardized infection ratio can be calculated), where a hospital didn’t enter complete data into the NHSN portal, or where a hospital refrains from entering data for a selected measure because it doesn’t perform a certain type of surgery or is otherwise exempt from reporting.
Appendix

- **HCAHPS question topics key:**
  - **Cleanliness of Hospital Environment** indicates patient responses to the following question:
    − During this hospital stay, how often were your room and bathroom kept clean?
  - **Nurse Communication** averages patient responses to the following questions:
    − During this hospital stay, how often did nurses treat you with courtesy and respect?
    − During this hospital stay, how often did nurses listen carefully to you?
    − During this hospital stay, how often did nurses explain things in a way you could understand?
  - **Doctor Communication** averages patient responses to the following questions:
    − During this hospital stay, how often did doctors treat you with courtesy and respect?
    − During this hospital stay, how often did doctors listen carefully to you?
    − During this hospital stay, how often did doctors explain things in a way you could understand?
  - **Responsiveness of Hospital Staff** averages patient responses to the following questions:
    − During this hospital stay, after you pressed the call button, how often did you get help as soon as you wanted it?
    − How often did you get help in getting to the bathroom or in using a bedpan as soon as you wanted?
  - **Pain Management** averages of patient responses to the following questions:
    − During this hospital stay, how often did hospital staff talk with you about how much pain you had?
    − During this hospital stay, how often did hospital staff talk with you about how to treat your pain?
  - **Communication About Medicines** averages patient responses to the following questions:
    − Before giving you any new medicine, how often did hospital staff tell you what the medicine was for?
    − Before giving you any new medicine, how often did hospital staff describe possible side effects in a way you could understand?
HCAHPS question topics key (continued):

- **Discharge Information** averages patient responses to the following questions:
  - During this hospital stay, did doctors, nurses or other hospital staff talk with you about whether you would have the help you needed when you left the hospital?
  - During this hospital stay, did you get information in writing about what symptoms or health problems to look out for after you left the hospital?

- **Care Transition** averages patient responses to the following statements:
  - During this hospital stay, staff took my preferences and those of my family or caregiver into account in deciding what my health care needs would be when I left.
  - When I left the hospital, I had a good understanding of the things I was responsible for in managing my health.
  - When I left the hospital, I clearly understood the purpose for taking each of my medications.

- **Hospital Rating** indicates patient responses to the following question:
  - Using any number from 0 to 10, where 0 is the worst hospital possible and 10 is the best hospital possible, what number would you use to rate this hospital during your stay?

- **Quietness of Hospital Environment** indicates patient responses to the following question:
  - During this hospital stay, how often was the area around your room quiet at night?

- **Willingness to Recommend Hospital** indicates patient responses to the following question:
  - Would you recommend this hospital to your friends and family?
Appendix

- **Bundled Payments for Care Improvement (BPCI) Advanced:**
  - Data in this analysis reflect Medicare fee-for-service only. Avalere Health analyzed the Centers for Medicare & Medicaid Services (CMS) Standard Analytic Files, which include 100% Medicare Parts A and B data with the exception of Part B physician and durable medical equipment services.
  - Episodes in this analysis include an episode initiating inpatient stay and the 90-days following discharge. Episodes were created for the top 15 conditions by volume in Maryland and are defined by the inpatient Medicare Severity Diagnosis-Related Groups (MS-DRGs).
  - Data included in this analysis is not risk-adjusted for case mix or acuity.
  - Averages in this analysis are calculated as universal averages, including all episodes regardless of utilization (or lack thereof). If there is no utilization in a particular category, the average will include a zero. For example, if an episode did not use any inpatient rehabilitation facility services, this episode would still be included in the overall spending average for inpatient rehabilitation facility services as a zero value. This may cause some averages to be lower than expected.
  - Episode exclusions in this analysis follow the methodology of the current BPCI program, which aim to exclude items and services unrelated to treatment of the clinical condition. Specifically, the exclusions consist of:
    - Blanket exclusions: Blood clotting factors to control bleeding for hemophilia patients. New technology add-on payments under the Inpatient Prospective Payment System.
    - Condition-specific exclusions: Clinician-developed list of excluded services from 13 groups of clinical episodes based on readmission MS-DRGs for inpatient stays and ICD-10 diagnosis codes for Part B services, aimed at excluding unrelated claims.
Appendix

**Data Disclaimer:**
- Data related to Medicare per capita spending on the previous slides represent analyses prepared by either MHA or HSCRC staff based on data summaries provided by the federal government. The intent is to give early indications of the spending trends in Maryland for Medicare fee-for-service beneficiaries, relative to national trends. These data have not yet been audited or verified. Claims lag times may change, making the comparisons inaccurate. ICD-10 implementation could have an impact on claims lags.

