Balancing State, Federal and Internal Bundle Payment Initiatives

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Key Take Aways

- What are the different types of bundles and reasons to become involved in a bundle payment?
- How do you work with multiple bundle payments at a time?
- What tools can you use to make changes?



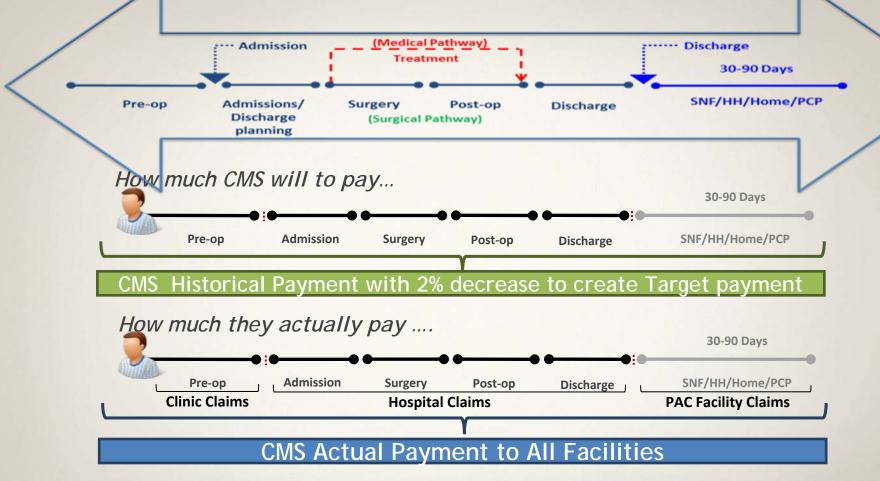
2013

2014

2015

2016

- Started BPCI program redesign
- State of TN announced Episodes of Care program
- BPCI program went live 1/1/2014 for Valve Surgery
- Temporary office formed to respond to state program
- Moved to sustaining office to support efforts
- 3 Episodes for Medicaid population mandated started 1/1/2015
- Addition of Total Joint and Stroke to BPCI
- Valve BPCI ended 1/1/2016
- CJR program 4/1/2016
- 5 Episodes added for mandated Medicaid population
- NOSA collaboration

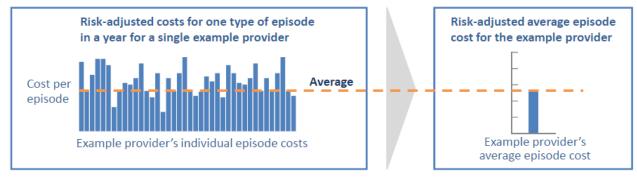


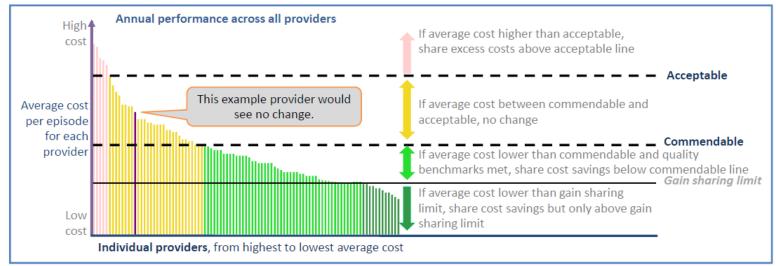


Target Payment > Actual Payment = hospital gets

Farget Payment < Actual Payment = hospital pays

TennCare Episodes of Care Program





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Current Episodes of Care in TN























Evaluating Other **episodes**







(State Employee Health Plan) (Commercial)

VUMC Episodes Landscape

Mandated

- TennCare
 - Perinatal
 - Asthma*
 - Total Joint
 - Colonoscopy
 - Non Acute/ Acute PCI
 - Cholecystectomy
 - COPD**
- CMS
 - Total Joint (CCJR)

Voluntary

- CMS (BPCI)
 - Valve Surgery*
 - Total Joint*
 - Stroke**
- Oncology Care Model**

Created/Internal work

- Internal
 - Pneumonia*
 - Spine Surgery*
 - PCI**
 - CHF**
 - Neonatal⁺⁺
 - CABG⁺⁺
 - GI Surgery⁺⁺

^{*}Currently in Monitoring phase

^{**}Currently in implementation phase

⁺⁺Future FY17 populations

75 Episodes of Care through 2019

Wave 1- Baseline 2015 (performance start 1/2015)

