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Conference & Exhibition | March 5–9, 2018

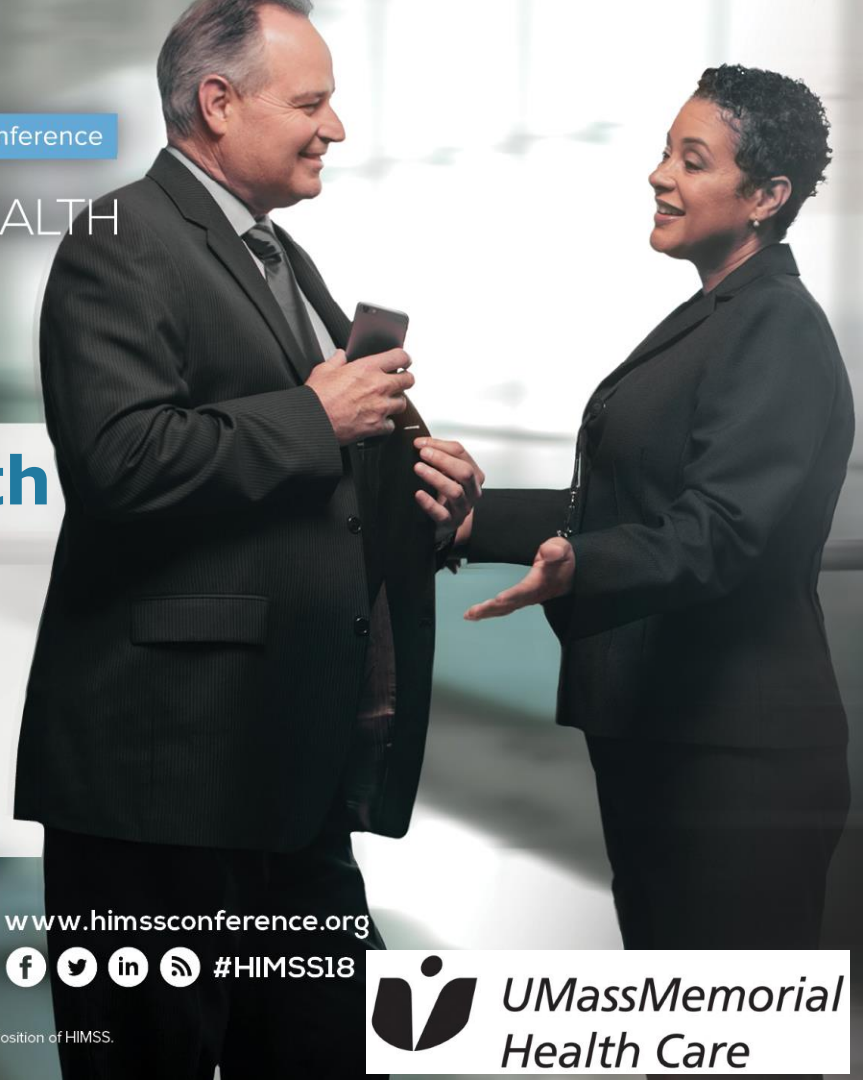
Las Vegas | Venetian – Palazzo – Sands Expo Center

Creating a Population Health Strategy that Scales

Session #72, March 6, 2018

Renee Broadbent,
AVP, Population Health IT & Strategy,
UMass Memorial Health Care

COMMITMENT



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UMassMemorial Health Care

Conflict of Interest

Renee Broadbent, MBA

Has no real or apparent conflicts of interest to report.

Agenda

Essential elements for creating a system-wide PHM program

- Investment categories
- Strategy and development
- Management
- Logistical barriers
- Education and communication

