MEDICAID DATA OPPORTUNITIES

WILLIAM GOLDEN MD MACP

MEDICAL DIRECTOR, ARKANSAS OFFICE OF HEALTH INFORMATION TECHNOLOGY

UAMS PROF. INT. MED AND PUBLIC HEALTH
"I'll Pause for a Moment So You Can Let This Information Sink In."
UNIVERSAL CHALLENGE

All Health Systems

• Have Service Demand and Limited Resources

• Stewardship

• Should Explore New Incentives to Shape Delivery
  • Reward Outcomes, Effectiveness
CONCEPTUAL MEDICAID

• Distributive Justice
• Applied Community Health
Population at Risk

Evaluation & Initial Management

Follow-up Care

PHASE 1

PHASE 2

PHASE 3

End of Episode - Risk-Adjusted Health Outcomes and Total Cost of Care

Patient & Family Engagement: Patient Preferences

Care Coordination

Overuse: Medical and diagnostic procedures

Palliative Care

Population Health

Safety

Clinical Episode Begins

Time
EARLY ANALYTICS

• 5/50 Analysis
  • Med/Surg vs Custodial Spend
  • Hemophilia, NICU, Behavioral Health

• Antipsychotic Prescribing
  • Primary Care Not Root Cause

• Hepatitis C Prescribing
  • Not Guideline Concordant
USING METRICS

• Goals
  • Trusted Analytics, Culture Change, Clinical Transformation, Effective Care Delivery

• Effective Incentives
  • Core Activity Metrics (Tied to PMPM) – \textbf{Minimal} Performance
  • Quality Metrics (Tollbooth for Incentive Dollars) – \textbf{Average} Performance
  • Incentive Metrics (Performance Bonuses) – \textbf{Excellent} Performance
METRICS

• Feasibility, Validity
• Meaningful, Actionable
• Burden
• Big Dot Measures
EPISODES OF CARE

- Total Joint Arthroplasty
- Perinatal Care
- ODD/ADHD
- NICU
- Targets Limited By Reimbursement Variation
EPISODES OF CARE  CLINICAL REPORTS

• Profiles of the Patient Journey
  • Identify Practice Variation
  • Identify Root Cause Patient Factors

• Diabetic Ketoacidosis
  • Data Cleaning
  • Small Number of Patients Drive Hospitalization
  • Behavioral Health, Discharge AMA, Follow Up Issues
  • Targeted Case Management
REPORTS

• ER Profiles
  • MRI/CT Rate, Early Revisits, Diagnosis Profile

• Suicide Attempts
  • Ongoing Care, Adherence, Follow Up,
MEDICAID PATIENT-CENTERED MEDICAL HOME (PCMH) ANALYTICS

• 2014 Initiation – Now 85% Eligible Population, 1000 PCPs, 225+ Sites

• Total Cost of Care Calculations
  • Complexity vs Surrogate Measures
  • Quarterly, Now Monthly Clinical Performance Data Feeds

• HIE Data Feeds
  • ER Visits, Hospitalizations
Distribution of Tamiflu

PCMH Tamiflu Distribution in CY2017 Performance Period for 2019 Configuration

Target <= 20

<table>
<thead>
<tr>
<th>Quantile</th>
<th>Observed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Min</td>
<td>0.0</td>
</tr>
<tr>
<td>16%</td>
<td>6.4</td>
</tr>
<tr>
<td>25%</td>
<td>7.6</td>
</tr>
<tr>
<td>50%</td>
<td>12.0</td>
</tr>
<tr>
<td>75%</td>
<td>18.3</td>
</tr>
<tr>
<td>84%</td>
<td>21.1</td>
</tr>
<tr>
<td>Max</td>
<td>66.7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quantile</th>
<th>Observed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Min</td>
<td>7.3</td>
</tr>
<tr>
<td>16%</td>
<td>8.3</td>
</tr>
<tr>
<td>25%</td>
<td>10.2</td>
</tr>
<tr>
<td>50%</td>
<td>13.7</td>
</tr>
<tr>
<td>75%</td>
<td>15.9</td>
</tr>
<tr>
<td>84%</td>
<td>21.3</td>
</tr>
<tr>
<td>Max</td>
<td>28.3</td>
</tr>
</tbody>
</table>
Prevalence of Inappropriate Antibiotic Prescriptions Among US Ambulatory Care Visits, 2010-2011

Katherine E. Fleming-Dutra, MD; Adam L. Harsh, MD, PhD; Daniel J. Shapiro; Mariana Barrosco, PhD;
Eva A. Cren, PhD; Thomas M. Fite Jr, MD; Jonathan A. Feinleib, MD, MPH; Jeffrey S. Gerber, MD, PhD;
David Y. Hwan, MD; Jeffrey A. Linder, MD, MPH; Ruth Lynnfield, MD; David J. Margolis, MD, PhD;
Larissa S. May, MD, MSPH; Daniel Marenzola, MD; Joshua P. McTay, MD, PhD; Jason G. Newland, MD, MEd;
Jay F. Perazella, MD; Rebecca M. Roberts, MS; Guillaume V. Sanchez, MPH; PA-C; Katie J. Suda, PharmD, MS;
Ann Thomas, MD, MPH; Teri Moser Wox, PhD; Rachel M. Zette; Laura A. Hida, DO

The National Action Plan for Combating Antibiotic-Resistant Bacteria set a goal of reducing inappropriate outpatient antibiotic use by 50% by 2020, but the extent of inappropriate outpatient antibiotic use is unknown.
Outpatient antibiotic prescriptions dispensed from community pharmacies per 1000 population, IQVIA data 2016
OUTPATIENT ISSUES

• Respiratory Conditions
  • Unsatisfactory Literature
  • Variable Patient Presentations
  • Prescribing 2-4x Higher Than Recommended for Select Conditions
  • Mixed Track Record For Improvement
    • Viral URI ↓, Sinusitis ↔, Ears ↔, Pharyngitis ↔
<table>
<thead>
<tr>
<th></th>
<th>total</th>
<th>&gt;=18</th>
<th>&lt;18</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Antibiotics/100 patients</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population</td>
<td>107.5</td>
<td>103.5</td>
<td>108.5</td>
</tr>
<tr>
<td>PCMH Median</td>
<td>114</td>
<td>104</td>
<td>118</td>
</tr>
<tr>
<td>Highest PCMH</td>
<td>220</td>
<td>179</td>
<td>231</td>
</tr>
<tr>
<td>Lowest PCMH</td>
<td>46</td>
<td>21</td>
<td>25</td>
</tr>
<tr>
<td><strong>% Receiving 1 Prescription</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population</td>
<td>50%</td>
<td>49%</td>
<td>50%</td>
</tr>
<tr>
<td>PCMH Median</td>
<td>54%</td>
<td>49%</td>
<td>55%</td>
</tr>
<tr>
<td>Highest PCMH</td>
<td>75%</td>
<td>66%</td>
<td>78%</td>
</tr>
<tr>
<td>Lowest PCMH</td>
<td>28%</td>
<td>14%</td>
<td>18%</td>
</tr>
</tbody>
</table>
STEWARDSHIP PLAN

• Biannual PCMH Report Card

• Informational Reports 2020

• Accountability 2021
  • Quality Metric and Core Metric

• Goal: 15% Reduction by Start of 2022
  • 920/1000 Patients
FUTURE?

• Providing Data That **Drives** Performance

• Smart FHIR (Fast Healthcare Interoperability Resource)
  • Data Extraction at Scale
    • Greater Granularity, but Data Integrity Dangers

• All Payer Metrics