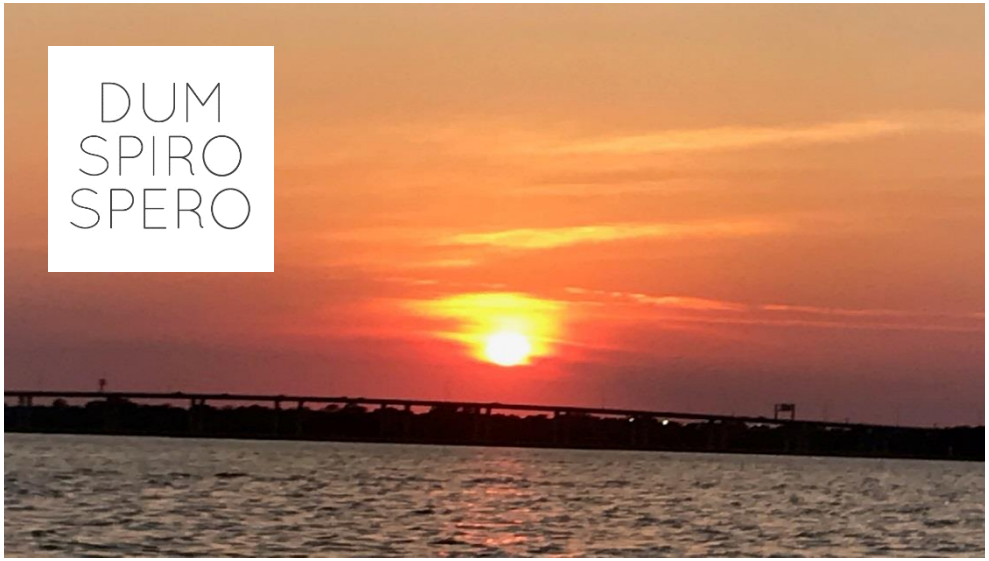
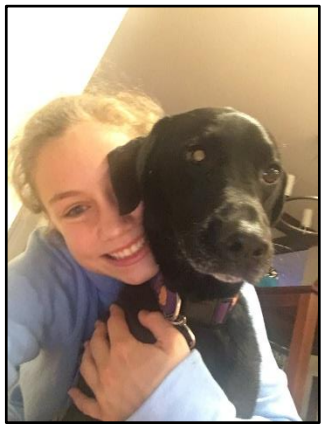
Bringing a Lagging Finance Function up to Speed on the Heels of Clinical Integration

MUSC
MEDICAL UNIVERSITY of SOUTH CAROLINA
Changing What's Possible

Lisa M. Goodlett, CPA, MBA, FACHE
Chief Financial Officer
MUSC Health

DUM SPIRO SPERO





Bringing a Lagging Finance Function up to Speed on the Heels of Clinical Integration

Clinical Integration Definition

- Collaborative leadership
- Aligned incentives
- Clinical programs
- Technology infrastructure

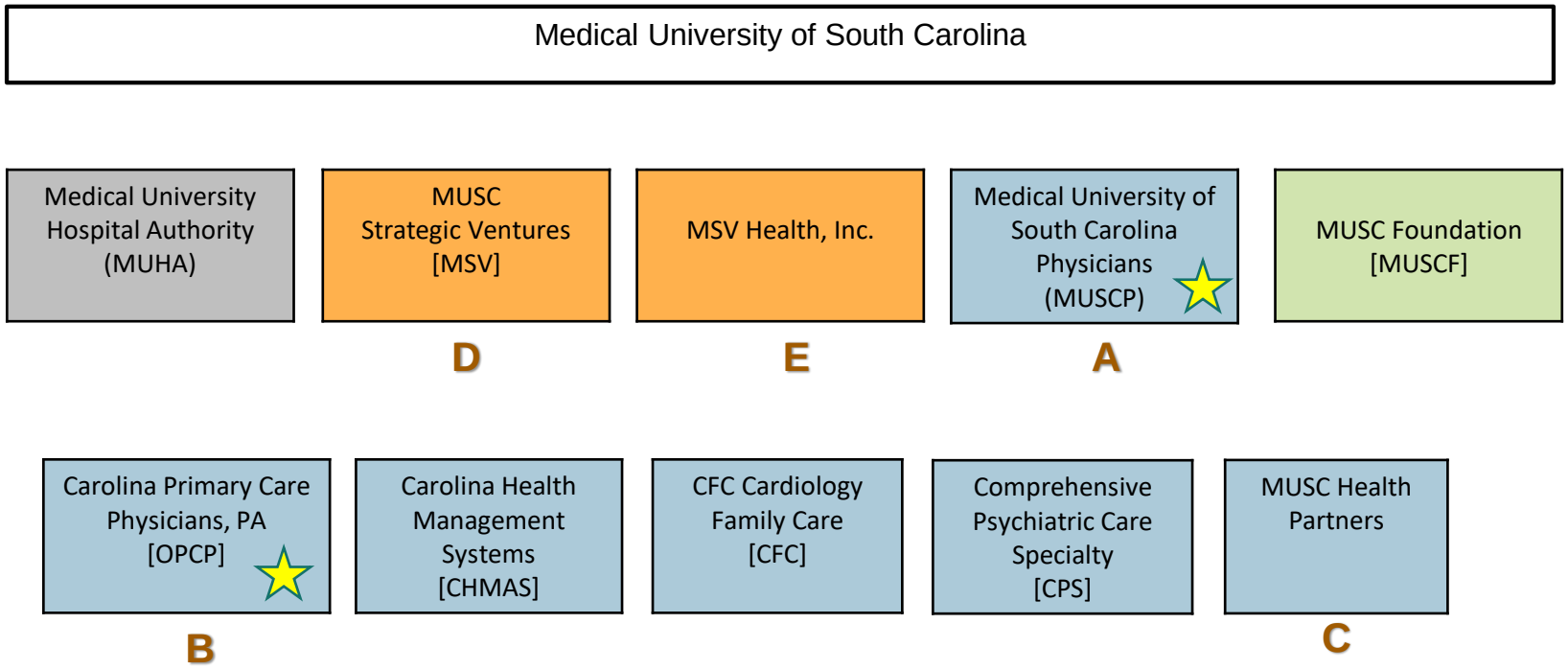
Source: American Medical Association

Leading Health **Innovation** for the Lives We Touch

MUSC's Impact

- One of the largest employers in South Carolina with more than 16,000 employees
- U.S. News & World Report named No. 1 hospital in South Carolina
- Annual $3.8 billion economic impact in the Charleston Metro Area; 12% of $33 billion total economy
- MUSC and its affiliates have collective annual budgets in excess of $2.5 billion
- Approximately 3,000 students in every area of health professions
- Nearly $260 million in research funding in 2016

MUSC Entity Structure – the "MUSC Family"



Entities for physicians

A – UMA for academic physicians

B – CPCP for non-academic physicians

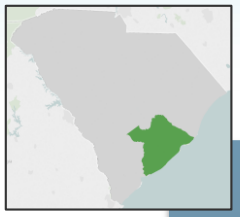
Entities for non-physicians

C – Health Partners for ambulatory sites controlled by MUSC Health

D – Joint ventures relationship where a partner has an ownership percentage. Allowable activity that will generate a profit. IRS Rev. Rul 68-375 and 68-376 control unrelated business taxable income through the guidance of providing healthcare to patients

E – For use in limited circumstances and only with vetting of MUSC Health CEO, CFO and General Counsel.

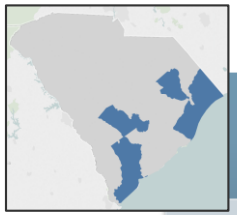
Building an MUSC Health System:
Our Tactics



