Agenda

- Introduction
- CMS’ Strategic Initiative... Pay for Quality to Value-based Purchasing to Patient-centered Integrated Care
- Care Coordination and Integrated Care
- Results – Care Coordination and Integrated Health Management
Introduction: APS Healthcare

- APS Healthcare delivers customized, integrated healthcare solutions to help people engage in behaviors that optimize health status
  - National specialty healthcare company
  - Main customers: Medicaid agencies and health plans
  - Headquartered in White Plains, NY
  - 1,250 employees
  - Approx 300 clients covering 14 million lives
  - APS provides health analytic, reporting, care coordination and clinical management services for ACOs

- In February of 2012, APS was acquired by Universal American, a predominately Medicare Advantage MCO
  - Healthy Collaboration: Partnership/gain sharing with physicians
  - Significant Dual Eligible experience
  - ACO partnerships and support services- 31 approved ACOs
  - Strong focus on STARS ratings/performance
CMS Healthcare Delivery Systems

From: Anthony Rodgers, Deputy Administrator & Director
Center for Strategic Planning
Centers for Medicare & Medicaid Services

Healthcare Delivery System 1.0

Episodic Non-Integrated Care

Focus on Care Mgmt
- Preventive Care
- Team Care (PCMH)
- UM and Medical Mgmt

Chronic Care Coordination
Accountable Networks
- ACOs / Patient Centered

Transparent Performance
- Shared Savings
- Quality Incentives

Better Care
- Patient/Person Centered
- High Satisfaction
- Coordinated Chronic Care

Better Health
- Integrated Networks and Community Resources
- E-Health Capable
- E-Learning Resources

Lower Costs
- Higher Quality
- Value-Based Purchasing

Healthcare Delivery System 2.0

Accountable Care

Integrated Care

Healthcare Delivery System 3.0

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Critical Elements for Integrated Care

- Patient tracking
  - Use of registries

- Care Coordination (Inter-visit Contact)
  - “In-panel” vs “out of panel” care coordination

- Enhanced Access
  - Same day appointment, levels of care, appropriate use

- Quality Improvement
  - Use of PDSA for QI activities
Complicated Patients: The Top 5%

- **A Small Group of Patients Drive a Large Portion of Cost**
  - ~5% of patients → ~50% of cost of care

- **Typical Profiles**
  - Chronic diseases, multiple co-morbidities

- **Patients Not Utilizing Care Efficiently**
  - Social supports are often lacking - stable home, transportation
  - Multiple providers, settings and levels of care
  - Healthcare is uncoordinated - health home not existent or not engaged
  - Unnecessary ER use, avoidable admissions and re-admissions
  - Polypharmacy
  - Difficulty engaging in conventional disease management
High Risk/Cost Members: Complex, Drive Utilization

- High Risk/High Cost (HR/HC) Members Compared to Remaining Members:
  - Average monthly spend: 8 – 10 times higher
  - Emergency room visits: 3 – 5 times higher
  - Inpatient admissions: >20 times higher
  - Readmissions: >80 times higher
  - Behavioral health co-morbidities: More than 50% of HR/HC members have an SMI
High Risk Members Drive Costs Across Categories

Primary Cost Drivers

- Acute Admits/1000
- Ave Length of Stay
- Acute Facility PMPM
- Acute Facility as % of Total
- Readm within 30 days
- Readm/1000
- Readm as % of Admits

Excludes dually eligible, pregnancy/neonatal, and LTC populations.

2009-10 Baseline data for ABD Population
Medicaid TANF Membership Comparisons

<table>
<thead>
<tr>
<th>Population n = 147,530</th>
<th>Top 1% HR/HC</th>
<th>Next 4% HR/HC</th>
<th>Next 15%</th>
<th>All Other 80%</th>
</tr>
</thead>
<tbody>
<tr>
<td>PMPM</td>
<td>$3,496</td>
<td>$901</td>
<td>$258</td>
<td>$40</td>
</tr>
<tr>
<td>% Male</td>
<td>56%</td>
<td>49%</td>
<td>45%</td>
<td>50%</td>
</tr>
<tr>
<td>Average Age</td>
<td>50</td>
<td>47</td>
<td>36</td>
<td>19</td>
</tr>
<tr>
<td>Average Months of Eligibility</td>
<td>9.7</td>
<td>10.4</td>
<td>10.6</td>
<td>10.5</td>
</tr>
<tr>
<td>Average # of Conditions</td>
<td>5.4</td>
<td>3.5</td>
<td>1.8</td>
<td>0.3</td>
</tr>
<tr>
<td>Average # RX</td>
<td>56.7</td>
<td>41.8</td>
<td>16.9</td>
<td>3.5</td>
</tr>
<tr>
<td>Average # of Physicians</td>
<td>9.6</td>
<td>5.2</td>
<td>3.2</td>
<td>1.9</td>
</tr>
<tr>
<td>Average Risk Score</td>
<td>4.70</td>
<td>2.28</td>
<td>1.15</td>
<td>0.37</td>
</tr>
<tr>
<td>Inpatient Admits Per 1000</td>
<td>1,981</td>
<td>398</td>
<td>59</td>
<td>4</td>
</tr>
<tr>
<td>ER Visits Per 1000</td>
<td>4,145</td>
<td>1,840</td>
<td>907</td>
<td>282</td>
</tr>
<tr>
<td>Readmits per 1000</td>
<td>753</td>
<td>59</td>
<td>2.5</td>
<td>0.1</td>
</tr>
</tbody>
</table>

