Implementing Multiple Pathways to Alternative Payment Models in an Academic Medical Center

Vanderbilt University Medical Center

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Vanderbilt University Medical Center

One of the nation’s largest, fully integrated university health systems...

- **Annual operating budget:** $7.5B
- **3,500 faculty** (MDs, PhDs) across all medical disciplines and sub-sub-specialties
- **3 Hospitals** (1,025 beds): Children’s, Adult, Psychiatric,
  - **57,421** Surgical Procedures
  - **2M ambulatory visits**
  - **123,632** ER visits
- **>20,000 faculty and staff** make it the largest state-based private employer of Tennessee citizens
- NCI-designated **Comprehensive Cancer Center** leading clinical trials center
- **National Centers of Excellence** for Heart, Trauma, Neurosurgery, Diabetes, Children’s care, and many others
- **Largest Transplant center** in the Southeast

...with a recognized national stature

- Discovery is core: one of 10 largest U.S. Centers doing NIH-funded biomedical research at $500M/year
- University leader in HIT: **nation's largest Informatics faculty** (70) and over 500 staff
- Lead of **Vanderbilt Health Affiliate Network**: 62 hospitals and >5,200 providers
Vanderbilt Health Affiliated Network

Network Growth

56 HOSPITAL LOCATIONS
12 HOSPITALS AND HEALTH SYSTEMS

We collaborate with other hospitals and health systems in our region, providing healthcare and/or research and academic support, including:
- Baptist Memorial Healthcare
- Cookeville Regional Medical Center
- Erlanger Health System
- Jennings Stuart Medical Center
- Maury Regional Medical Center
- Mountain States Health Alliance
- NorthCrest Medical Center
- Saint Thomas (McDowell and Rutherford)
- Sumner Regional Medical Center
- West Tennessee Healthcare
- Williamson Medical Center

Unique in the Region
- Comprehensive Cancer Center for adults and children
- Level 1 Trauma Center
- Level 4 Neonatal Intensive Care Unit
- Dedicated Regional Burn Center
- TN’s only comprehensive solid organ transplant center

10 MILLION SQ. FT. Vanderbilt University Medical Center’s building footprint

Unique Stats & Facts

Received its largest grant ever — $71.6 million — for its part in the Precision Medicine Initiative Cohort Program, a landmark study of genetic, environmental and lifestyle factors impacting the health of more than a million people.

A credible source of meaningful health information to improve the health of those in the southeast, MySouthernHealth.com has had more than one million page views.
Goals of discussion

• Describe organizational framework to respond to multiple pathways of alternative payment models
• Identify processes to involve clinical leadership in construction and outcomes of P4Ps
• Describe infrastructure that constructs bundles and improves clinical process to enable success.
Population Health
Population Health Aim

Design and implement population health management systems which improve the health status and outcomes of served populations at top quartile performance as compared with national benchmarks.
Population Health Strategic Drivers

- Execution on VUMC Pay for Performance Contracts – P4P
- Develop and Manage Bundles
- Grow Network
- Grow Lives Under Management
- Grow Employer Based Strategic Contracts
- Establish Capabilities to Excel in Risk Based Insurance Relationships
- Execute on Network Value Creation
  - Quality
  - Total Cost of Care
Pop Health PMO Initial Scope

The full scope of the Population Health PMO includes several programs at various states and at varying levels of PMO reporting to include:

- Pay for performance (P4P) outcomes and accountability*
- Design and execution of population health analytics*
- Design and implementation of population health informatics capabilities*
- Episodes of care (Bundles) oversight*
- Care coordination deployment and assessment
- Rationalizing patient site of service (patient flow) across the network
- Design and deployment of transformative chronic care methods and potential other care methods targeted to segments of the population.

*current areas of focus
Pop Health PMO Organization

- Executive Steering Team
- Advisory Cabinets
  - Population Health Clinical Executive
  - Population Health Business/Finance
  - Population Health IT
- PMO Team
  - Analytics
  - Information Systems / IT
  - P4P
  - Quality/ Value
  - Bundles
  - MACRA
  - Communication & Education
Pay for Performance (P4Ps)
P4Ps: A First Step

• P4Ps are tools for tracking and incenting quality improvement

• Used extensively by commercial payers, CMS and some Medicaid agencies

• It just looks easy!!