- These analyses should be used with caution and do not represent official guidance on performance or spending trends. These analyses may not be quoted until public release.
APDU ANNUAL CONFERENCE | JULY 2018

USING DATA IN INNOVATIVE HEALTHCARE DELIVERY AND PAYMENT MODELS:

THE EXPERIENCE OF TWO CMMI INNOVATIONS

Donald Nichols
Acknowledgment

This presentation is based solely on publicly available reports resulting from work produced during RTI contracts with CMMI.

- Evaluation of MAPCP Demonstration Final Report:

- SIM Round 2 Model Test Annual Report Two:
Two CMMI Initiatives

• Multi-payer Advanced Primary Care Practice Demonstration (MAPCP)
  – CMS joined eight state-sponsored multi-payer initiatives to promote the principles characterizing patient-centered medical home (PCMH) practices.

• Round Two of State Innovation Models (SIM 2)
  – CMMI awarded funds to 11 states to use policy and regulatory levers to enable or facilitate the spread of innovative health care models, integrating population health into transformation efforts, engaging a broad range of stakeholders, and leveraging existing efforts to improve health care delivery and outcomes.
Data in MAPCP

- CMS-sponsored MAPCP Demonstration Web (quarterly)
  - Practice-level feedback reports: summary information on key Medicare FFS expenditures, utilization, and quality of care measures
  - Beneficiary utilization files: beneficiary-level information on health status and utilization information
  - Beneficiary assignment files: names of beneficiaries assigned to practices, as well as some demographic information
Data in MAPCP (cont’d)

• Some state initiatives and participating payers made additional data available to MAPCP practices.
  – Administrative claims
  – All-payer claims databases
  – HIEs
  – Clinical registries

• Many providers also had EHRs.
MAPCP Experience

• Most providers understood and appreciated the benefit that data could provide.
  – Identify beneficiaries in need of care management
  – Compare their performance with other participating practices

• However, one of the most commonly reported implementation issues was related data. Thus, many providers were not able to fully take advantage of the opportunities data could provide them in advanced primary care.
MAPCP Data Issues

- Dated data
- Unreliable/inaccurate data
- Incomplete data
- Questionable algorithms
- Difficult to use systems
- Incompatible EHRs/HIEs
- Inoperable systems
- Differing measures, measure specifications, algorithms, data sources, and report formats across payers
MAPCP Positive Experiences

• Rhode Island’s dashboard
  – Updated quarterly and included key quality and utilization measures based on data from Medicaid managed care plans, Medicare Advantage plans, and commercial plans
  – Allowed practices to monitor their performance and identify areas needing improvement

• Vermont’s practice profiles
  – Produced from state’s APCD
  – Helped practices compare their performance to other practices and to plan initiatives for quality improvement and care coordination

• CMS beneficiary-level utilization data were useful.
  – Able to identify specific beneficiaries in need of care management
  – Provided useful trends in utilization and expenditures
  – But only Medicare beneficiaries
SIM Round 2
SIM 2: Data

• SIM 2 Model Test states were required to have enabling strategies that involved health IT and/or data analytic infrastructure.

• These strategies are intended to give providers a better view of their patients’ complete healthcare spending and use patterns to improve coordination of their patients’ health care, as well as to take on and manage financial risk.
State health IT and data strategies varied. Some strategies address issues found in MAPCP.

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Number of SIM2 States</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop common quality metrics or reporting systems</td>
<td>11</td>
</tr>
<tr>
<td>Establish, promote HIE adoption or enhancement, or clinical data sharing</td>
<td>7</td>
</tr>
<tr>
<td>Develop/enhance APCD</td>
<td>6</td>
</tr>
<tr>
<td>Increase data analytic capability</td>
<td>5</td>
</tr>
<tr>
<td>ADT notification</td>
<td>4</td>
</tr>
<tr>
<td>Promote adoption/use of EHRs</td>
<td>3</td>
</tr>
<tr>
<td>Expand telehealth</td>
<td>3</td>
</tr>
<tr>
<td>Develop data hub/repository</td>
<td>3</td>
</tr>
<tr>
<td>Promote adoption/use of EHRs</td>
<td>3</td>
</tr>
<tr>
<td>Promote interoperability</td>
<td>2</td>
</tr>
</tbody>
</table>
SIM 2: Early Experience

- Health IT and data infrastructure strategies viewed as a driver of provider participation in health care transformation because they supplied the information needed for the adoption of value-based purchasing and APMs.
  - Anecdotes about Iowa’s ADT contributing to timely follow-ups after admissions and the successful management of care transitions for patients with multiple conditions
  - Very positive feedback on Tennessee’s care coordination tool
SIM 2: Early Experience (cont’d)

• However, some states suffered similar issues as MAPCP Demonstration
  – Incompatibility of different, existing platforms caused delays.
  – Systems are only valuable if there is sufficient data in them and if the data is believed to be accurate.