Local (Tricounty) Partnerships

-Inpatient Bed capacity
-Community Needs / Ambulatory Expansion

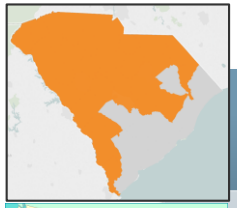
-Primary Care
-Employer Needs



Regional Partnerships

-Protect and build referral base for *Marquee* Services

-Population Health/Risk Management

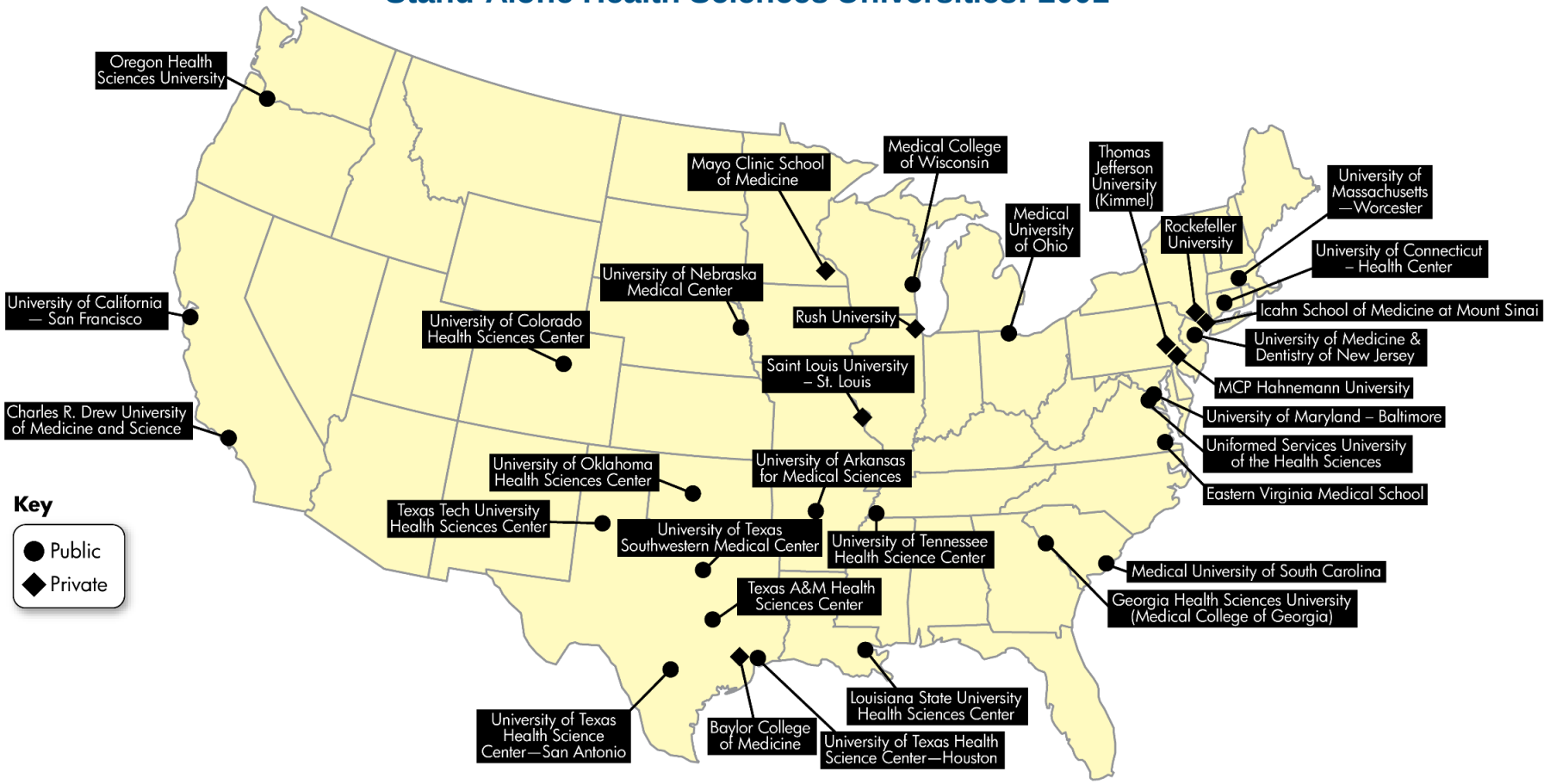


State & National Presence/Partnerships

-Build *Marquee* Services
-Academic integration

-State wide health impact / Medicaid
-National impact

National Market Trends for Stand-Alone Health Sciences Universities: 2001

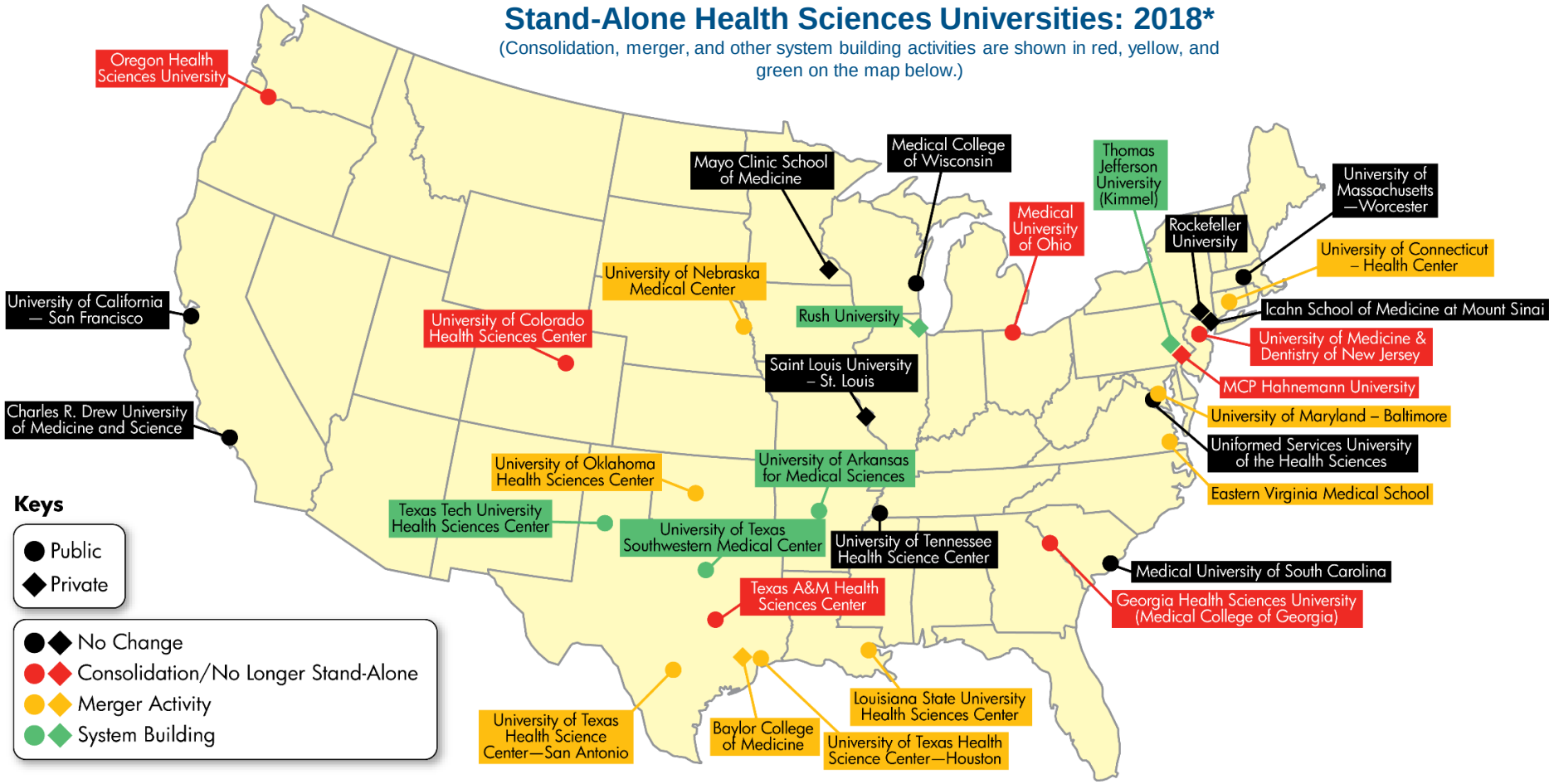


* Center for Measuring University Performance (MUP) criteria used to determine classification as stand-alone health sciences university.

National Market Trends for Stand-Alone Health Sciences Universities: 2018

Stand-Alone Health Sciences Universities: 2018*

(Consolidation, merger, and other system building activities are shown in red, yellow, and green on the map below.)



* Center for Measuring University Performance (MUP) criteria used to determine classification as stand-alone health sciences university.

MUSC believes Transformative Leadership through Growth & Innovation

MUSC Medical University of South Carolina

CHANGING WHAT'S POSSIBLE IN HEALTH CARE

SIEMENS Healthineers

This partnership is about transformation:

- We expect to generate significant innovations: pediatrics, cardiovascular care, radiology, and neurosciences.

We are focusing in these areas:

- expanding precision medicine, transforming care delivery, improving the patient experience, and digitalizing health care.

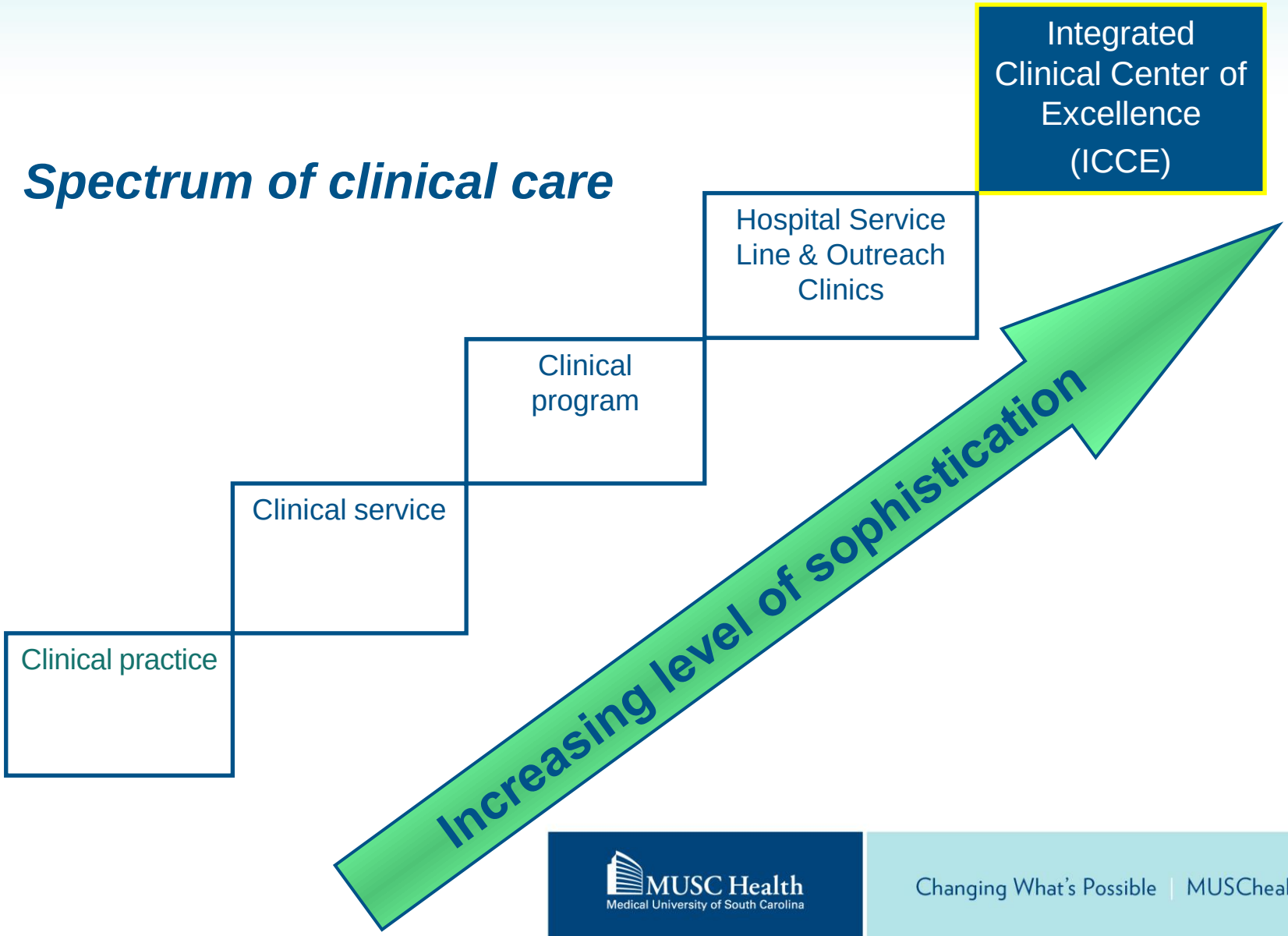
Joint Vision:

- Create a blueprint for the rest of the world of a transformed health care system that provides safe, equitable, timely, effective, efficient and patient centered care

Collaborative Leadership
Aligned Incentives
Clinical Programs

MUSC Facing the Future

Spectrum of clinical care



How is Care Organized in MUSC Health?

An Integrated Center of Clinical Excellence (**ICCE**) is a ***defined set*** of clinical services ***aligned to meet patients' and providers' needs*** for convenience, access, consistency and quality/cost (value)

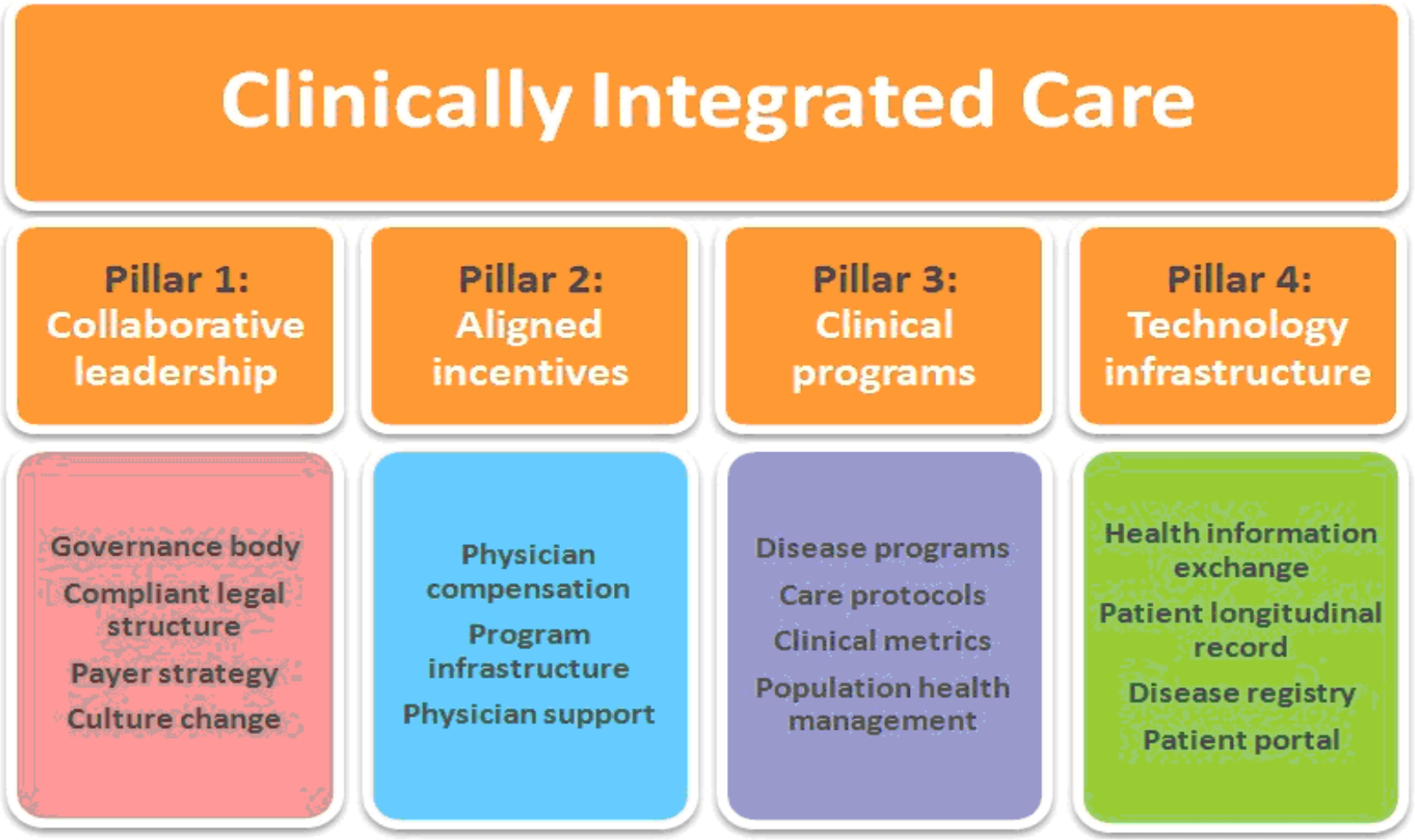
ICCE is…

- The basic organizational unit of MUSC Health
- Patient-oriented and organized by disease or service provided
- An inter-professional, multidisciplinary team-focused model
- A platform to better unite traditional medical and surgical specialties and subspecialties
- A mechanism to facilitate scientific inquiry, educational programs and further the academic mission

Common Terminology

- **ICCE:** A Health System function, organized by disease or body organ definition, that oversees, manages and is responsible for all aspects of patient care
- **Department:** An academic body, organized by study, that performs a range of clinical, research & educational activities
- **Program:** An organized array of clinical services contained wholly within an ICCE

What is Clinical Integration?



Source: American Medical Association

ICCE Principles

Collaborative Leadership
Aligned Incentives
Clinical Programs

Physician Led	An ICCE is a business unit that spans MUSC Health – wherever clinical service is provided – and is accountable to a single physician leader (ICCE Chief)
Collaborative Approach	The ICCE structure recognizes and supports that physicians often work more closely with colleagues in different departments than their own; facilitates relationships among clinicians based on patient approach or disease
Aligned Goals	ICCE improve strategic alignment by promoting a single, unified approach for MUSC Health within the business unit
Care Continuum Accountability	ICCE have responsibility over all aspects of patient care within their domains; every clinical area has a home in ICCE
Reduced Fragmentation	The ICCE structure helps to reduce fragmentation and competition for patients among physician in different departments who perform the same procedures; drives health system development

SL vs. ICCE Evolution (high-level)

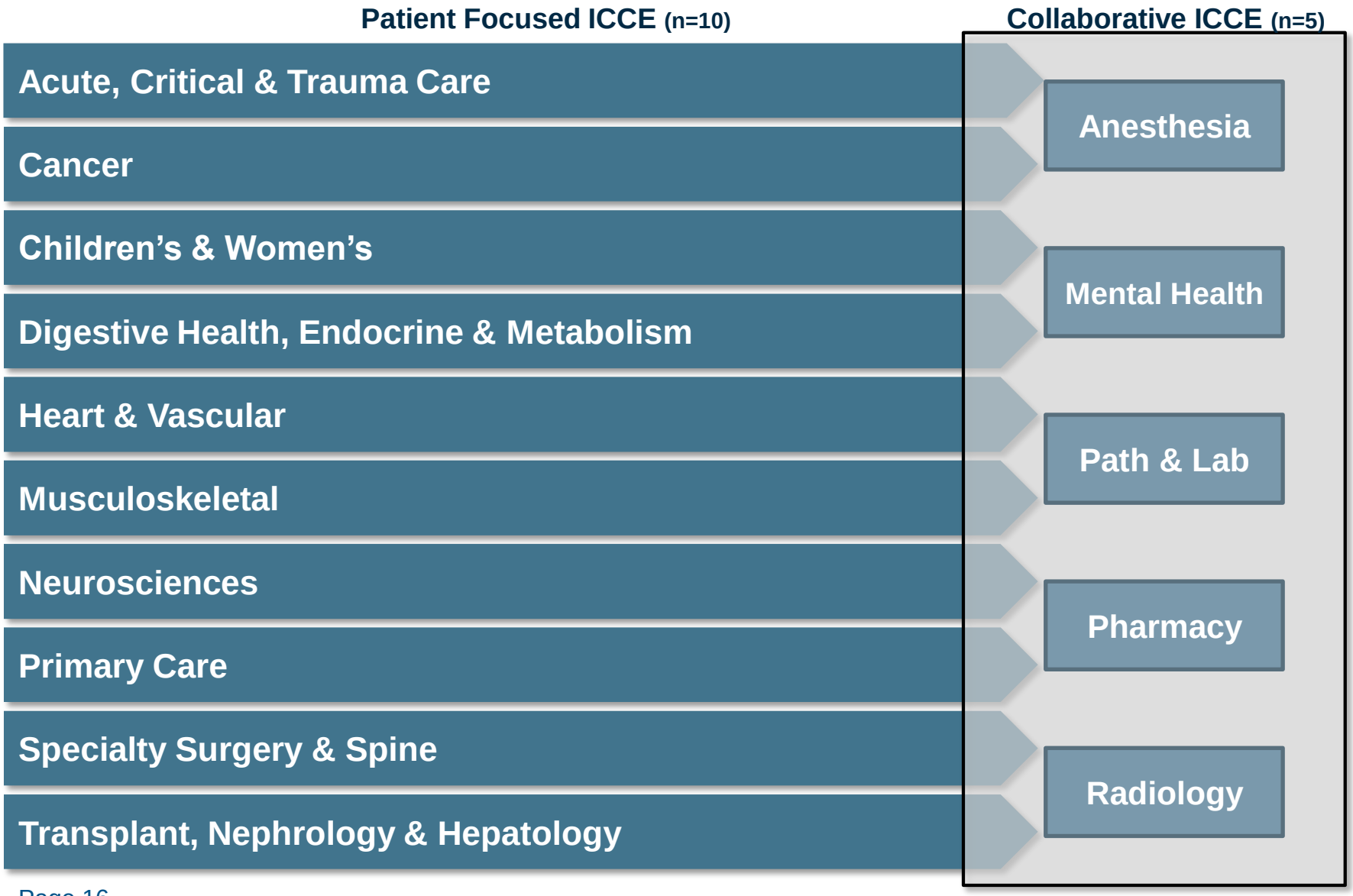
Concepts	SL	ICCE	Notes
Clear Authority / Accountability		✓	Single Physician leader vs. dyad leadership
Ability to influence Physician goals/performance		✓	Explicit alignment with COM via new governance structures
Ability to influence Value (V=Q/E) goals/performance		✓	Aligned incentives and accountability for of the Continuum of Care
Direct oversight of nursing	✓		Explicit integration with clinical support services and all ambulatory operations managed by Operations
Enterprise focus vs. hospital focus		✓	ICCE spans entire clinical enterprise (ambulatory clinics, IP units, affiliates, and other care delivery partners)
Everyone has a 'home'		✓	All clinical areas/departments are represented within an ICCE
Budget / Financial performance	✓	✓	As today, ICCE will have specific financial targets and expense budgets. Revenue will continue to flow through COM.