• Challenges:
  – understand the magnitude and variability of the measures and their associated value and penalties
  – building awareness and organizational buy-in
  – integrate measurement and process improvement into the everyday operations
# Professional P4Ps

## Calendar Year 2016

<table>
<thead>
<tr>
<th>Date Frame</th>
<th>Professional (P4P)</th>
<th>Clinical Quality Measure (CQM)</th>
<th>Performance Measures (PM)</th>
<th>Improvement Measures (IM)</th>
<th>Total Payer Measures (TPM)</th>
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<td>4</td>
<td>6</td>
<td>3</td>
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</table>

## Key

* Type of P4P program (1 quality reporting, 2 cost reduction, 3 quality reporting and cost)
* **Negotiations**

Light Red = Programs >$1M annually with known measures

Dark Red = Measure is needed for MSSP and multiple P4P programs >$1M or included in commercial programs AND opportunities for improvement exist

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# National Council for Behavioral Health

2017 NatCon Highlight #17

#BH365
Building Infrastructure
2017 PILLAR GOALS
VANDERBILT UNIVERSITY MEDICAL CENTER

PEOPLE
We nurture a caring, culturally sensitive, and professional atmosphere as we continuously invest in the individual and collective aspirations of our people.

SERVICE
Collegiality is a central characteristic of our culture and defines how we serve our patients, those we teach, and the local and worldwide community.

QUALITY
We relentlessly pursue and measure ourselves against the highest quality performance in all areas, from patient care to scholarship.

GROWTH & FINANCE
We invest our resources in a manner that supports our long-term obligation to society; to achieve local, national and worldwide impact in improving health.

INNOVATION
We seek excellence and leadership as we advance our systems of care, educational practices and our commitment to discovery.
Bridge
Supporting VUMC’s strategy for clinically effective patient care while adapting to population health and new payment reforms
**VUMC P4P Contract/Program Vetting Process**

**DRAFT**

* Taskforces include representation from: QSRP, Health IT, Pop Health Data Analytics, Case Coordination, Pediatric/Adult Clinic Operations, Quality Improvement, Managed Care, and Pop Health. Taskforces will review and discuss recommendations with Clinical Operations and Executive Committees as necessary.

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- **MCO Contracting**
- **Pop Health / QSRP**
  - Proposed Contract

**Clinical Operational Review**

- Adult Ops Taskforce*
- Peds Ops Taskforce*

**Clinical Appropriateness Review**

- Clinical Chairs
- QSRP

**Data Management Review**

- Health IT
- Analytics

**Initial Financial Review**

**Recommendation Reconciliation [Pop Health PMO]**

- Adult only? Yes
- PACE & CAC

**Hospital P4P Contract?**

- Yes
- No

**Finalized VMG contract**

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See Next: VUMC P4P Contract/Program Operationalizing Process
<table>
<thead>
<tr>
<th>Measure</th>
<th>Population</th>
<th>Description</th>
<th>Frequency</th>
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<td>Breast Cancer Screening</td>
<td>F: 50-75</td>
<td>Mammogram</td>
<td>24 months</td>
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<tr>
<td>Colorectal Cancer Screening</td>
<td>M/F: 50-75</td>
<td>FOBT</td>
<td>FOBT: annual</td>
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<td>Flexible Sig</td>
<td>Flex Sig: q5y</td>
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<tr>
<td></td>
<td></td>
<td>Colonoscopy</td>
<td>Colonoscopy: q10y</td>
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<td>Diabetes A1c Control</td>
<td>M/F: 18-75</td>
<td>A1c &lt; 9</td>
<td>Annual</td>
</tr>
<tr>
<td>Diabetic Eye Exam</td>
<td>M/F: 18-75</td>
<td>Dilated eye exam</td>
<td>Annual</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Retinal photograph</td>
<td></td>
</tr>
<tr>
<td>Adult BMI Assessment</td>
<td>M/F: ≥ 18</td>
<td>Measure height and weight (calc. BMI)</td>
<td>Annual</td>
</tr>
<tr>
<td>High Risk Medication</td>
<td>M/F: ≥ 66</td>
<td>Prescription for HRM</td>
<td>Annual</td>
</tr>
<tr>
<td>Influenza Immunization</td>
<td>M/F: ≥ 6 mo.</td>
<td>Receive influenza immunization</td>
<td>Annual</td>
</tr>
<tr>
<td>Pneumococcal Vaccination</td>
<td>M/F: ≥ 65</td>
<td>Receive pneumococcal vaccine</td>
<td>Once</td>
</tr>
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</table>