Top 5%:
- PMPM = $1,393
- IP per 1000 = 698
- -- ER per 1000 = 2,227
- -- Average # Rx = 44.8

Excludes maternity/newborns
Care is Fragmented, Inadequate, Costly

Care Coordination is Inadequate

Chronic patients see ≥6 providers per yr.

18% of patients receive conflicting information from various providers.

At time of visit, reports not available or test duplicated in 43% of patients seeing ≥4 providers.

Care Coordination is Inadequate - Bodenheimer, T., M.D., “Coordinating Care – A Perilous Journey Through the Health Care System”, NEJM, March 6, 2006

Recommended Care is Not Received

Recommended care not received by 55% of patients.

Recommended Care is Not Delivered - McGlynn, et. al., “The Quality of Health Care to Adults in the United States”, NEJM, June 26, 2008

Costs are High

In 2009, $2.3 Trillion spent on healthcare (16% of GDP); 75% for chronic illness

From RMD Networks, Geoff Hyatt

Obligation for Coordination is High

In a year, an average PCP coordinates with 229 other doctors in 117 practices, for FFS Medicare patients

Obligation for Coordination is High - Pham, Hoangmai, MD, MPH, et. al., “...The Scope of Care Coordination”, Annals of Internal Medicine, February 17, 2009
Levels of Care

Drivers of Cost

- Intensive/Procedural Medical Treatment
- Rehabilitative Treatment
- Combined Treatment
- Patient Education & Counseling
- Self-Help & Natural Supports
- Marital/Familial
- Vocational/Financial
- Social/Legal
- Intrapsychic
- Biomedical

What Is Treated

- Hospital
- Partial Care
- Office
- Community
- Home

Where Treatment Is Done

How Treatment Is Delivered
Care Coordination: CareConnection® and Percolator™

- Proprietary, web-based, HIPAA-compliant case management application with secure data transfer capabilities
- Integrates multiple data sources
  - Medical claims
  - Rx
  - Laboratory results
  - Biometric screening
  - Health risk assessments, etc.
- Workflow processor for outreach
  - Identifies impactable high-risk members: clinical and utilization impact
- **APS Percolator**
  - Rules based engine
  - Optimizes and facilitate case coordination work flow
  - Prioritizes members in response to real-time data
  - Continually reprioritizes and targets members for impactability
Care Coordination: CareConnection® and Percolator™

- Creates a single, interactive health record visible to care/case managers, practitioners and members
- Translates disparate data into actionable, evidence-based information for practitioners to use in treating patient
  - Alerts and messages
  - Decision support tools
  - Educational modules
- System tracks all components of services for comprehensive outcomes analyses
APS Percolator™ Stratifies Members Based on Need

- Claims/Rx/UM
- HRA
- LTSS
- Uniform assessment
- Self report
- APS staff interactions
- Program goals

Percolator Algorithms
- Gaps in care
- Workflow
- TRS/CDPS
- Stratification
- Cost

Ranking Queue
- 5% High Risk
- 15% Medium Risk
- 80% Low Risk
Percolator Daily Process to Drive Staff Workflow

- Percolator Algorithms Applied
- Members Prioritized
- APS Staff Daily Workflow Populated
- Outreach

Daily prioritization using:
- Claims/Rx/UM
- HRA
- Uniform assessment
- Self report
- APS staff interactions
- Program goals