Types of ICCE

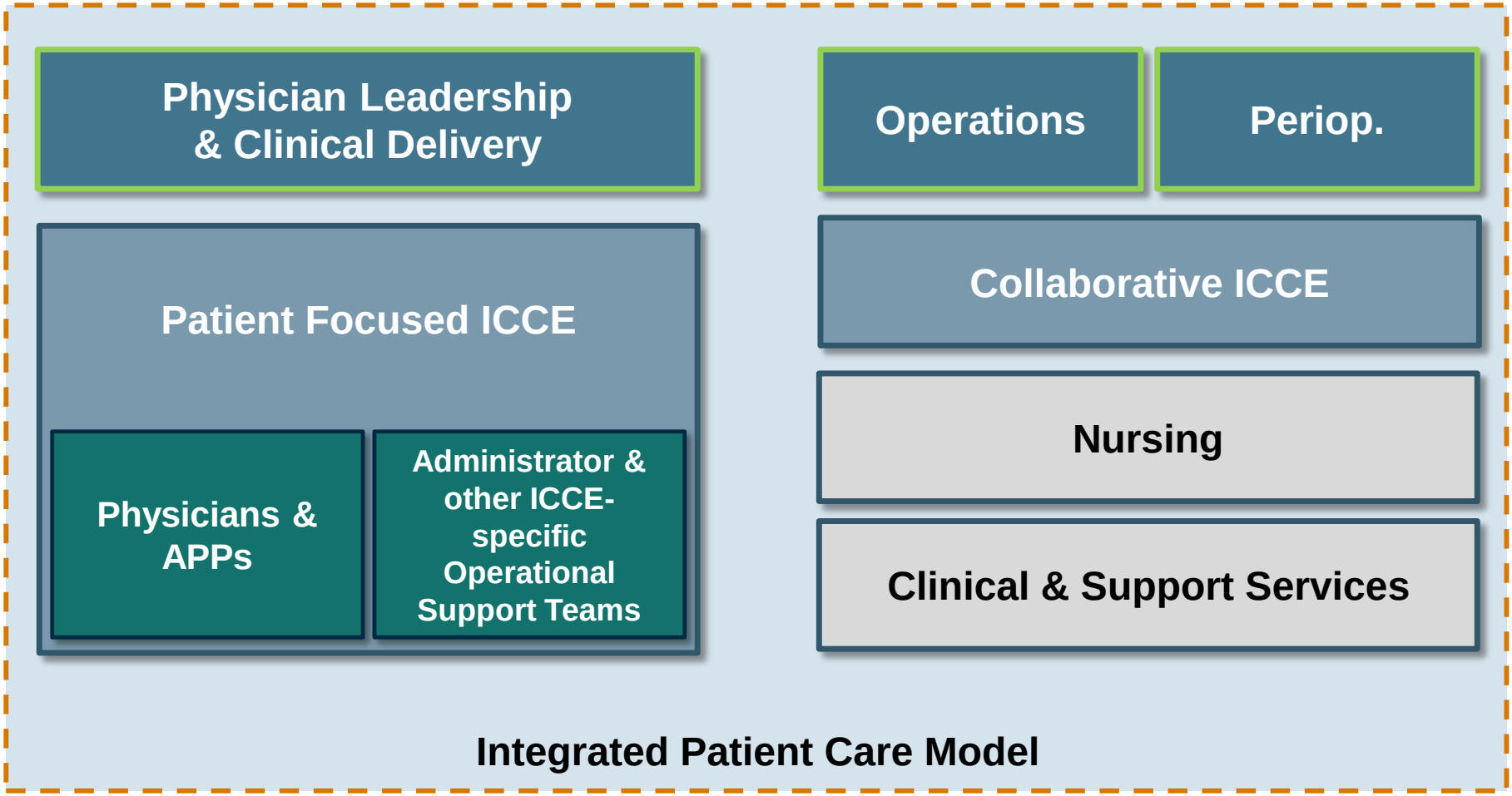
ICCE have been categorized as either Patient-Focused (pICCE) or Collaborative (cICCE) based on the orientation of care they provide. While pICCE and cICCE are both physician-led and share the same internal governance structure, they have slightly different missions.

Patient-Focused ICCE	Collaborative ICCE
• pICCE are organized by disease, patient, process or body organ (i.e. Cancer) • In this context, the term "Patient-Focused" denotes that DRGs live within pICCE • pICCE are the revenue-generating units of the Health System and leverage services from other units to support the comprehensive delivery of patient-focused care	• cICCE are organized by the services they render (i.e. Radiology). • In this context, the term "Collaborative" denotes that activities performed by this ICCE may be leveraged in care plans across any and all pICCE, necessitating a collaborative relationship with pICCE to deliver comprehensive patient care

ICCE Model


Patient Focused ICCE (n=10)
Collaborative ICCE (n=5)
Acute, Critical & Trauma Care
Cancer
Children's & Women's
Digestive Health, Endocrine & Metabolism
Heart & Vascular
Musculoskeletal
Neurosciences
Primary Care
Specialty Surgery & Spine
Transplant, Nephrology & Hepatology
Anesthesia
Mental Health
Path & Lab
Pharmacy
Radiology

ICCE & Operations – Working Together



Funding Mechanisms

- Support to COM
- Funds Flow
- Compensation change
- Multispecialty group

How we mange the system

- Tableau
- Daily focus with 7:45am call – All Leaders
- Ambulatory throughput
  - Referral Management
  - External Referrals Summary
  - Open Encounters
  - MUSC Volume Driven Marketing
  - APP Scorecard

Ambulatory Balanced Scorecard

MUSC Health
Medical University of South Carolina

Ambulatory Balanced Scorecard
Access (PATH)
Updates daily at 9:15am

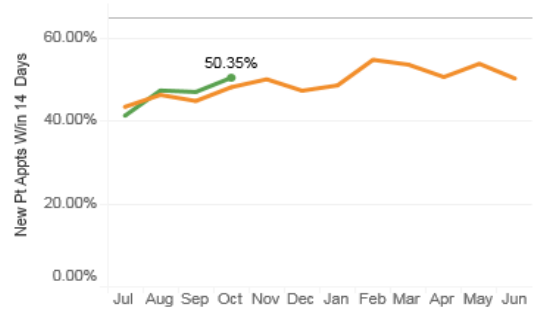
Clinical L... MUSC SPECIALTY CARE NORTH | Departm... (All) | Fiscal Year (Multiple values)

MUSC SPECIALTY CARE NORTH - FY 2018 & FY 2019

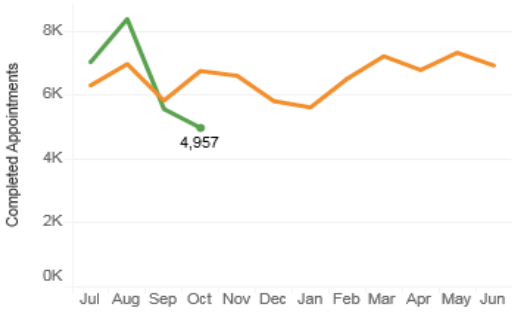
	New Pt Appts - 14 Days	Avg Third Next New	Avg Third Next Return	Density - Actual (min)	Density - Sched (min)	Provider Cancel Rate	No Show Rate	Pt. Same Day Cancel	Completed Appts	Complete Appts/ Session
FY 2018	49.42%	21.94	23	33.51%	36.53%	5.20%	8.29%	11.60%	78,461	3.49
FY 2019	46.07%	24.20	23	36.69%	40.16%	5.33%	8.44%	11.53%	25,886	3.72