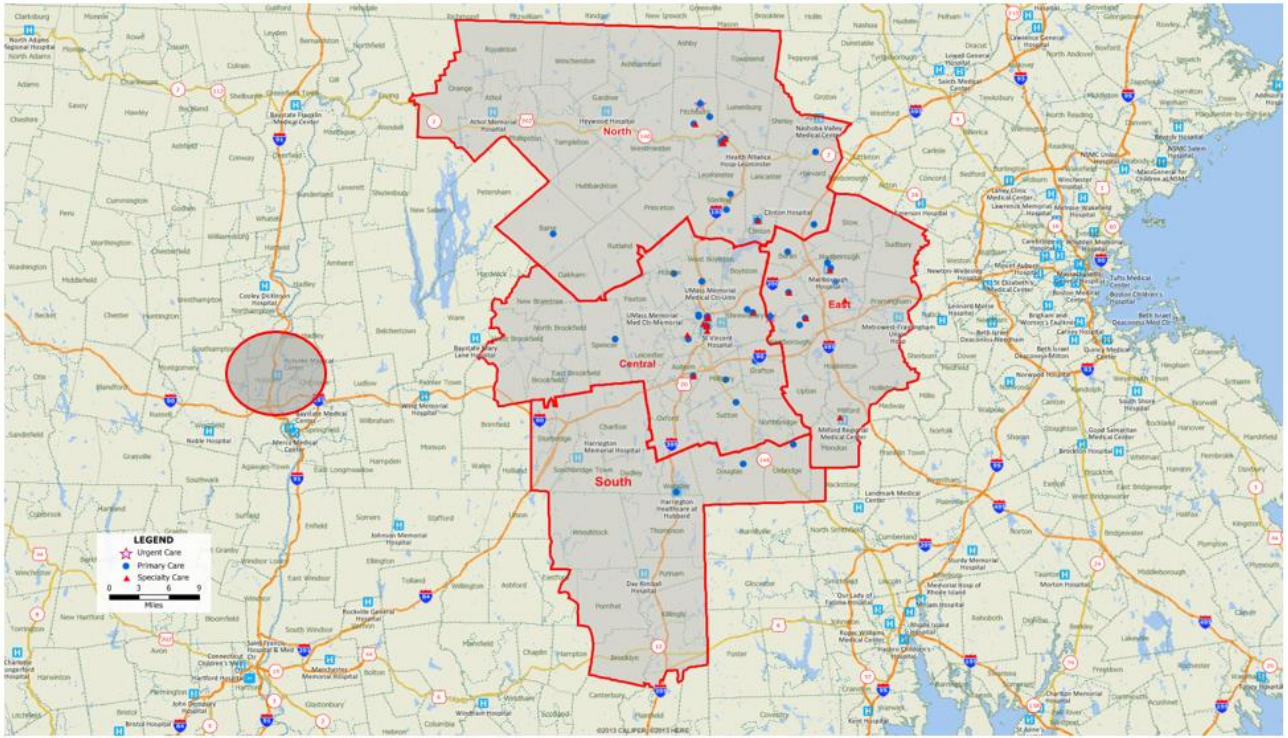
Learning Objectives

- Define the investment categories needed to scale a system-wide population health management program
- List the elements of developing and managing a system-wide PHM program, including financial planning and ROI reporting to drive greater executive and physician buy-in
- Describe logistical barriers to a system-wide PHM program, including disparate data sources, physician push back and educational / training needs
- Discuss the role of education and communication in meeting system-level PHM goals

UMass Memorial Health Care Overview

- Largest health care system in central Massachusetts
- Clinical partner with UMass Medical School, with access to latest technology, research and clinical trials
- Locations:
  - UMass Memorial Medical Center (Worcester)
  - HealthAlliance-Clinton Hospital (Clinton, Burbank and Leominster)
  - Marlborough Hospital (Marlborough)
- 1,600 physicians on active medical staff
- 3,000 registered nurses
- 12,000 total employees
- 1,125 hospital beds

UMMHC Geographic Footprint 2018



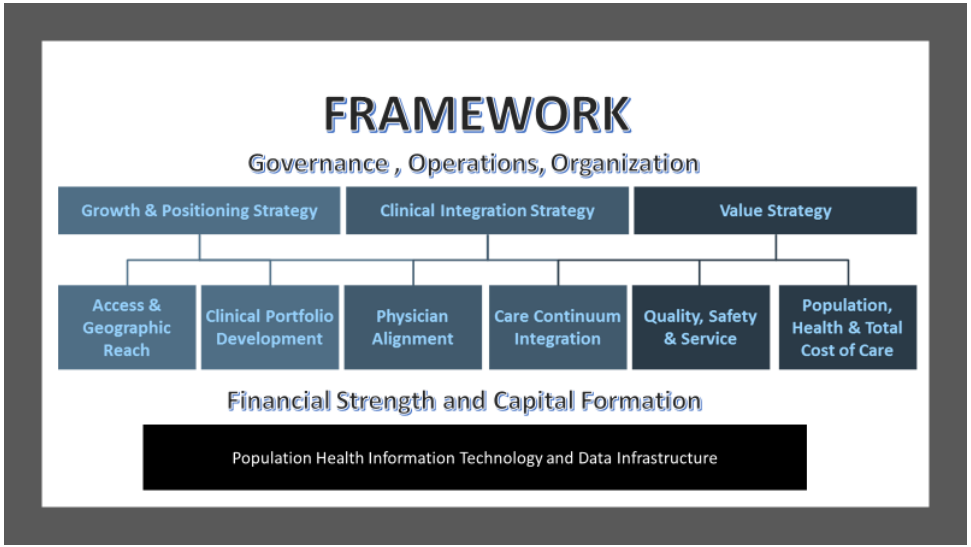
Population Health Management Organization

- Internal organization within the health system
- Sits at the system level, meaning we have responsibility for the entire organization as the drivers of population health
- Manage multiple programs (MSSP, Bundles, Commercial, Medicaid Pilot)
- Staff of 67 consisting of Administration, Care Management, Physician Leadership, Data Analytics & Reporting, Account Management for Network support and development
- 1,700+ participating providers in Central MA and to the east and west
- Total beneficiary member count across programs: 150,000
- Internal relationships and partnerships with medical school and community organizations to facilitate population health management
- Total of 3 additional hospitals outside the system that participate

Investing in a System-Wide PHM

- Objective: Create a clear picture of population health needs and value-based care performance.
- Data Consolidation (data aggregation)
  - 32 different EMRs from independent ACO providers
  - Claims
  - Multiple internal systems - Single EMR 10/1/2017
- Analytics Platform
  - Collects, integrates and analyzes data from all sources
  - Develops quality and medical expense reports
  - Predictive analytics finds opportunities for population health improvement
  - Enterprise analytics population health as a strategic system effort
- Robust Operations
  - Invest in people, processes and technology to support success

Strategy & Development



- Create a complete PHM strategy:
  - Care management
  - Staffing models
  - Governing models
  - Budgeting
- Create a comprehensive financial plan
- Develop a dedicated team to lead PHM strategies
  - Responsible for education
  - Monitors compliance
  - Recommends modifications

Utilization Management Strategic Initiatives

CARE MANAGEMENT	PRACTICE ENGAGEMENT	CARE PATHWAYS
Care managers focusing on four domains for intervention	Engaging our primary care practices as partners for practice-based care management	Employing clinical interventions that begin in the inpatient setting to reduce overall post acute utilization and improve patient outcomes
• *Readmissions* • *ED utilization* • *Chronic disease management* • *Post-acute care*	• *Standardized patient management tactics* • *Rising risk identification and action steps* • *Care management team utilization*	• *Bundle care best practices* • *Specialist engagement*

Care Management Pillar Initiatives

I. Readmissions

Pillar Lead

- WP2: Telemonitoring pilot for COPD and CHF
  - PIC
- WP3: Readmissions Advisory Committee
  - COPD/CHF CM workgroups with medical center
    - PIC
  - Transitional Care Management coding (educational)
    - PIC
  - SNF/LTAC/Post-Acute Transitions
    - PIC
- WP4: D/C Follow-up phone calls for medical center
  - PIC
- WP5: Standard CM work & internal summit
  - PIC