Perinatal

Asthma

Total Joint

Wave 2- Baseline 2014(performance start 1/2016)

Colonoscopy

Non Acute / Acute PCI

Cholecystectomy

COPD

Wave 3- Baseline 2015 (performance start 1/2017)

Kidney infection

GI hemorrhage

Simple pneumonia

URI

Upper GI endoscopy

UTI

Wave 4- Baseline 2015 (performance start 1/2017)

Cardiac valve

CABG

ODD

CHF acute exacerbation

ADHD (multiple)

Wave 5- Baseline 2016 (performance start 1/2018)

Breast biopsy

PTSD

Anxiety

Otitis/ Tonsillectomy

Breast cancer (multiple)

Wave 6- Baseline 2016 (performance start 1/2018)

Bronchiolitis & RSV pneumonia

Hepatitis C

HIV

Neonatal Part I (multiple)

Neonatal Part II (multiple)

Cellulitis & bacterial skin infection

Wave 7- 2017

Knee arthroscopy

Hip/Pelvic fracture

Lumbar laminectomy

Spinal fusion exc. cervical

Diabetes acute exacerbation

Schizophrenia (multiple)

Medical non-infectious orthopedic

Wave 8-2017

Pacemaker/Defibrillator

Sickle cell

Cardiac arrhythmia

Hernia procedures

Coronary artery disease & angina

Colon cancer

Anal procedures

Hemophilia & other coag. disorders

Wave 9-2018

Bariatric surgery

Other major bowel (multiple)

Female reproductive cancer

Lung cancer (multiple)

Major Depression

Mild/Moderate Depression

Wave 10- 2018

Drug dependence

GERD acute exacerbation

Pancreatitis

Hepatobiliary & pancreatic cancer

Renal failure

Fluid electrolyte imbalance

GI obstruction

Rheumatoid arthritis

Wave 11- 2019

Dermatitis/Urticaria

Kidney & urinary tract stones

Other respiratory infection

Epileptic seizure

Hypotension/Syncope

Bipolar (multiple)

Conduct disorder

Managing different Model Elements

Elements	TennCare	CMS-BPCI	Internal	
Program Duration	Rolling Wave implementations through 2011	3 Yrs. (11/1/15-9/30-/18)	Per Negotiated Contract	
Baseline Period	Baseline Yr previous to Performance Yr	Fixed	EPSi Data FY 2014 forward	
Primary Accountable Provider (PAP)	Either Hospital OR primary physician	Hospital	Hospital	
Episode Trigger	Defined by ICD-9s or CPTs	Defined by DRGs	Defined internally by PCC and Episodes of Care Team	
Post-Trigger Window	Varies (30-90 days)	90 Days Post-Discharge	Identified by PCC and Episodes of Care Team	
Quality Metrics Defined by Episode		Administrative claims	National benchmarks for population or defined internally if benchmarks are unavailable	
Target Price Factors	Upper Threshold set by TennCare Lower Threshold set by individual MCOs	Determined by Historical Hospital-Specific Data (Updated 4x/Yr. w/Trend Factors)	Based on historical payments, internal margins and market position data for like services within the region	
Discount Factor	MCOs apply individual risk adjustment	Yr. 1-3 = 2%	Negotiated with individual payers	
Risk	50% shared savings/ risk over thresholds	Retrospective, Two-sided w/Repayment Starting in Yr. 1.	Per negotiated contract	
Payment	FFS w/ Reconciliation once for each CY	FFS w/Reconciliation 4x/Yr.	Single prospective payment with allocated distribution from hospital	
Data	PDF report per MCO	Episode Claims 12x/Yr.	Currently Internal Data only	

HOW DO WE RESPOND AND PREPARE?

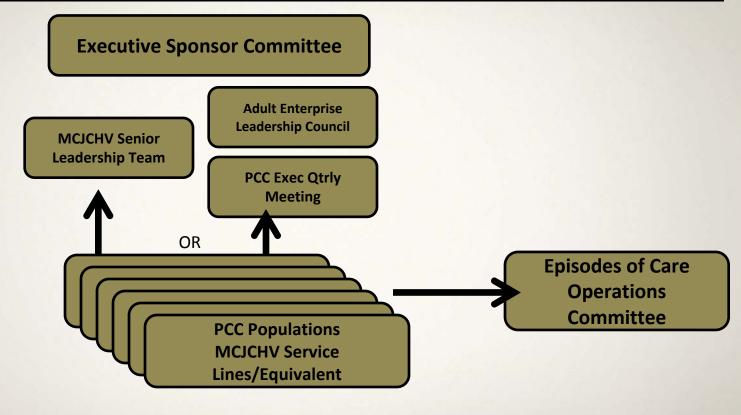


Structure and Standardization

- Governance structure with centralized support
- Population prioritization tool
- Playbook for clinical redesign efforts
 - Lean tools, PDSA, Driver Diagrams
- Standardized analytics tool
- Standardize process for pricing populations
- Approval for proactive efforts