FY 2018 FY 2019

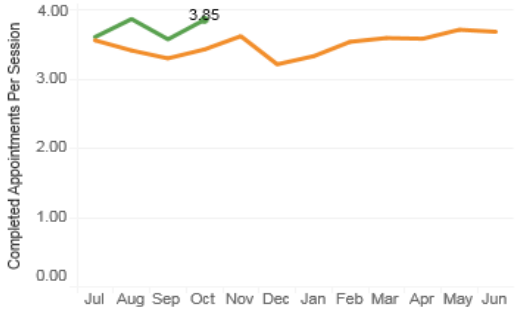
New Patient Appointments W/in 14 Days



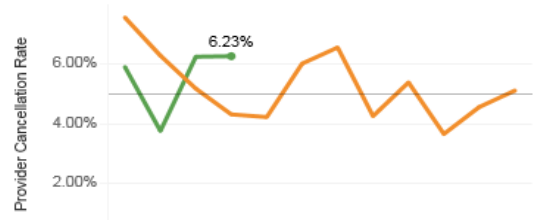
Completed Appointments



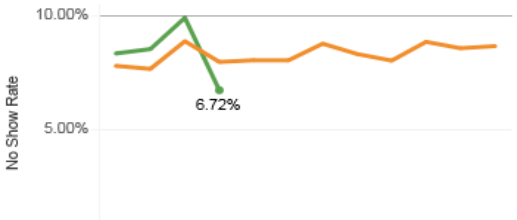
Completed Appointments Per Session



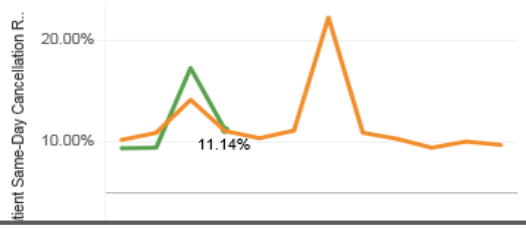
Provider Cancellation Rate



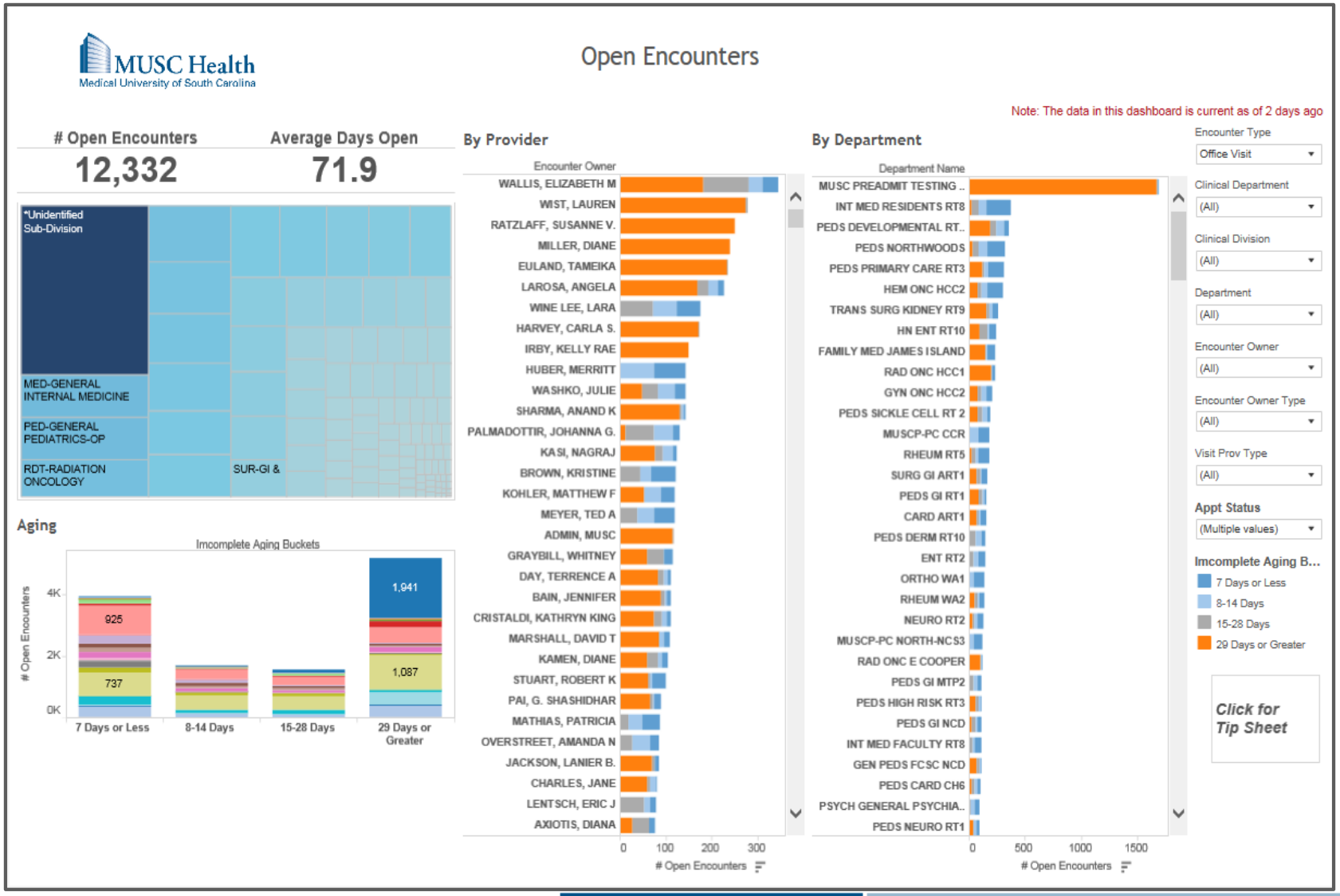
No Show Rate



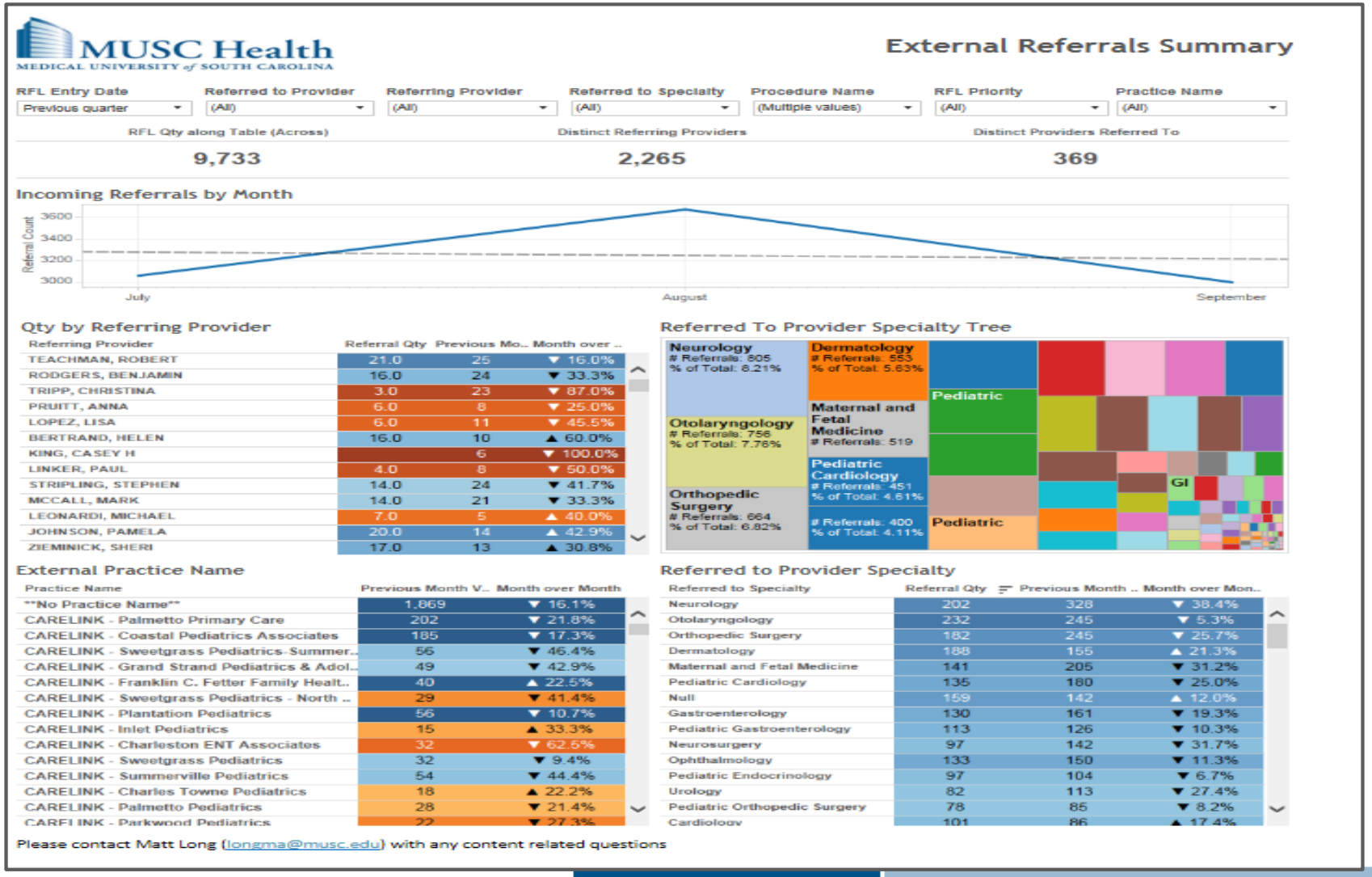
Pt. Same-Day Cancel Rate



Open Encounters



External Referrals Summary



MUSC Health
MEDICAL UNIVERSITY of SOUTH CAROLINA

External Referrals Summary

RFL Entry Date	Referred to Provider	Referring Provider	Referred to Specialty	Procedure Name	RFL Priority	Practice Name
Previous quarter	(All)	(All)	(All)	(Multiple values)	(All)	(All)