• *Gobeille v. Liberty Mutual Insurance Company* ruling has threatened the value of APCDs.
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THANK YOU
The National Association of Health Data Organizations

2018 APDU Annual Conference
About NAHDO

• A national non-profit educational association
• Established by the Washington Business Group on Health in 1986
  • 25 state data commissions came together
• Members: state data agency officials and federal and private stakeholders
• Shared vision:
  • Uniformity and comparability across state hospital data systems
  • Improved health and system performance through publicly available data
  • Facilitate use of data while protecting patient privacy
Statewide Hospital Inpatient Data Programs

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

No collection
Voluntary collection
APCDs as of June 2018
Typically Included Information

• Social security numbers
• Patient demographics (date of birth, gender, residence, relationship to subscriber)
• Type of product (HMO, POS, Indemnity, etc.)
• Type of contract (single person, family, etc.)
• Diagnosis codes (including E-codes)
• Procedure codes (ICD, CPT, HCPC, CDT)
• NDC code / generic indicator / other Rx

• Revenue codes
• Service dates
• Service provider (name, tax id, payer id, specialty code, city, state, zip code)
• Prescribing physician
• Plan charges & payments
• Member liabilities (co-pay, coinsurance, deductible)
• Date paid
• Type of bill
• Facility type
Consumer Price and Quality Websites

Compare the Costs & Quality of Healthcare Procedures in Maine
Know What to Expect Before You Receive Care

find the cost of a procedure

more information. better decisions.

CompareMaine shows the average cost of common healthcare procedures at different facilities in Maine. The average cost represented on this website are representative of those costs, and have been higher than expected.

Select a Hospital Facility
Select a Dental Facility
Using APCD to evaluate cost of chronic conditions

FIGURE 6: Distribution of MN Residents by Average Annual Health Care Spending and Number of Chronic Conditions (2012)

percent of insured Minnesota Residents

Per-Person Annual Health Care Spending

Number of Chronic Conditions

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Where are Utah Healthcare Dollars Going?

- Catastrophic Conditions
- Metastatic Malignancies
- Three or More Significant Chronic Diseases
- Two Significant Chronic Diseases
- Single Significant Chronic Disease
- Multiple Minor Chronic Diseases
- Single Minor Chronic Disease
- Significant Acute Disease
- Routine & Preventive Care/Non-Users

Source: Utah Department of Health, 2011
Prescription Drug Use in MN

Prescription Drug Spending in Minnesota
By Claim Type: 2009 to 2013

MDH Minnesota Department of Health
Source: Analysis by the PRIME Institute, University of Minnesota using the Minnesota All Payer Claims Database (MN APCD) data from 2009 to 2013.
Avoidable ED visits

Potential Preventable Emergency Room Visits

Introduction

A potentially preventable emergency room visit is when a patient goes to an emergency room for a health condition that could have been treated in a non-emergency setting or prevented by keeping them healthier earlier on. Treatment in an emergency room is generally more expensive than a primary care visit. When people have fewer barriers to good health in their communities, and when they can easily access high quality primary care and follow-up, they are less likely to end up in the emergency room. (Patients experiencing a medical emergency should always seek emergency care.)

Key Findings

- In Rhode Island, we could potentially save $90 million annually by preventing non-emergency visits to emergency rooms.
- Chest pain is one of the top reasons for potentially preventable emergency room visits, and the most expensive. Better access to primary care and disease management could help prevent these visits.
- Upper respiratory infections, low back, and abdominal pain are common, potentially preventable, reasons Rhode Islanders go to the emergency room.

Discussion

Rate

*All dollar amounts are based on standardized proxy reimbursement amount(s)
Reducing ED visits for health issues that are non-emergent could result in $800 million annual cost savings for Colorado.
Healthcare Cost Variation

Health Plan and Patient Cost per Person per Year (PPPYP), by Geography, Payer Type and Service Type

Select RURAL vs. URBAN:
Statewide

- Inpatient
- Outpatient
- Professional
- Pharmacy

- All Payers
  - $840
  - $879
  - $1,401
  - $810

- Commercial
  - $759
  - $891
  - $1,364
  - $801

- Medicaid
  - $640
  - $895
  - $1,174
  - $758

- Medicare Advantage
  - $1,988
  - $764
  - $2,494
  - $1,894

It takes nearly $4,000 Per Person Per Year (PPPYP) to cover the healthcare needs of most Coloradans.
Consumers
Consumer websites primarily focused on cost and quality

Employers
Employer and purchasing coalition efforts

Providers
Accountable Care Organizations and quality

Researchers
Academic and “think tank” research

Population Health
Incidence, prevalence, quality, and utilization

Insurance Department
Regulatory and market use cases

Medicaid
Comparisons between Medicaid and Commercial populations

Health Reform
Medical Home, Accountable Care Organizations & Triple Aim
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