Metrics:
- Disease-specific readmission rates
- Short-term stay total discharges

II. ED Utilization

Pillar Lead

- WP6: Provider triage algorithms, flyers for offices, resource maps, standardized patient education & ID inappropriate ED usage
  - PIC
- WP7: Care plans for high ED utilizers/super user lists from XXXX
  - PIC
- WP8: Community Paramedicine
  - PIC
- WP9: Hotspotting program
  - PIC

Metrics:
- Relationship between no-show patients and ED utilization
- NYU algorithm rates
- % avoidable ED visits

III. Chronic Disease Management

Pillar Lead

- WP10: ESRD
  - PIC
  - Palliative Care Consults
    - PIC
  - Davita & Fresenius catheter centers
    - PIC
- WP11: National Sleep and Respiratory Pilot
  - PIC
- WP12: Complex care clinic (Heywood)
  - PIC
- WP13:
  - PIC
  - DM Community classes with HLCOE
    - PICs
- WP14: Pharm/med adherence programs
  - Shields specialty pharmacy pilot
    - PIC
  - Omnicare
    - PIC
- WP15: CKD Pilot
  - PIC
- WP16: DM Clinical Pathway
  - PIC
- WP17: Hypertension Control Project
  - PIC

Metrics:
- ESRD readmissions
- Catheter days
- Hospitalization rate
- Depression screenings and remission
- HEDUS measures used by commercial contracts
- CKD progression to ESRD and ESRD stage progression
- % of patients who don't get x-rays within 28 days of first appointment for back pain
- Measures of the month (e.g., hypertension, diabetes retinal exams, asthma medication ratio, etc.)

IV. Post-Acute Care

Pillar Lead

- WP18: Non-preferred SNF networks
  - Lifecare
  - PIC
- WP19: Preferred SNF networks
  - PICs
- WP20:
  - PIC
- SNF Care Management Initiatives
  - WP21: SNF Collaborative
    - PIC
  - WP22: SNF Palliative Care Pilot
    - PIC
  - WP23: Post-Acute work groups
    - PIC
  - WP24: SNF hand off to PCP pilot (LEAN project)
    - PIC
  - WP25: Advanced care planning/honoring choices
    - PIC

Metrics:
- LOS
- Readmissions

Utilization Management Strategic Initiatives

Pillars (Care Management Focus)

Project Lead

CM Management + Project Plans

I. Readmissions
Pillar Lead

II. ED Utilization
Pillar Lead

III. Chronic Disease Management
Pillar Lead

IV. Post-Acute Care
Pillar Lead

Tactics:
- *See next page*

Metrics
- *See next page*

Practice Engagement

Project Lead

Practice Engagement Team (PIFs, CMs, physicians) + Project Plans

1. 4-quadrant list
2. Practice leadership meetings
3. Team meeting with CM, PIF, and Med Dir.
4. Create action steps
    1. Specific patient solutions (who will follow-up)
    2. Practice level interventions/operational changes
    3. Additional tips or hints to address patients on the right/lower quadrant

Tactics:
- 4-quadrant data and reporting in Tableau
    - PIC
- CMs/PIFs set monthly practice rounding times for patients in right-hand quadrants
    - PIC
- Patient Management Tactics to practices
    - PIC

Metrics
- Emerging risk to high risk analysis

Care Pathways

Project Lead

Inpatient Team + Project Plans

- Employing clinical interventions in the inpatient setting to reduce SNF utilization and improve patient outcome
- Bundle care practices
- Inpatient psych network

Tactics:
- WP1: Inpatient psych network development/telehealth
    - PIC
- WP26: Telehealth
    - PIC
- Bundle best practices
    - PIC