RFL Qty along Table (Across)	Distinct Referring Providers	Distinct Providers Referred To
9,733	2,265	369

Incoming Referrals by Month

Qty by Referring Provider

Referring Provider	Referral Qty	Previous Mo..	Month over ..
TEACHMAN, ROBERT	21.0	25	▼ 16.0%
RODGERS, BENJAMIN	16.0	24	▼ 33.3%
TRIPP, CHRISTINA	3.0	23	▼ 87.0%
PRUITT, ANNA	6.0	8	▼ 25.0%
LOPEZ, LISA	6.0	11	▼ 45.5%
BERTRAND, HELEN	16.0	10	▲ 60.0%
KING, CASEY H		6	▼ 100.0%
LINKER, PAUL	4.0	8	▼ 50.0%
STRIPLING, STEPHEN	14.0	24	▼ 41.7%
MCCALL, MARK	14.0	21	▼ 33.3%
LEONARDI, MICHAEL	7.0	5	▲ 40.0%
JOHNSON, PAMELA	20.0	14	▲ 42.9%
ZIEMINICK, SHERI	17.0	13	▲ 30.8%

Referred To Provider Specialty Tree

External Practice Name

Practice Name	Previous Month V...	Month over Month
No Practice Name	1,869	▼ 16.1%
CARELINK - Palmetto Primary Care	202	▼ 21.8%
CARELINK - Coastal Pediatrics Associates	185	▼ 17.3%
CARELINK - Sweetgrass Pediatrics-Summer..	56	▼ 46.4%
CARELINK - Grand Strand Pediatrics & Adol..	49	▼ 42.9%
CARELINK - Franklin C. Fetter Family Healt..	40	▲ 22.5%
CARELINK - Sweetgrass Pediatrics - North ...	29	▼ 41.4%
CARELINK - Plantation Pediatrics	56	▼ 10.7%
CARELINK - Inlet Pediatrics	15	▲ 33.3%
CARELINK - Charleston ENT Associates	32	▼ 62.5%
CARELINK - Sweetgrass Pediatrics	32	▼ 9.4%
CARELINK - Summerville Pediatrics	54	▼ 44.4%
CARELINK - Charles Towne Pediatrics	18	▲ 22.2%
CARELINK - Palmetto Pediatrics	28	▼ 21.4%
CARELINK - Parkwood Pediatrics	22	▼ 27.3%

Referred to Provider Specialty

Referred to Specialty	Referral Qty	Previous Month ..	Month over Mon..
Neurology	202	328	▼ 38.4%
Otolaryngology	232	245	▼ 5.3%
Orthopedic Surgery	182	245	▼ 25.7%
Dermatology	188	155	▲ 21.3%
Maternal and Fetal Medicine	141	205	▼ 31.2%
Pediatric Cardiology	135	180	▼ 25.0%
Null	159	142	▲ 12.0%
Gastroenterology	130	161	▼ 19.3%
Pediatric Gastroenterology	113	126	▼ 10.3%
Neurosurgery	97	142	▼ 31.7%
Ophthalmology	133	150	▼ 11.3%
Pediatric Endocrinology	97	104	▼ 6.7%
Urology	82	113	▼ 27.4%
Pediatric Orthopedic Surgery	78	85	▼ 8.2%
Cardiology	101	86	▲ 17.4%

Please contact Matt Long (longma@musc.edu) with any content related questions

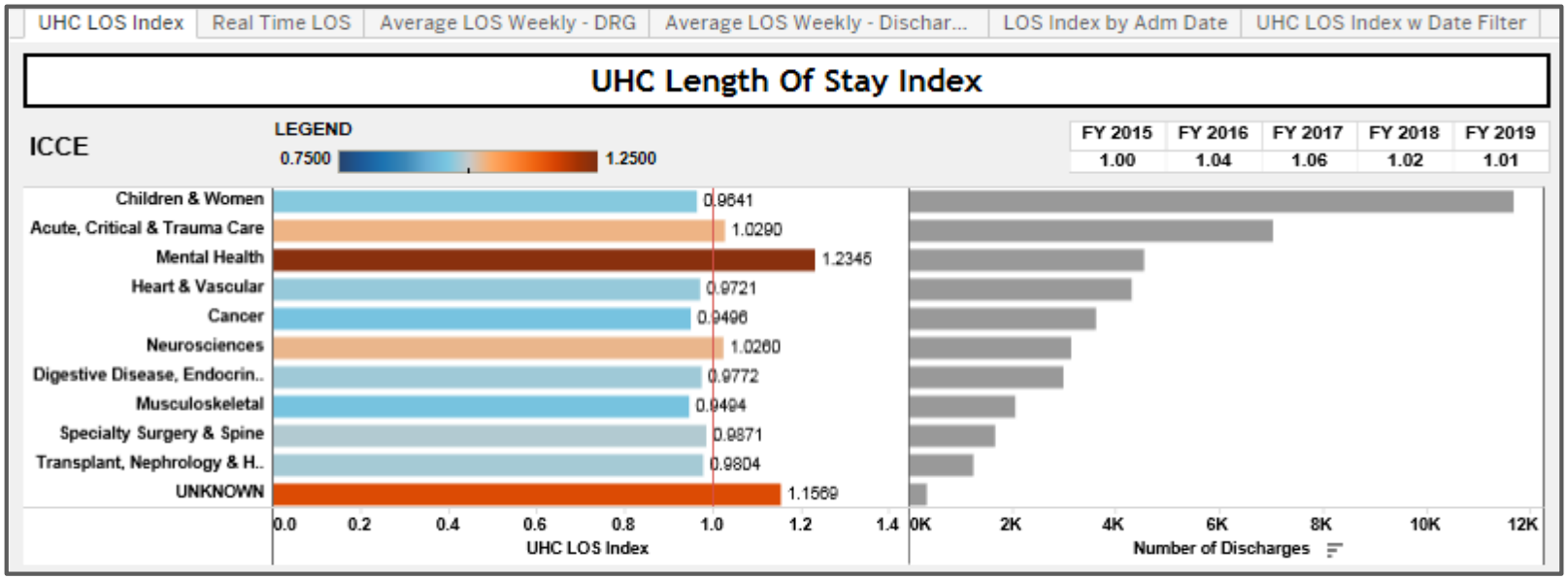
Collaborative Leadership
Aligned Incentives
Technology Infrastructure

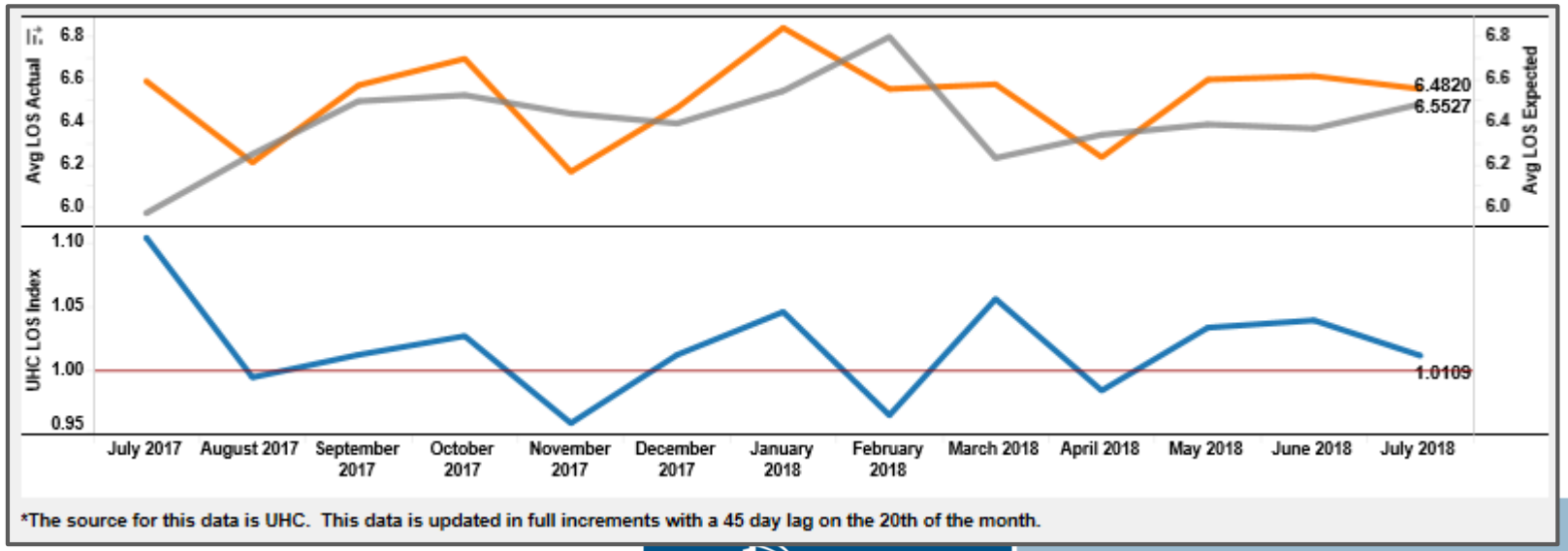
Running the Medical Center

- Patient Throughput
- Length of Stay
- Trended Operations Dashboard
- Readmission