Highest need members identified

Role-based activities set to address highest need per member

APS Care Team activities documented
## Percolator Triggers by Importance

<table>
<thead>
<tr>
<th>Trigger</th>
<th>Group</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Member with CHF has had hospital admission in past 90 days</td>
<td>Very-High</td>
<td>Utilization</td>
</tr>
<tr>
<td>Member with CHF needs beta blocker Rx filled</td>
<td>High</td>
<td>Stratification</td>
</tr>
<tr>
<td>Member readmitted to the hospital within 30 days of a hospital discharge in the last 90 days</td>
<td>Very-High</td>
<td>Utilization</td>
</tr>
<tr>
<td>Member reports being to the ER or hospitalized in the last 3 months</td>
<td>Very-High</td>
<td>Utilization</td>
</tr>
<tr>
<td>Member has &gt;= 1 IP admits in the past 90 days</td>
<td>Very-High</td>
<td>Utilization</td>
</tr>
<tr>
<td>Member has &gt;= 1 ER visits in the past 90 days</td>
<td>Very-High</td>
<td>Utilization</td>
</tr>
<tr>
<td>Member with CHF needs ACE inhibitors or ARBs Rx filled</td>
<td>High</td>
<td>Care Coordination</td>
</tr>
<tr>
<td>Member has &gt;= 2 ER visits in the past 180 days</td>
<td>Very-High</td>
<td>Stratification</td>
</tr>
<tr>
<td>Member has &gt;= 1 ambulatory care sensitive admissions in past 90 days</td>
<td>Very-High</td>
<td>Utilization</td>
</tr>
<tr>
<td>Member has &gt;= 1 preventable ER visits in the past 90 days</td>
<td>Very-High</td>
<td>Utilization</td>
</tr>
<tr>
<td>Member at high risk for an ER visit</td>
<td>Very-High</td>
<td>Stratification</td>
</tr>
<tr>
<td>Member has clinical follow-up activity</td>
<td>Very-High</td>
<td>Follow-up</td>
</tr>
</tbody>
</table>
The Problem: Ratios of Patients to Case Managers
- Different kinds of case management
- Fixed protocols = fixed costs
- Static predictive models vs. dynamic individual needs
- High cost/high risk vs. provider group care coordination
- Medical vs. BioPsychoSocial case coordination

The Solution: APS Percolator and Case Finding
- Dynamic workflow management
- Access to medical services; deliver necessary education
- Team based care coordination
- Targeted field-based case management
- Manage psychosocial barriers; coordinate medical transitions
Total Health Management Services Across the Care Continuum

APS provides services and support at all stages of health

- Programs and Resources that Help the Total Population Move Toward a Healthier Life
- Well
- At Risk
- Acute
- Chronic
- Complex
- Care, Disease, & Case Management
- Preventive and Wellness
- Lifestyle Management
- Complex Care Management
- Palliative Services
- Utilization Management
Program contract focused on is a sub-set of the whole
Savings accrued for entire program, driven by targeted group savings
Greater savings likely if non-targeted group included

<table>
<thead>
<tr>
<th></th>
<th>Impact on Total Population</th>
<th>Impact on Targeted Top 5%</th>
<th>Impact on Next 15%</th>
<th>Impact on Lowest 80%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Spend</td>
<td>-8%</td>
<td>-20%</td>
<td>-5%</td>
<td>+2%</td>
</tr>
<tr>
<td>PMPM</td>
<td>0%</td>
<td>-11%</td>
<td>+1%</td>
<td>+12%</td>
</tr>
<tr>
<td>Admits/1000</td>
<td>-4%</td>
<td>-8%</td>
<td>-7%</td>
<td>+3%</td>
</tr>
<tr>
<td>Average LOS</td>
<td>-5%</td>
<td>-10%</td>
<td>-12%</td>
<td>+12%</td>
</tr>
<tr>
<td>Inpatient PMPM</td>
<td>0%</td>
<td>-11%</td>
<td>+2%</td>
<td>+23%</td>
</tr>
<tr>
<td>Readmits/1000</td>
<td>-5%</td>
<td>-3%</td>
<td>-5%</td>
<td>-9%</td>
</tr>
<tr>
<td>ER/1000</td>
<td>+3%</td>
<td>+5%</td>
<td>+4%</td>
<td>+3%</td>
</tr>
</tbody>
</table>

*Same ABD members measured in the same risk group from baseline to impact year
APS SMI Impact Assessment: Program B

Pre Post SMI Population Comparison

- Readmits/1000: -73%
- Inpatient PMPM: -68%
- IP Admits/1000: -61%
- ER Visits/1000: -25%
- Rx PMPM: 47%
- Average #Rx: 67%
- Average #Physicians: 24%
Follow-up after Hospitalization for Mental Illness
Program B (State Medicaid Program), 2010-2011

HEDIS 2010 Medicaid 90th Percentile = 64.25%
Contact

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