Metrics
- TBD

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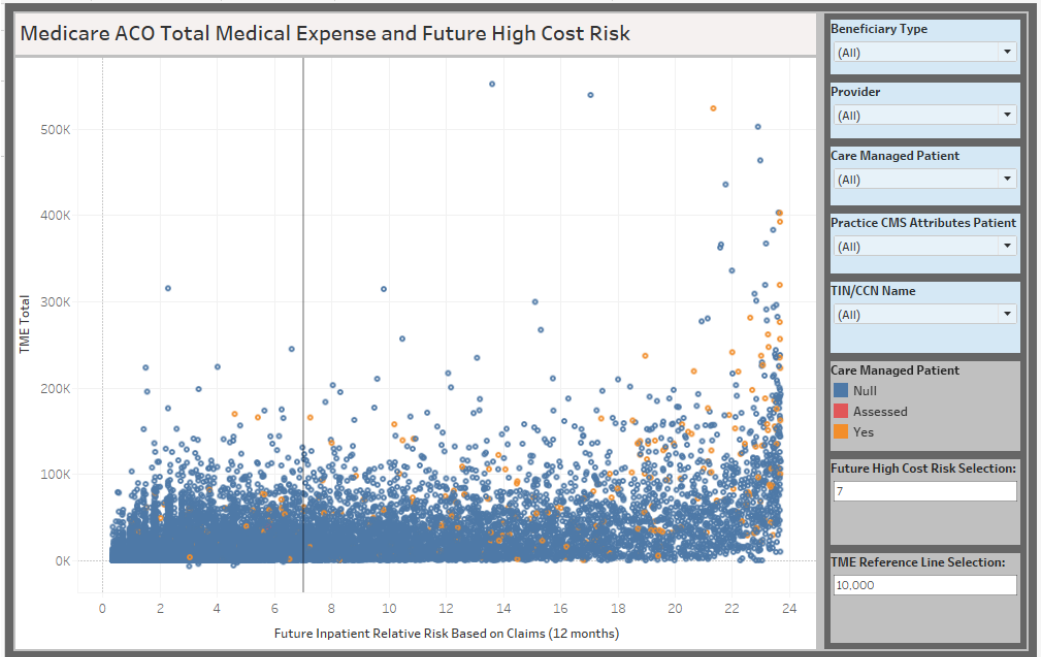
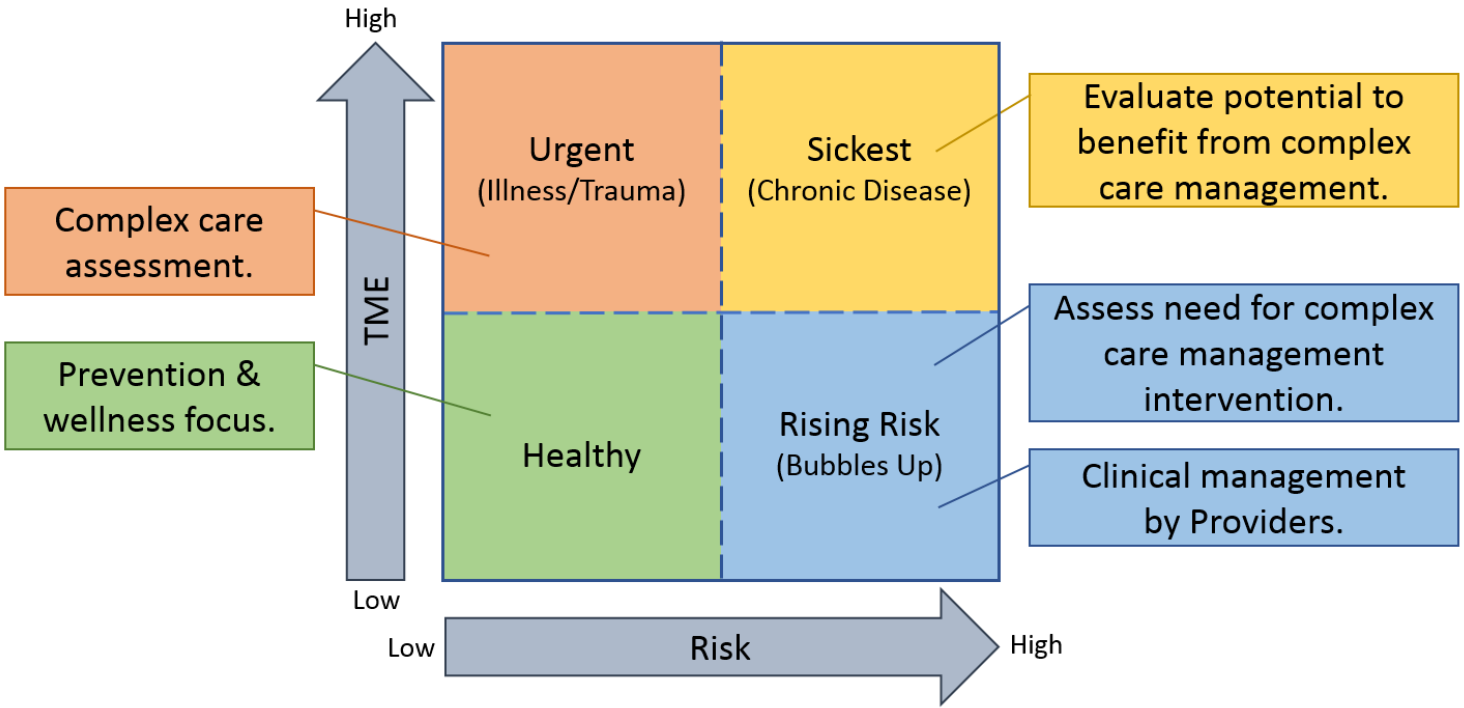
Where is the expense derived? How to anticipate and change



Quadrant	Number of Beneficiaries	TME Total	Avg TME/Beneficiary	Count of Care Managed Pt
(Q1)Hi$LowRisk	5,734	156,623,352	$27,314.85	71
(Q2)Hi$HiRisk	4,063	205,015,538	$50,459.15	185
(Q3)Low$LowRisk	39,988	174,468,851	$4,363.03	76
(Q4)Low$HiRisk	1,850	8,244,826	$4,456.66	23
Grand Total	51,635	544,352,568	$10,542.32	355