Patient Throughput

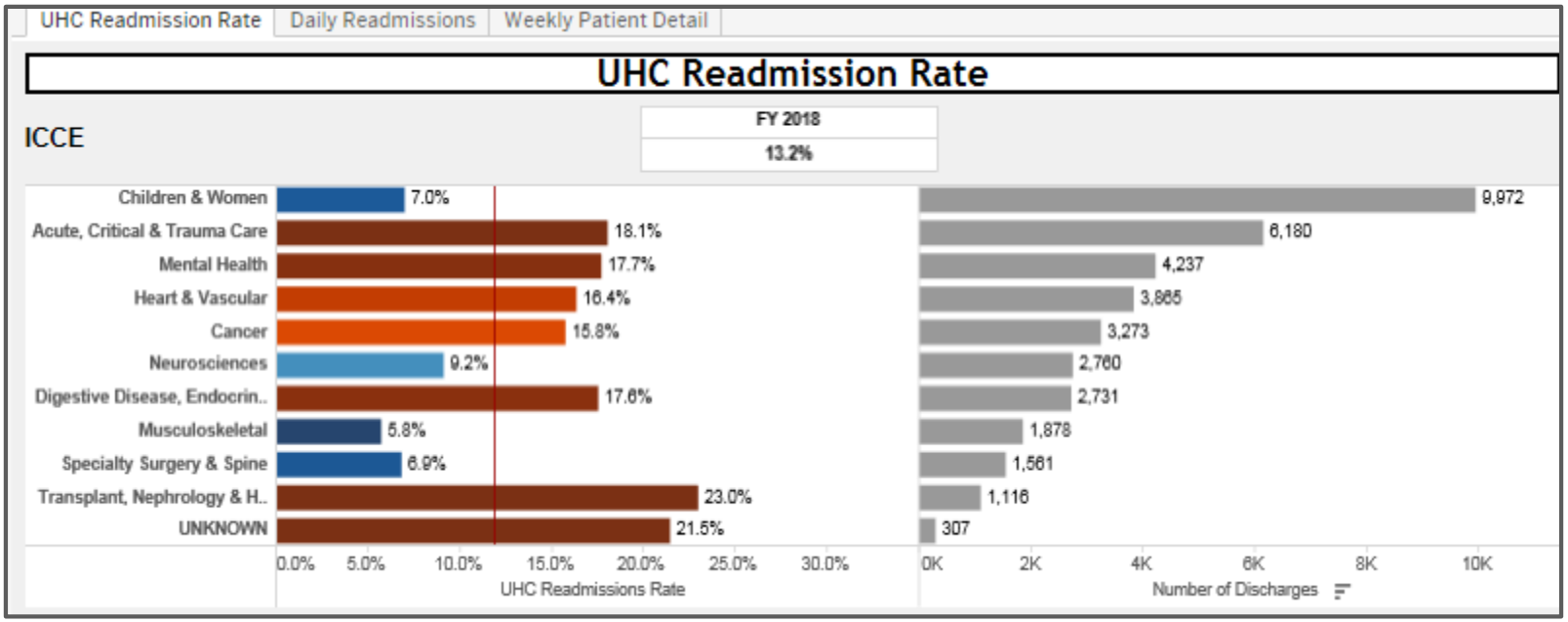
Length of Stay

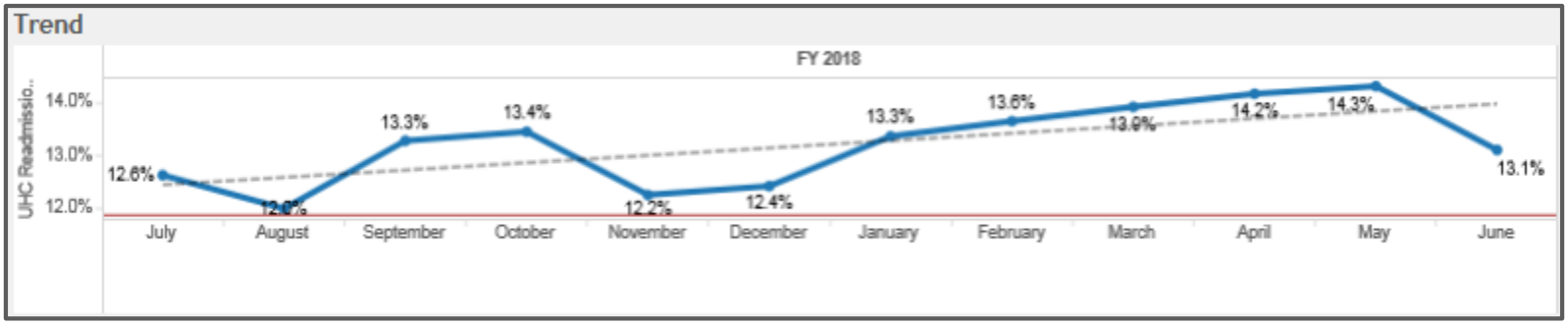




*The source for this data is UHC. This data is updated in full increments with a 45 day lag on the 20th of the month.

Readmission



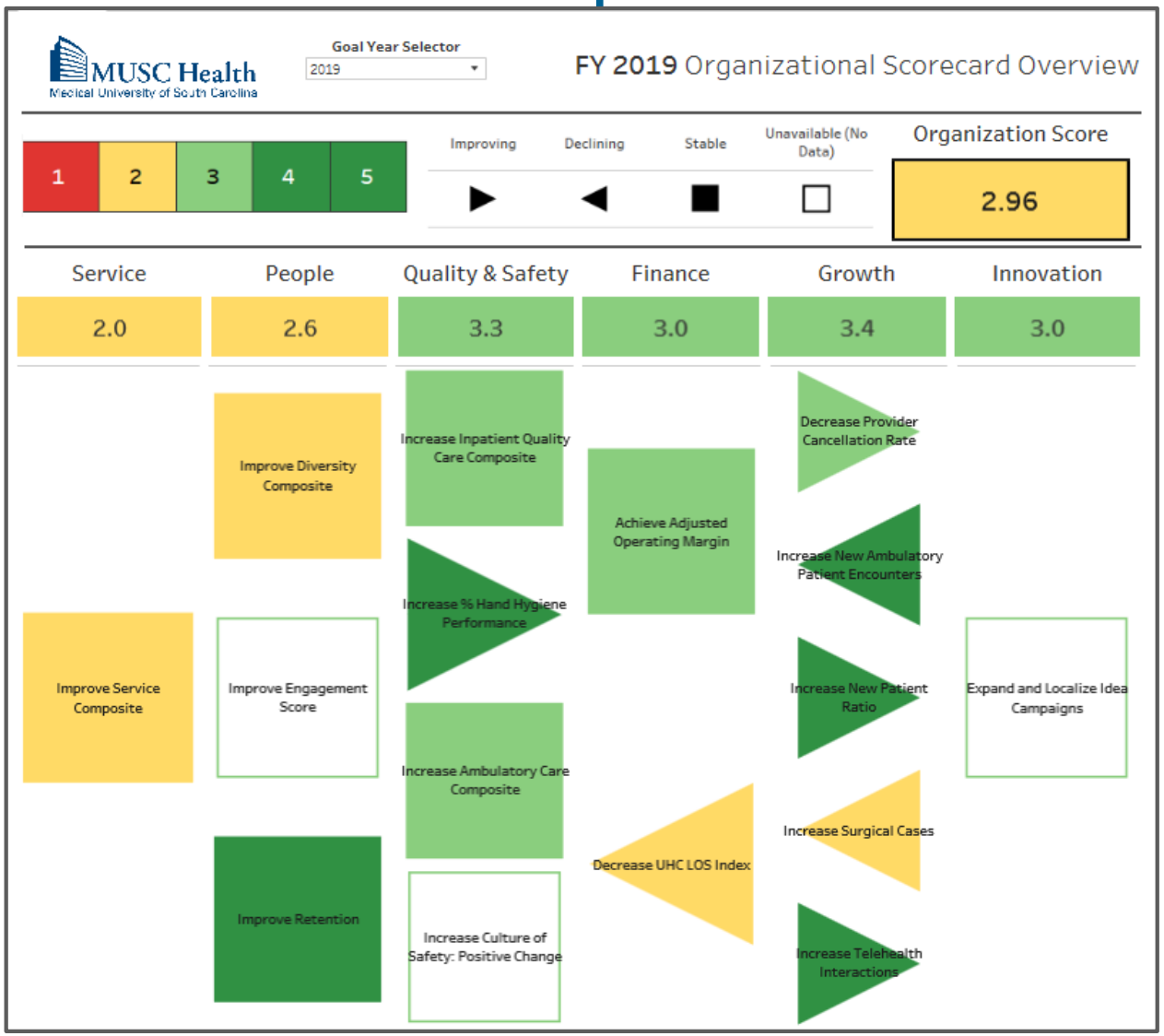


LEAP Goal Process

MUSC Health Goals – Pillars

Service	People	Quality & Safety	Finance	Growth	Innovation
Improve Ideal Patient and Family Composite	Improve Engagement	Improve Inpatient Quality Care Composite	Increase Days Cash on Hand	Increase Surgical Cases	Expand and Localize Idea Campaigns
	Improve Retention	Improve ACO Quality Care Composite	Achieve Adjusted Operating Margin	Increase Patient Encounters	
	Improve Diversity Composite	Improve Culture of Safety Composite	Achieve LOS Index	Increase Telehealth Visits	

Hospital


MUSC Health
Medical University of South Carolina
Goal Year Selector
2019
FY 2019 Organizational Scorecard Overview
1
2
3
4
5
Improving
Declining
Stable
Unavailable (No Data)
Organization Score
2.96
Service
People
Quality & Safety
Finance
Growth
Innovation
2.0
2.6
3.3
3.0
3.4
3.0
Improve Service Composite
Improve Engagement Score
Improve Retention
Improve Diversity Composite
Increase Inpatient Quality Care Composite
Increase % Hand Hygiene Performance
Increase Ambulatory Care Composite
Increase Culture of Safety: Positive Change
Achieve Adjusted Operating Margin
Decrease UHC LOS Index
Decrease Provider Cancellation Rate
Increase New Ambulatory Patient Encounters
Increase New Patient Ratio
Increase Surgical Cases
Increase Telehealth Interactions
Expand and Localize Idea Campaigns