Episode of Care Governance Structure





Episodes of Care Office

Roles and Responsibilities work

CEO Team

<u>Accountable</u> for prioritizing populations, Initiating Teams, Holding PCCs accountable for work, Removing barriers for successful implementation

Chairs

<u>Responsible</u> for initiating teams, Holding PCC accountable; <u>Consulted</u> during Population identification prioritization

PCC MD/ ANO/ AOO

<u>Accountable and Responsible</u> for mobilizing teams, Identifying Opportunities for Improvement, Developing Interventions, Assigning Leads, Testing Interventions, Hardwiring

MD Content Expert

<u>Responsible</u> for Identifying opportunities and Developing Interventions

PCC Staff and Faculty

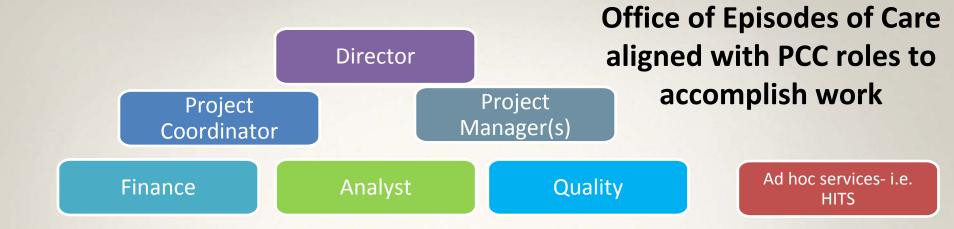
<u>Consulted</u> for Identification of opportunities and Developing Interventions; <u>Responsible</u> for Testing Interventions and Hardwiring

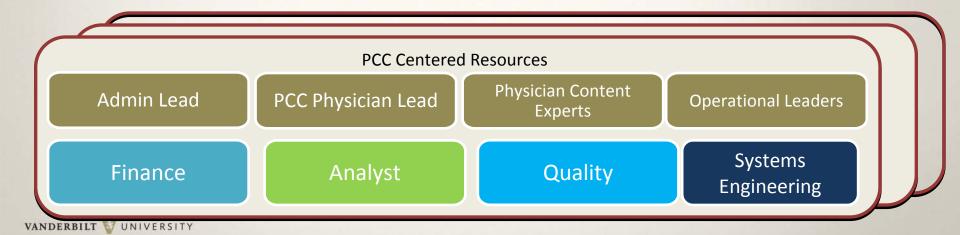
PCC Support Team-Quality, Analyst, Finance <u>Responsible</u> for Identifying Opportunities for Improvement through data, Developing Interventions, Testing Interventions, and Hardwiring

Episodes of Care Team

<u>Accountable and Responsible</u> for supporting work through analysis of populations and opportunities, facilitating team through work; <u>Consulted</u> for Identifying Opportunities for Improvement, Developing Interventions, Testing Interventions

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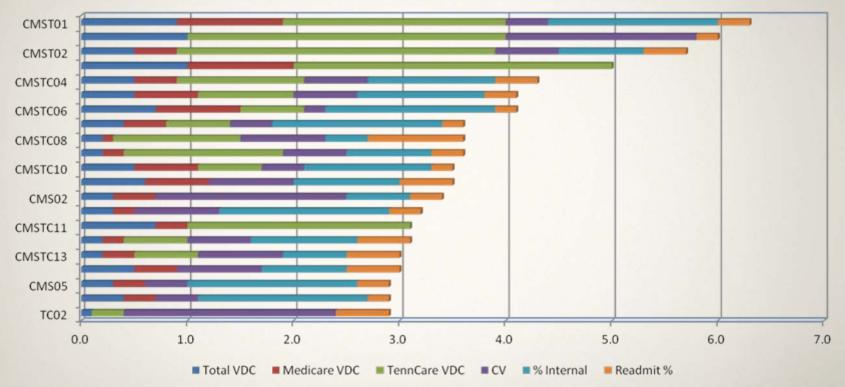
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Bundles Prioritization – Scoring Tool

- Objective: Prioritize episodes of care for focused analysis and performance improvement initiatives.
- The tool utilizes the CMS structure as the baseline, matches anticipated Tenncare episodes and considers other high cost DRGs.