VUMCBridge.com
Operational Approach

Key Leader Engagement
• Continued Partnership with PCC & Department Leadership, Clinical Champions, and Clinic Managers

Data Improvement
• Establish a tool kit: ex. EMR tools and dashboard
• Systematic rollout plan

Clinical Process Improvement
• Support workflow and solutions within and among departments and clinics
Workflow Tools
StarTracker Indicator (in StarPanel)
## Outpatient Visit Panel (in StarPanel)

<table>
<thead>
<tr>
<th>MR#</th>
<th>Patient Name</th>
<th>Actions</th>
<th>Age</th>
<th>S</th>
<th>PCP</th>
<th>Apptmt.</th>
<th>Ck-in</th>
<th>Provider</th>
<th>dept</th>
<th>appType</th>
<th>Alert for HVM</th>
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</tbody>
</table>

- **Actions**: Various actions related to patient visits and appointments.
- **Age**: Age of the patient.
- **S**: Significance level.
- **PCP**: Primary Care Provider.
- **Apptmt.**: Appointment details.
- **Ck-in**: Check-in time.
- **Provider**: Provider details.
- **dept**: Department.
- **appType**: Type of appointment.
- **Alert for HVM**: Alerts for healthcare visualization metrics.
## Bridge Quality Dashboard (mock up)

<table>
<thead>
<tr>
<th>Measure</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Adult BMI Assessment</td>
<td>90.1%</td>
</tr>
<tr>
<td>Breast Cancer Screening</td>
<td>65.8%</td>
</tr>
<tr>
<td>Colorectal Cancer Screening</td>
<td>59.2%</td>
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<tr>
<td>Diabetes Eye Exam</td>
<td>25.3%</td>
</tr>
<tr>
<td>Diabetes: HbA1c &lt;9</td>
<td>86.0%</td>
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<tr>
<td>High Risk Medications</td>
<td>94.3%</td>
</tr>
<tr>
<td>Influenza Immunization</td>
<td>83.7%</td>
</tr>
<tr>
<td>Pneumococcal Vaccination</td>
<td>92.2%</td>
</tr>
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</table>
Continued Work

- Ongoing pilot projects in 4 Primary Care clinics
- Scaling lessons learned across multiple clinics
- Expansion of measures and roll out into Women’s Health and Pediatrics
- Ongoing touchpoints and support
- Data Monitoring
- Clinical Process Improvement
Transforming Clinical Practice Networks (TCPI)
In September 2015, CMS announced $685 million in awards over four years to regional networks and support organizations as part of TCPI

29 Practice Transformation Networks (PTNs) received awards, including MidSouth PTN. 10 Support and Alignment Networks (SANs) also received awards.

CMS funded the networks to support 140,000 clinicians nationwide in data collection/reporting and practice transformation activities necessary to be successful in pay-for-value models. CMS defines this progression through the TCPI five phases of transformation:

The goal of TCPI is to “graduate” participating practices into APMs successfully.
TCPI As Supportive Conduit to APMs

- Practices enrolled by PTNs are assessed on:
  - Quality improvement (QI) & Evidence-based practice
  - Data collection and reporting
  - Patient and family engagement
  - Preparation for APMs

- PTN provides technical assistance (and, in some cases, financial support) to the practice to:
  - Develop a QI plan and set improvement targets
  - Implement appropriate interventions
  - Collect and report data

- TCPI aligns with APMs (e.g., MSSP) on numerous fronts:
  - Data Collection and reporting on quality and cost metrics
  - Engaging clinicians in practice transformation and quality improvement
  - Aligning on key quality goals to improve outcomes and reduce costs
Preparing for Data Collection and Reporting under APMs

Our quality goals align with current MSSP and P4P measures and we employ ACO definitions to facilitate the transition into MSSP and other APMs.