Patient Risk Matrix

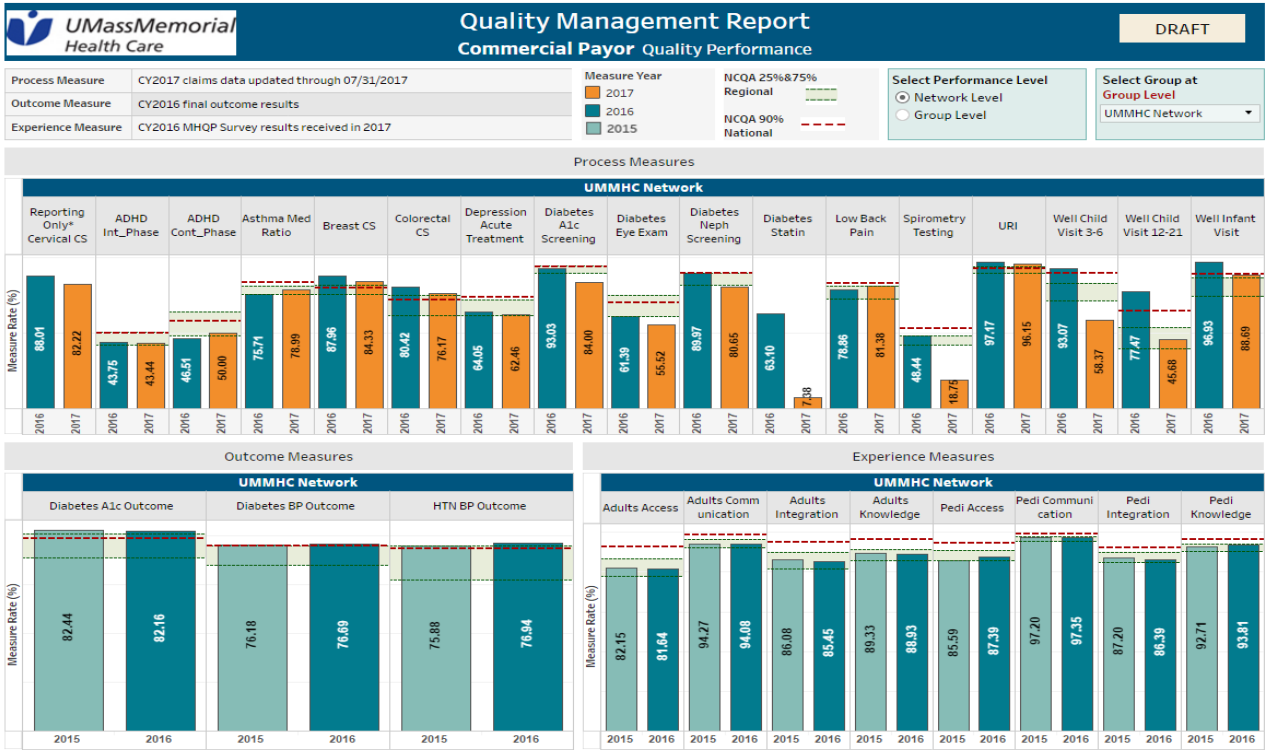


Management

Office of Clinical Integration (OCI): The UMass Memorial Health Care model for supporting population health management across the system

- Multi-disciplinary team tasked to manage cultural change
- Oversee areas such as Medicare and Medicaid ACOs and other risk-based contracts
- Functional areas:
  - Quality reporting
  - Quality payment program guidance
  - Practice improvement facilitation
  - State and federal regulatory and policy impact analysis, education and support
  - Data aggregation and analysis
  - Utilization reporting and analysis
  - Care management and coordination
  - SNF utilization management
  - Engagement and decision-making opportunities

Quality Management Report



What is Practice Improvement Facilitation?

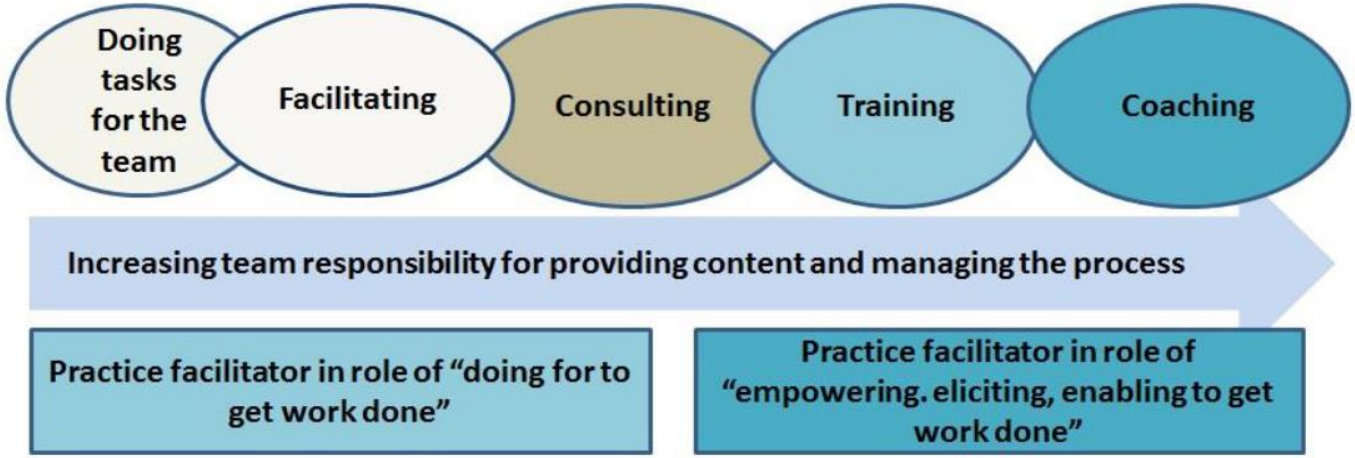
Practice Facilitation is a supportive service provided to a primary care practice by a trained individual or team of individuals.

Practice Improvement Facilitators (PIFs) use a range of organizational development, project management, quality improvement, and practice improvement approaches and methods to build the internal capacity of a practice to help it engage in improvement activities over time and support it in reaching incremental and transformative improvement goals.

How is support offered?

- On-site
- Virtually (telephonic or webinars)
- Combination of both

When used well, a practice facilitator will build capacity for change



Created by Neil Baker, Ann Lefebvre, and Cory Sevin for the Institute for Healthcare Improvement

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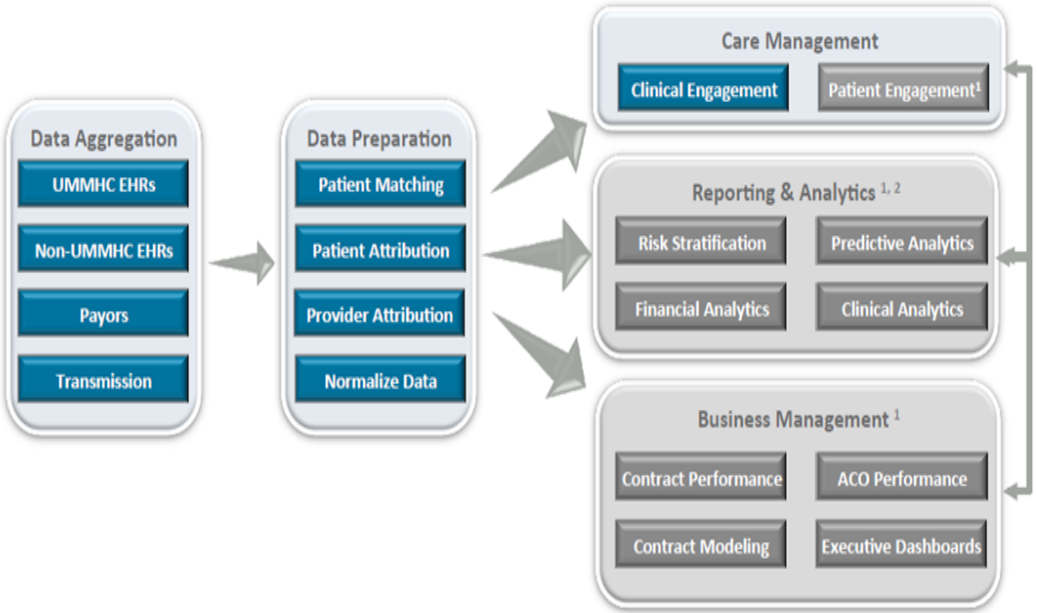
State and Federal Regulatory Impact