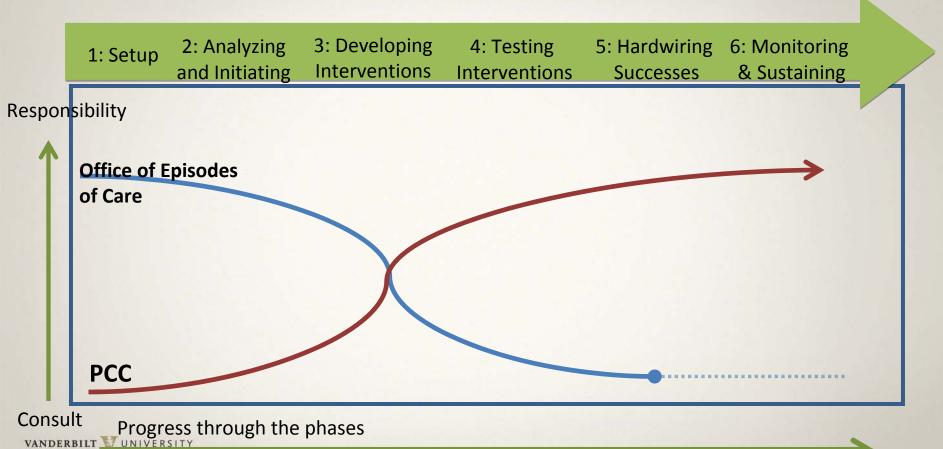
Variable	Scoring Weight		
Medicare Variable Direct Cost (for applicable episodes)	10%		
TennCare Variable Direct Cost (for applicable episodes)	30%		
Total Variable Direct Cost	10%		
Coefficient of Variation (case mix adjusted – all cases)	20%		
% Inpatient (per Medicare claims analysis, as available)	20%		
Readmit % (30-day All Cause)	10%		
	100%		

Scoring Results – Top 20 Episodes





Shifting Responsibilities through the Phases of the Playbook



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What does the playbook contain?

Exec Sign off

Exec Sign off

1: Setup

2: Analyzing and Initiating

3: Developing Interventions

Define the population

Financial
Opportunity
Analysis

Population Leadership meeting

Environmental Assessment

Exec Sign off

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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

Exec Sign off Create Aims from data

List all interventions that drive aim

Determine process & outcome metrics

Leads assigned to each Aim to lead out work groups

Core Team Sign of

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

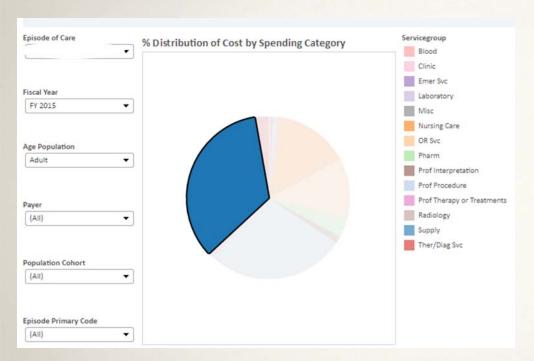
Determine "alerts" for review

Set up regular meetings for key members for report out on "hard" and "soft" data

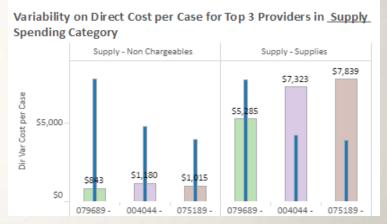
Cycle back to phase 4 or 5 if issues are identified