<table>
<thead>
<tr>
<th>QUALITY MEASURES</th>
<th>MSSP</th>
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<tbody>
<tr>
<td>Breast Cancer Screening</td>
<td>X</td>
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<tr>
<td>Colorectal Cancer Screening</td>
<td>X</td>
</tr>
<tr>
<td>Pneumonia Vaccination Status for Older Adults</td>
<td>X</td>
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<tr>
<td>Influenza Immunizations</td>
<td>X</td>
</tr>
<tr>
<td>Screening for Clinical Depression and Follow-up plan</td>
<td>X</td>
</tr>
<tr>
<td>Tobacco Use: Screening and Cessation Intervention</td>
<td>X</td>
</tr>
<tr>
<td>Well Child Visits 3-6 Years of Life</td>
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<tr>
<td>Diabetes: HbA1c Poor Control (&gt;9.0%)</td>
<td>X</td>
</tr>
<tr>
<td>Coronary Artery Disease (CAD): ACE-I or ARB Therapy – Diabetes or LVSD (LVEF &lt;40%)</td>
<td>X</td>
</tr>
<tr>
<td>CAHPS for PQRS Clinician/Group Survey</td>
<td>X</td>
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</tbody>
</table>

Our utilization measures focus our clinicians on evidence-based practice, reduced unnecessary utilization and higher value care.

<table>
<thead>
<tr>
<th>UTILIZATION MEASURES</th>
<th>MSSP</th>
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<tbody>
<tr>
<td>All-Cause Readmissions</td>
<td>X</td>
</tr>
<tr>
<td>All-Cause Unplanned Admissions for Patient with Diabetes</td>
<td>X</td>
</tr>
<tr>
<td>All-Case Unplanned Admissions for Patient with Heart Failure</td>
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<td>Reduction in &lt;2 Day Hospital Length of Stay (LOS)</td>
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<tr>
<td>Reduction in ED Visits</td>
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<tr>
<td><strong>Choosing Wisely:</strong></td>
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<td>Back Pain Imaging with No Red Flags</td>
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<td>Benign Prostatic Hyperplasia Imaging</td>
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<td>Cardiac Tests for Low Risk Patients</td>
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<td>Cervical Cancer Screenings for Women over 65</td>
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<td>Dual-Energy X-Ray Absorptiometry Scans</td>
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<td>Preoperative Cardiac Tests for Cataract Surgery</td>
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<tr>
<td>Preoperative Cardiac Tests for Non-Cardiac Surgeries</td>
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<td>Population-based 25-OH Vitamin D Deficiency Screenings</td>
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<td>Percutaneous Feeding Tubes for Advanced Dementia</td>
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<tr>
<td>Opioid or Butalbital Treatment for Migraines</td>
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MidSouth’s QI, data, and financial support not only facilitate our practices’ transition to APMs but also prepare them for the requirements of P4P models ensuring their future success.
Bundle Payments/ Episodes of Care
Episodes of Care Program

- **VUMC Episodes of Care Department**
- **State Mandated “Episodes of Care”**
- **Medicare Bundle Payments**
- **Voluntary programs**
VUMC Bundle Payment Episodes Landscape

**Mandated - State Medicaid**
- Wave 1 (start Jan 2015)
  - Perinatal
  - Asthma
  - Total Joint
- Wave 2 (start Jan 2016)
  - Colonoscopy
  - Non Acute/ Acute PCI
  - Cholecystectomy
  - COPD
- Waves 3 & 4 (start Jan 2017)
  - EGD
  - Respiratory Infection
  - Pneumonia
  - Urinary Tract Infection
  - GI Hemorrhage
  - CABG
  - CHF acute exacerbation
  - Valve Repair
  - ADHD
  - Bariatric Surgery
  - ODD

**Mandated - CMS**
- CMS
  - Total Joint (CJR)
  - Coronary Artery Bypass
  - Acute Myocardial Infarctions
  - Surgical Hip/Femur Fracture Treatment

**Voluntary**
- CMS (Bundle Payment Care Initiative- BPCI)
  - Valve Surgery
  - Total Joint
  - Stroke
  - Oncology Care Model

**Created/ Internal work**
- Internal
  - Pneumonia
  - Spine Surgery
  - Percutaneous Coronary Intervention
  - Congestive Heart Failure
  - Neonatal
<table>
<thead>
<tr>
<th></th>
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<tr>
<td>Perinatal*</td>
<td>Colonoscopy</td>
<td>GI hemorrhage</td>
<td>Cardiac valve*</td>
<td>Non-emergent depression</td>
</tr>
<tr>
<td>Asthma*</td>
<td>Non Acute / Acute PCI*</td>
<td>Simple pneumonia*</td>
<td>CABG*</td>
<td>Anxiety</td>
</tr>
<tr>
<td>Total Joint*</td>
<td>Cholecystectomy</td>
<td>Upper Respiratory Infection</td>
<td>ODD</td>
<td>Otitis/ Tonsillectomy</td>
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<td></td>
<td></td>
<td></td>
<td>CHF acute exacerbation*</td>
<td>Breast cancer (multiple)*</td>
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</table>