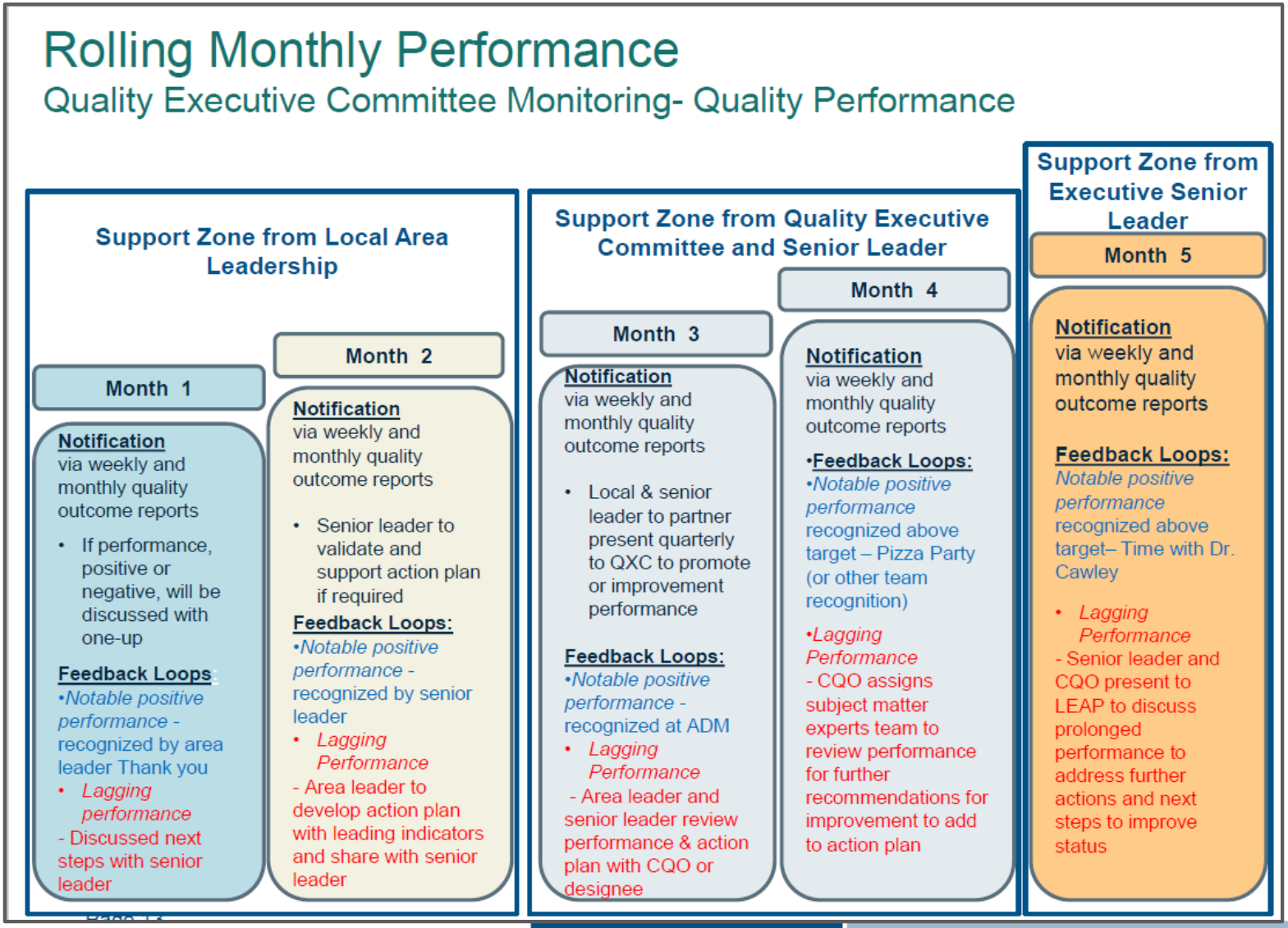
Aligned Incentives

[ICCE]Balanced Scorecard – FY19

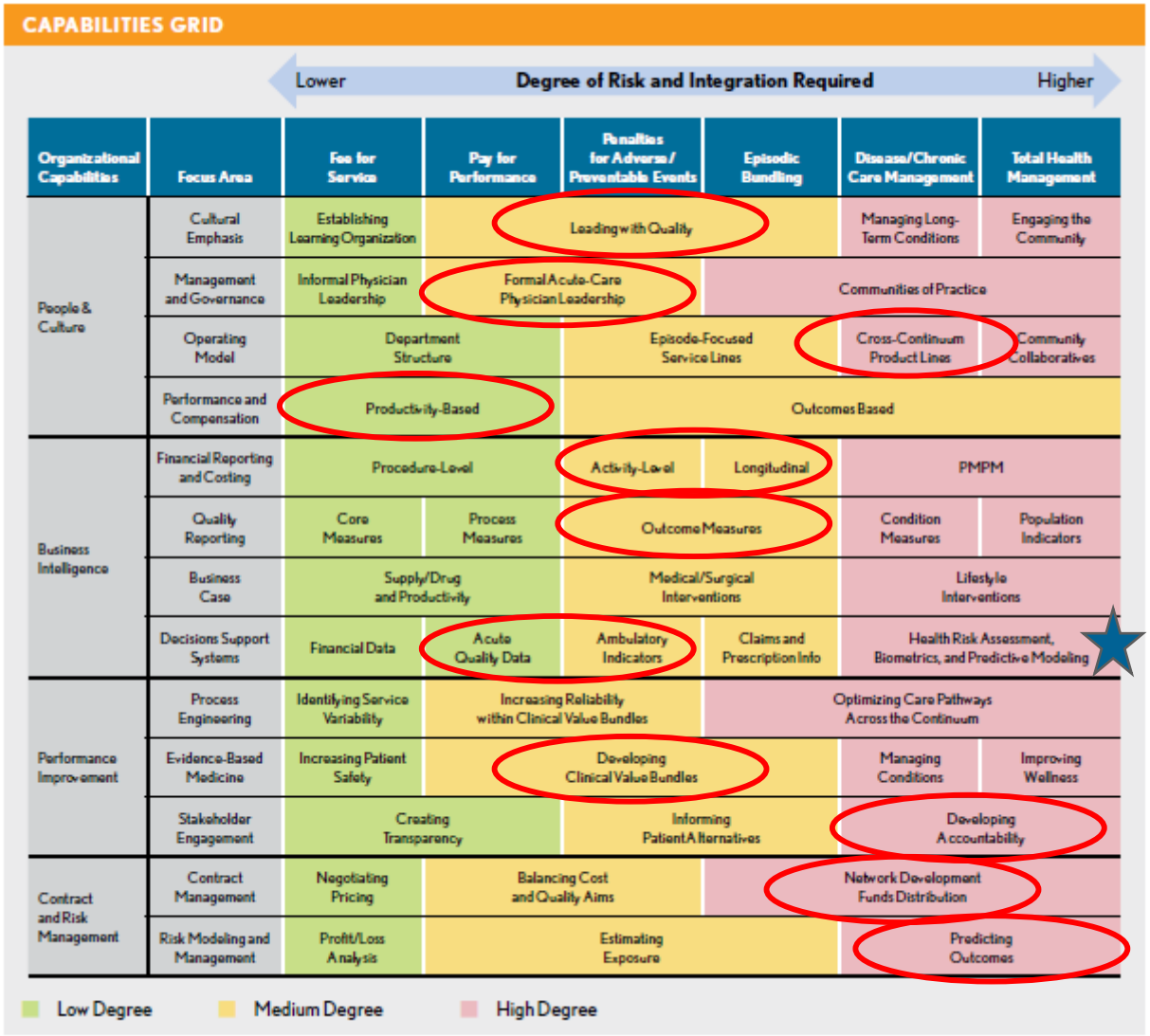
Area	YTD Month Sep - 17	Metrics	Source
Growth		▪ Gross Charges vs. FY18 Budget MUHA ▪ Gross Charges vs. FY18 Budget MUSCP	▪ Monthly Budget Presentation Report - EPSi ▪ MUSCP = Tableau - MUSC-P - Budget MTD Daily
Gross Margin		▪ Actual YTD Gross Margin vs. FY18 Budgeted Gross Margin MUHA	▪ Monthly Budget Presentation Report - EPSi
Retention		▪ Actual turnover % vs. Target % MUHA	▪ Tableau – People Analytics - Organizational Turnover Dashboard; Filter ICCE cost centers
Quality		▪ TBD	▪ TBD
Patient Experience		▪ HCAHPS Overall Rating vs. PY ▪ CGCAHPS Overall Rating vs. PY ▪ Press Ganey Overall Assessment vs. PY	▪ Tableau - Patient Experience – Patient Experience Balanced Scorecard – Organization Scorecard; Filter ICCE (also Press Ganey tab)
Access Improvement		▪ New Patient Appointments w/in 14 days vs. PY ▪ Provider Cancellation Rate vs. PY	▪ MUSCP Tableau – Ambulatory Balanced Scorecard – Access (PATH); Filter ICCE locations
Length of Stay		▪ Length of Stay Index vs. 1.06	▪ Tableau – Medical Center Capacity Management – Length of Stay – UHC LOS Index
Supply Cost		▪ Supply expense as % of gross revenues MUHA	▪ Monthly Budget Presentation Supplies Report - EPSi
Medication Costs		▪ Medication Cost per patient day vs. PY ▪ Medication Cost per encounter vs. PY	▪ Tableau – ICCE – MUSC Health Medication Cost – MUSC Health Medication Costs – Inpatient Medication Costs; Filter ICCE

Collaborative Leadership
Aligned Incentives

LEAP Goal Process



Capabilities Grid



Source: HFMA's Value Project