- Rapidly changing regulatory environment requires dedicated resources to monitor state and federal regulatory activities.
- MACRA is a healthcare game-changer with significant financial implications, both positive and negative, and presents unique challenges for ACOs and their provider partners.
- Regulatory liaison with state and federal regulators is key to keeping abreast of the dynamic regulatory and enforcement environment and development of training and tools to ensure compliance with evolving requirements.
- Increased regulatory oversight of value-based program reporting and payment methodologies requires vigilant monitoring and auditing.
- The shift from volume to value by state and federal programs and the resulting waivers of provisions within anti-kickback, Stark and other state and federal laws requires dedicated resources to ensure appropriate applicability to Population Health programs.
- As the environment evolves, organizations need to remain nimble and ensure ongoing assessment of the regulatory parameters around population health management initiatives and how to leverage the existing framework to find optimal performance opportunities within it.

Analytics Platform & Data Consolidation

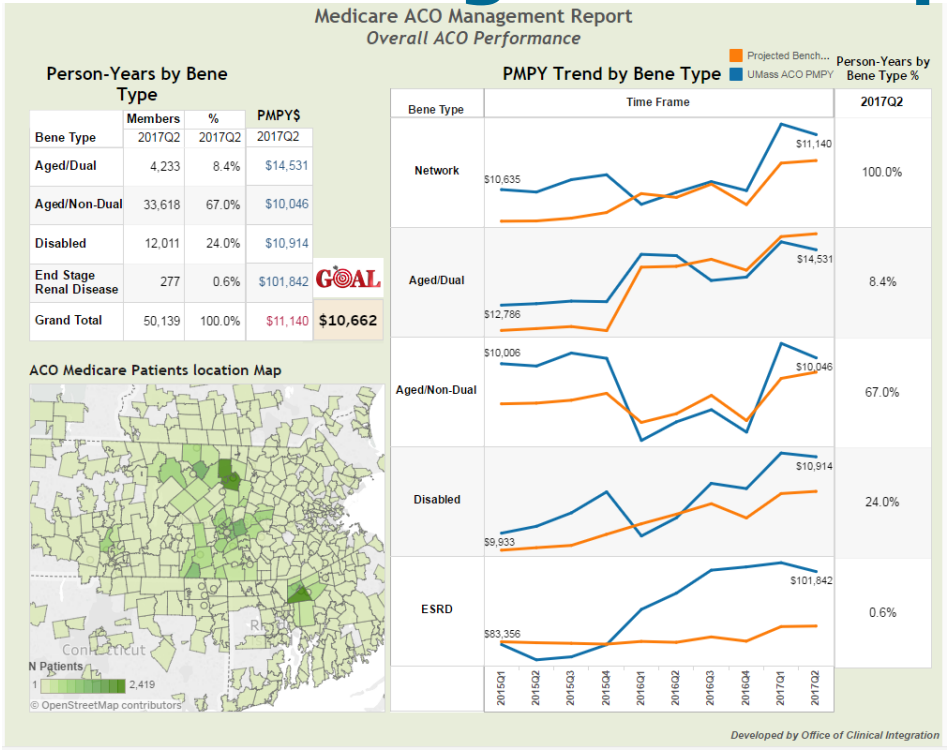
- Implementing a data aggregation strategy (automated collection and integration of data from all sources); 32 different EMR's
  - Claims data integration
- Development of IT plan for integration/migration plan to hospital EMR; how all the pieces fit together
- Enhanced reporting and predictive analytics; actionable data for the future planning, data governance
- Additional data sources, SNF's, other facilities, HIE's, etc.
- Interoperable framework
- What other systems are needed to support the population health management office?

Conceptual Model

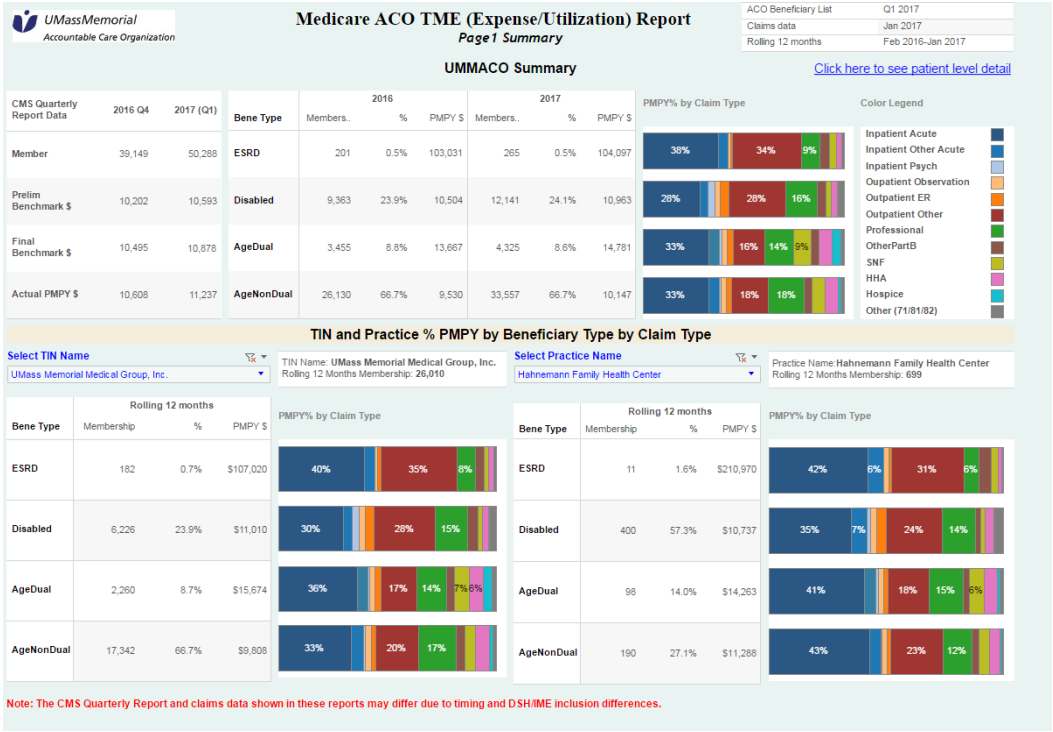


- Data is a key part of the VBC strategy
- Conceptual model demonstrates the data sources and process
- It fuels the processes and programs in the VBC model
- It must remain flexible
- Many layers of integration
- Production of robust analytics