<table>
<thead>
<tr>
<th>Wave 6- Baseline 2016 (performance start 1/2018)</th>
<th>Wave 7- Baseline 2017</th>
<th>Wave 8- Baseline 2017</th>
<th>Wave 9- Baseline 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pancreatitis</td>
<td>Knee arthroscopy</td>
<td>Schizophrenia (multiple)</td>
<td>Other major bowel (multiple)</td>
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<tr>
<td>Diabetes Acute Exacerbation</td>
<td>Hip/Pelvic fracture*</td>
<td>Pacemaker/Defibrillator</td>
<td>Female reproductive cancer*</td>
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<td>HIV</td>
<td>Lumbar laminectomy</td>
<td>Sick cell</td>
<td>Lung cancer (multiple)*</td>
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<tr>
<td>Neonatal (multiple)*</td>
<td>Spinal fusion exc. Cervical*</td>
<td>Cardiac arrhythmia</td>
<td>Major Depression</td>
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<td>Outpatient skin and soft tissue skin infection</td>
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<td>Hernia procedures</td>
<td>PTSD</td>
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<table>
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<th>Wave 10- Baseline 2018</th>
<th>Wave 11- Baseline 2019</th>
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<tr>
<td>Drug dependence</td>
<td>Dermatitis/Urticaria</td>
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<tr>
<td>GERD acute exacerbation</td>
<td>Kidney &amp; urinary tract stones</td>
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<tr>
<td>Pancreatitis</td>
<td>Other respiratory infection</td>
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<td>Hepatobiliary &amp; pancreatic cancer*</td>
<td>Epileptic seizure</td>
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<td>Renal failure</td>
<td>Hypotension/Syncope</td>
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<tr>
<td>Fluid electrolyte imbalance</td>
<td>Bipolar (multiple)</td>
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<tr>
<td>GI obstruction</td>
<td>Conduct disorder</td>
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<tr>
<td>Rheumatoid arthritis</td>
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</table>

*Episodes where work is ongoing or has in the past occurred with clinical leaders to decrease cost and increase quality
<table>
<thead>
<tr>
<th>Wave 1 - Baseline 2015 (performance start 1/2015)</th>
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</thead>
<tbody>
<tr>
<td>Wave 2 - Baseline 2014 (performance start 1/2016)</td>
</tr>
<tr>
<td>Wave 3 - Baseline 2015 (performance start 1/2017)</td>
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<tr>
<td>Wave 4 - Baseline 2015 (performance start 1/2017)</td>
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<tr>
<td>Wave 5 - Baseline 2016 (performance start 1/2018)</td>
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<thead>
<tr>
<th>Wave 9 - Baseline 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Depression</td>
</tr>
<tr>
<td>PTSD</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Wave 10 - Baseline 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drug dependence</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Wave 11 - Baseline 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bipolar (multiple)</td>
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<tr>
<td>Conduct disorder</td>
</tr>
</tbody>
</table>

*ADHD delayed start date to 1/2018

Behavioral Health Episodes of Care through 2019
Organizational Changes to Support Value Based Care
Structure and Standardization

- Governance structure with centralized support
- Population prioritization tool
- Playbook for clinical redesign efforts
  - Lean tools, PDSA, Driver Diagrams
- Standardized analytics tool
- Reporting tool for Leading and Lagging measures
Episode of Care Governance Structure

- Executive Sponsor Committee
- Hospital Senior Leadership
- Service Line Leadership
- Episodes of Care Office

Newly formed committees or support for Value Based work
Office of Episodes of Care aligned with service line roles to accomplish work

Service line Centered Resources

- Admin Lead
- Physician Lead
- Physician Content Experts
- Operational Leaders
- Finance
- Analyst
- Quality
- Systems Engineering

Ad hoc services - i.e. HITS, EDW team, EBM
Shifting Responsibilities through the Phases of the Playbook

1: Setup
2: Analyzing and Initiating
3: Developing Interventions
4: Testing Interventions
5: Hardwiring Successes
6: Monitoring & Sustaining

Responsibility

Office of Episodes of Care
Service Line

Consult
Progress through the phases
What does the playbook contain?