Analytics tool: Drill down by Physician

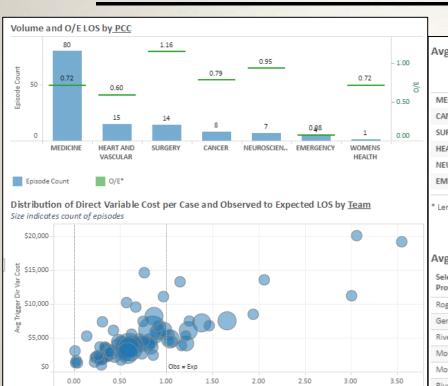








Team drill down to show variation



Observed to Expected (O/E) LOS

Avg Cost per Episode, LOS and Readmit Rate by PCC

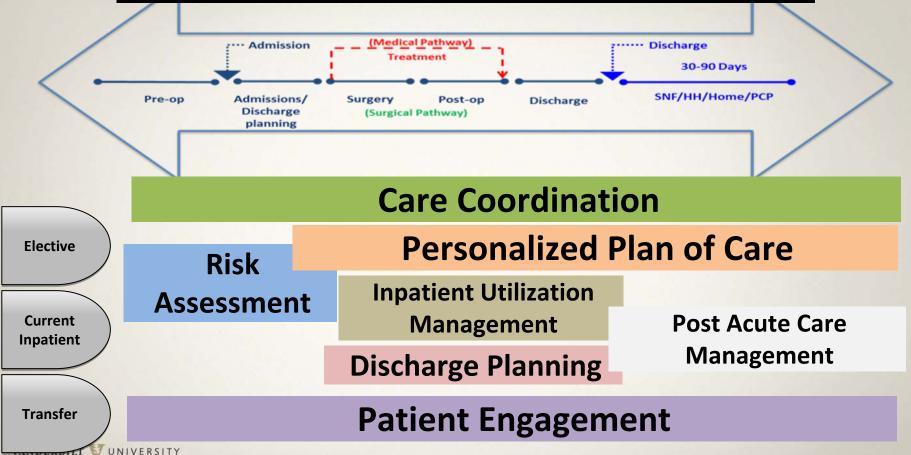
	Episode Count	% of All Episodes	Trigger Avg LOS*	O/E*	Readmit Rate
MEDICINE	80	62.0%	3.1	0.72	11.3%
CANCER	8	6.2%	3.2	0.79	12.5%
SURGERY	14	10.9%	5.0	1.16	14.3%
HEART AND VASCULAR	15	11.6%	2.5	0.60	6.7%
NEUROSCIENCES	7	5.4%	3.5	0.95	0.0%
EMERGENCY	4	3.1%	0.3	0.08	0.0%

^{*} Length of Stay is calculated for inpatients only (this metric is under development for the Asthma episode)

Avg Cost per Episode, LOS and Readmit Rate by Top 15 Providers per Team

Select Unit, Team or Provider	Episode Count	% of All Episodes	Trigger Avg LOS*	O/E*	Readmit Rate
Rogers Pulmonary A	32	24.8%	3.4	0.76	6.3%
Geriatrics 2	10	7.8%	2.8	0.70	0.0%
Riven Hm 5	8	6.2%	2.4	0.64	0.0%
Morgan 1	7	5.4%	3.5	0.95	0.0%
Morgan 4	6	4.7%	2.9	0.64	16.7%
Riven Hm 2	6	4.7%	3.9	0.81	16.7%
Riven Hm 4	5	3.9%	3.3	0.96	0.0%

Interventions across the Continuum



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Post Acute Care Relationships

- Joint Councils/ Quality council
- Affiliations
- Standard quality measures



Outcomes to date

- Decreased Direct Variable Cost by \$250k in 3 populations
- Decreased Total Joint LOS by 19% (3.5 to 2.8 days)
- Decreased Total Joint SNF utilization from 22% to 14%
- Decreased Valve Surgery Readmissions from 50% to 30%
- Dropped the Valve Surgery BPCI total episode cost ratio to 0.83 with post acute care ratio to 0.55
- Patient satisfaction up in Ortho, Nuero, and Cardiology, the areas of CMS at risk bundles



Current Population Status

1: Setup

2: Analyzing and Initiating

3: Developing Interventions

4: Testing Interventions

5: Hardwiring Successes

6: Monitoring& Sustaining

Population	Playbook phase	Cost Quality		External Drivers	
Asthma	Performance	~	~	TennCare- Wave 1	
Perinatal	Performance	•	~	TennCare- Wave 1	
Ortho- Total Joint	Performance	0	~	TennCare; BPCI Oct 2015	
Spine Surgery	Performance	×	~	Internal	
Pneumonia	Performance	•	×	Internal	
Stroke	Intervention	~	×	BPCI Oct 2015	
PCI	Intervention	•	~	TennCare Wave2; Internal	
COPD	Intervention	×	_	TennCare Wave 2; Internal	
CHF	Baseline			TennCare Wave 4; Internal	
Oncology	Baseline			CMS application	

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