Medicare ACO Management Report



Medicare ACO TME (Expense/Utilization) Report



UMassMemorial
Accountable Care Organization

Medicare ACO TME (Expense/Utilization) Report
Page1 Summary

ACO Beneficiary List	Q1 2017
Claims data	Jan 2017
Rolling 12 months	Feb 2016-Jan 2017

UMMACO Summary

Click here to see patient level detail

CMS Quarterly Report Data	2016 Q4	2017 (Q1)
Member	39,149	50,288
Prelim Benchmark $	10,202	10,593
Final Benchmark $	10,495	10,878
Actual PMPY $	10,608	11,237

	2016			2017		
Bene Type	Members..	%	PMPY $	Members..	%	PMPY $
ESRD	201	0.5%	103,031	265	0.5%	104,097
Disabled	9,363	23.9%	10,504	12,141	24.1%	10,963
AgeDual	3,455	8.8%	13,667	4,325	8.6%	14,781
AgeNonDual	26,130	66.7%	9,530	33,557	66.7%	10,147

PMPY% by Claim Type

Color Legend

TIN and Practice % PMPY by Beneficiary Type by Claim Type

Select TIN Name: UMass Memorial Medical Group, Inc.

TIN Name: **UMass Memorial Medical Group, Inc.**
Rolling 12 Months Membership: **26,010**

Select Practice Name: Hahnemann Family Health Center

Practice Name:**Hahnemann Family Health Center**
Rolling 12 Months Membership: **699**

	Rolling 12 months		
Bene Type	Membership	%	PMPY $
ESRD	182	0.7%	$107,020
Disabled	6,226	23.9%	$11,010
AgeDual	2,260	8.7%	$15,674
AgeNonDual	17,342	66.7%	$9,808

PMPY% by Claim Type

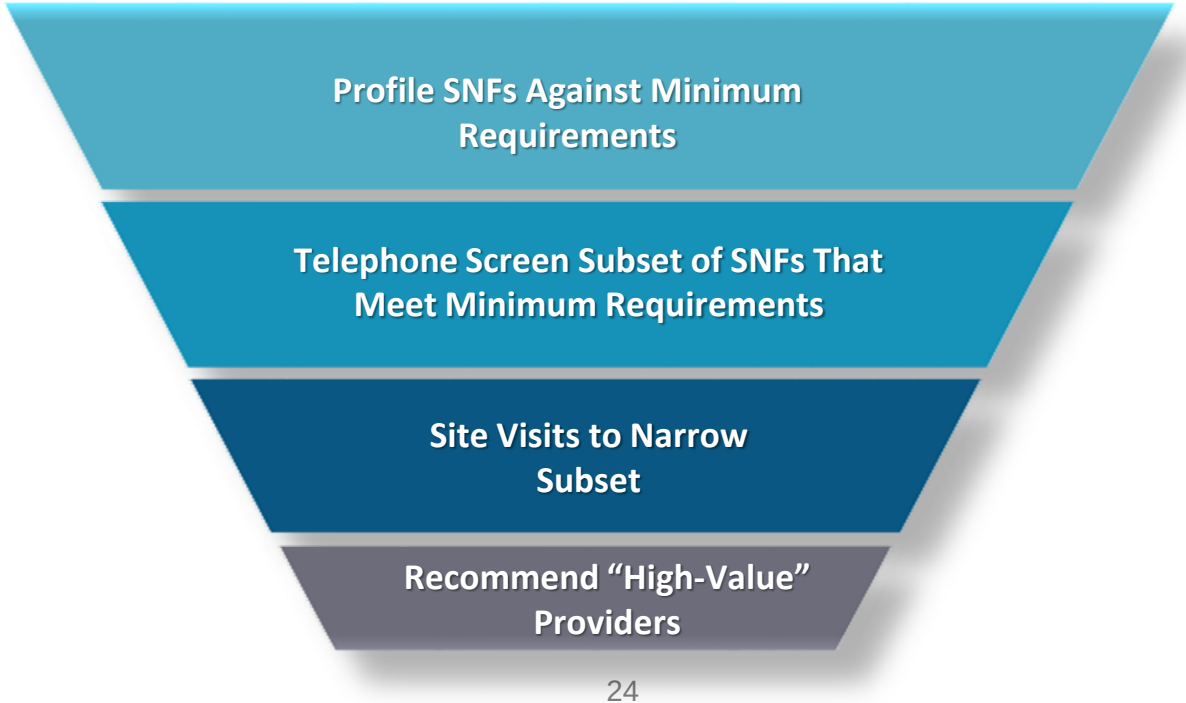
	Rolling 12 months		
Bene Type	Membership	%	PMPY $
ESRD	11	1.6%	$210,970
Disabled	400	57.3%	$10,737
AgeDual	98	14.0%	$14,263
AgeNonDual	190	27.1%	$11,288