1: Setup
- Define the population
- Financial Opportunity Analysis
- Population Leadership meeting
- Environmental Assessment

2: Analyzing and Initiating
- Create flowcharts, Value stream mapping, TDABC* in targeted areas
- Use tableau tool to look at EDW* data for variation between physician and cost in population
- Meet with Population Core Team to review “hard” and “soft” data to identify opportunities

3: Developing Interventions
- Create Aims from data
- List all interventions that drive aim
- Determine process & outcome metrics
- Leads assigned to each Aim to lead out work groups

*TDABC = Time Driven Activity Based Costing
EDW = Enterprise Data Warehouse
What does the playbook contain?

4: Testing Interventions
- Identify intervention to test in PDSA iterative cycle
- Measure identified process metrics for desired effect
- Report out progress/changes; recognize success

5: Hardwiring Success
- Spread Interventions that give desired effect based on data
- Continue measuring process measures; add outcome measures
- Create electronic tools for clinical support
- Publish data on an ongoing reporting tool

6: Monitoring and Sustaining
- Identify owners of process in each phase to review data
- Determine “alerts” for review
- Set up regular meetings for key members for report out on “hard” and “soft” data
- Cycle back to phase 4 or 5 if issues are identified
### Summary of TAG recommendations – ADHD episode (11.15.2016)

<table>
<thead>
<tr>
<th>Area</th>
<th>Episode design summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><strong>Identifying episode triggers</strong></td>
</tr>
<tr>
<td></td>
<td>An ADHD episode is triggered by a professional claim that has:</td>
</tr>
<tr>
<td></td>
<td>- A primary diagnosis of ADHD (ICD-9 diagnosis code 314 – Hyperkinetic syndrome of childhood), or</td>
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<tr>
<td></td>
<td>- A secondary diagnosis of ADHD and a primary diagnosis of a symptom of ADHD1</td>
</tr>
<tr>
<td></td>
<td>This professional visit must also have a procedure code that is for assessment, therapy, case management, or physician services</td>
</tr>
<tr>
<td>2</td>
<td><strong>Attributing episodes to quarterbacks</strong></td>
</tr>
<tr>
<td></td>
<td>The quarterback is the provider or group with the plurality of ADHD-related visits during the episode</td>
</tr>
<tr>
<td></td>
<td>The contracting entity ID with the plurality of ADHD visits will be used to identify the quarterback</td>
</tr>
<tr>
<td>3</td>
<td><strong>Identifying services to include in episode spend</strong></td>
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<tr>
<td></td>
<td>The length of the ADHD episode is 180 days. During this time period the following services are included in episode spend:</td>
</tr>
<tr>
<td></td>
<td>- All inpatient, outpatient, professional, and long-term care claims with a primary diagnosis of ADHD</td>
</tr>
<tr>
<td></td>
<td>- All inpatient, outpatient, professional, and long-term care claims with a secondary diagnosis of ADHD and a primary diagnosis of a symptom of ADHD</td>
</tr>
<tr>
<td></td>
<td>Pharmacy claims with eligible therapeutic codes</td>
</tr>
<tr>
<td>4</td>
<td><strong>Risk adjusting and excluding episodes</strong></td>
</tr>
<tr>
<td></td>
<td>Episodes affected by factors that make them inherently more costly than others are risk adjusted. The list of factors recommended for testing will be provided in the DBR</td>
</tr>
<tr>
<td></td>
<td>Episodes which are not comparable or affected by factors that make them inherently more costly but that cannot be risk adjusted for are excluded. There are three types of exclusions:</td>
</tr>
<tr>
<td></td>
<td>Business exclusions: Available information is not comparable or is incomplete2</td>
</tr>
<tr>
<td></td>
<td>Clinical exclusions: Patient’s care pathway is different for clinical reasons:</td>
</tr>
<tr>
<td></td>
<td>- Those include age (&lt;4 or ≥20), attempted suicide, autism, bipolar, BPD, conduct disorder, delirium, dementia, dissociative disorders, homicidal ideation, intellectual disabilities, manic disorders, psychoses, PTSD, schizophrenia, specific psychosomatic disorders (e.g. facilitious disorder), substance abuse, homelessness, disruptive dysregulation mood disorder (DDMD), children in custody (DCC) and Level 1 Case Management2</td>
</tr>
<tr>
<td></td>
<td>- High cost outlier exclusions: Episode’s risk adjusted spend is three standard deviations above the mean</td>
</tr>
<tr>
<td>5</td>
<td><strong>Determining quality metrics performance</strong></td>
</tr>
<tr>
<td></td>
<td>Quality metrics tied to gain sharing are:</td>
</tr>
<tr>
<td></td>
<td>- Percentage of valid episodes that meet the minimum care requirement. The minimum care requirement is set at 5 visits/claims with a related diagnosis code during the episode window. These may be a combination of physician visits, therapy visits, level I case management visits, or pharmacy claims for treatment of ADHD</td>
</tr>
<tr>
<td></td>
<td>- Rate of long-acting medication use by age group (4 and 5, 6 to 11, 12 to 20)</td>
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<tr>
<td></td>
<td>- Average number of therapy visits per valid episode for the 4 and 5 age group</td>
</tr>
<tr>
<td></td>
<td>Quality metrics not tied to gain sharing are:</td>
</tr>
<tr>
<td></td>
<td>- Average number of physician visits per valid episode</td>
</tr>
<tr>
<td></td>
<td>- Average number of therapy visits per valid episode by age group (6 to 11, and 12 to 20)</td>
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<tr>
<td></td>
<td>- Average number of level I case management visits per valid episode</td>
</tr>
<tr>
<td></td>
<td>- Percentage of valid episodes with medication by age group (4 and 5, 6 to 11, and 12 to 20)</td>
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<tr>
<td></td>
<td>- Percentage of valid episodes for which the patient has a physician, therapy, or level I case management visit within 30 days of the triggering visit</td>
</tr>
</tbody>
</table>

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1 Symptoms of ADHD are identified by ICD-9 diagnosis codes 312.30 – Impulse control disorder and 312.9 – Unspecified disturbance of conduct

2 Episodes with inconsistent enrollment, third-party liability, or dual eligibility; episodes where triggering procedure occurs in a Federally Qualified Health Center or Rural Health Clinic; episodes that cannot be associated with a quarterback ID; episodes with zero triggering professional spend; episodes where total non-risk-adjusted spend is within the bottom 2.5% of all episodes; and episodes where patients expired in the hospital or left against medical advice

3 Level 1 Case Management will be evaluated before the 2018 performance period.
# TennCare Report Scorecard (Preview Wave 4 - Reporting 04/01/2015 - 3/31/2016)

<table>
<thead>
<tr>
<th>Volume</th>
<th>Cost</th>
<th>Quality</th>
<th>Low threshold</th>
<th>High threshold</th>
<th>Actual Avg Payment</th>
<th>Gain/ Loss</th>
<th>Quality Metrics tied to Shared Savings Eligibility (*Goal)</th>
</tr>
</thead>
<tbody>
<tr>
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</table>

**Attention Deficit & Hyperactivity Disorder (Provider)**

**Minimum care REQ rate**

- **BlueCare**: 242
  - Quality: ✔️
  - Low threshold: ✔️
  - $1,283.00
  - High threshold: ✔️
  - $1,959.60

- **CoverKids-VUMC**: 1
  - Quality: ✔️
  - Low threshold: ✔️
  - $1,135.00
  - High threshold: ✔️
  - $1,959.60

- **CoverKids-VMG**: 125
  - Quality: ✔️
  - Low threshold: ✔️
  - $1,135.00
  - High threshold: ✔️
  - $1,959.60

- **Amerigroup**: 163
  - Quality: ✔️
  - Low threshold: ✔️
  - $1,050.00
  - High threshold: ✔️
  - $1,959.60

- **United**: 183
  - Quality: ✔️
  - Low threshold: ✔️
  - $800.00
  - High threshold: ✔️
  - $1,959.60

**Minimum care requirement:** Percentage of valid episodes that meet the minimum care requirement. The minimum care requirement is set at 5 visits/claims during the episode window. These may be a combination of E&M and medication management visits, therapy visits, level I case management visits, or pharmacy claims for treatment of ADHD (higher rate indicative of better performance).
Next Steps

• Look at episodes that extend long periods in continuum for enhanced protocols and collaboration
• Add patient reported outcomes to episodes including behavioral health measures
Questions?

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Tiercy.k.Fortenberry@Vanderbilt.edu