PMPY% by Claim Type

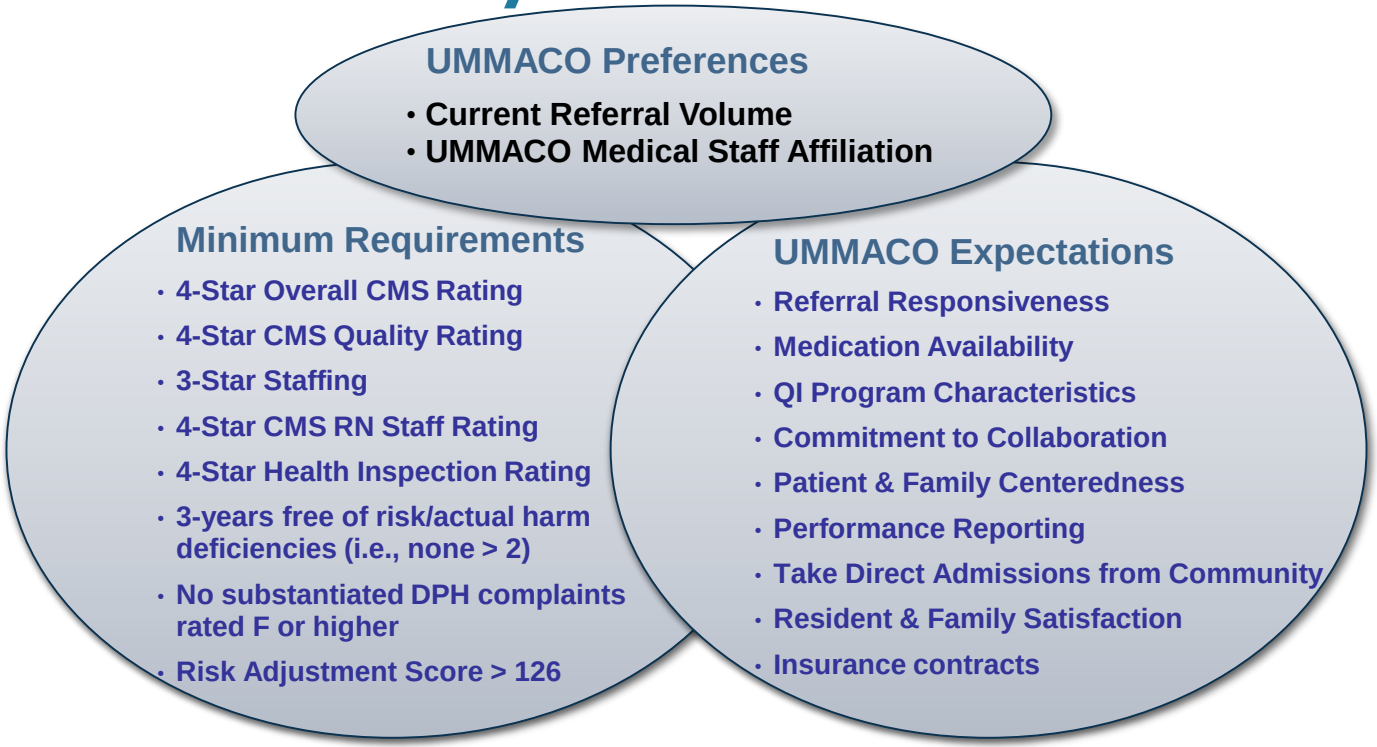
Note: The CMS Quarterly Report and claims data shown in these reports may differ due to timing and DSH/IME inclusion differences.

Steps in Building Post Acute Network

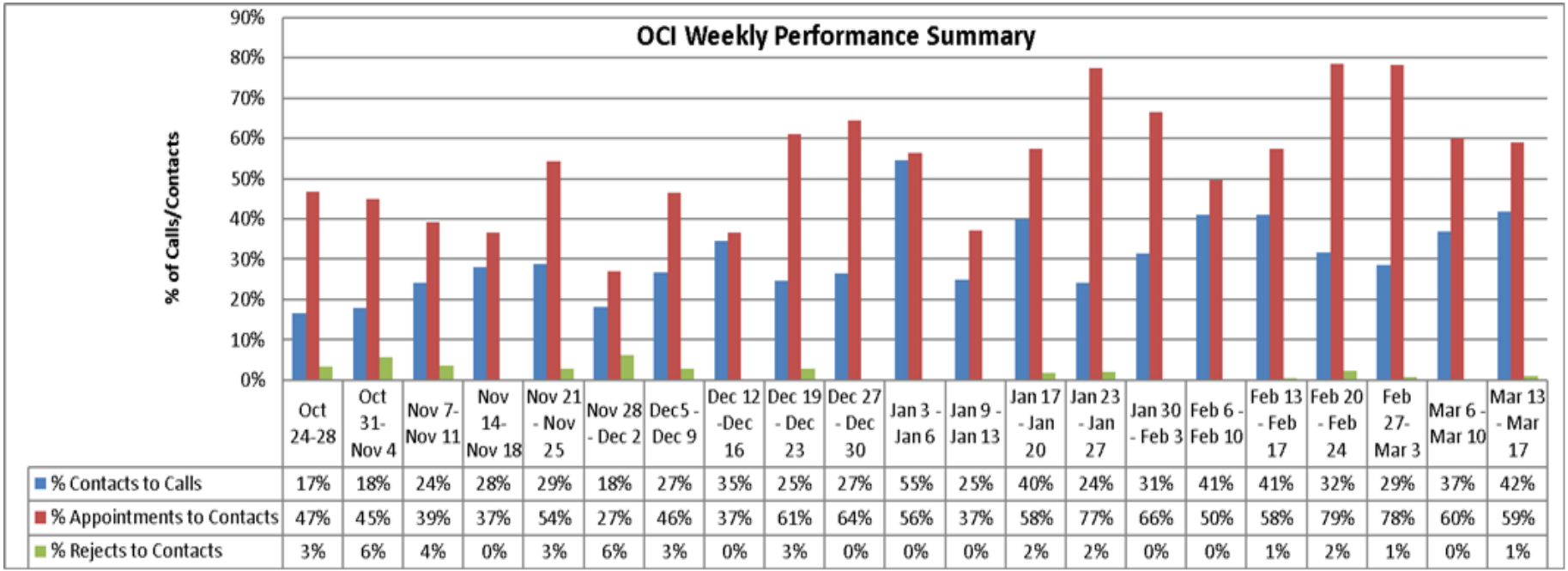
- Established and refined post acute SNF evaluation/selection process and criteria



SNF Evaluation/Selection Criteria

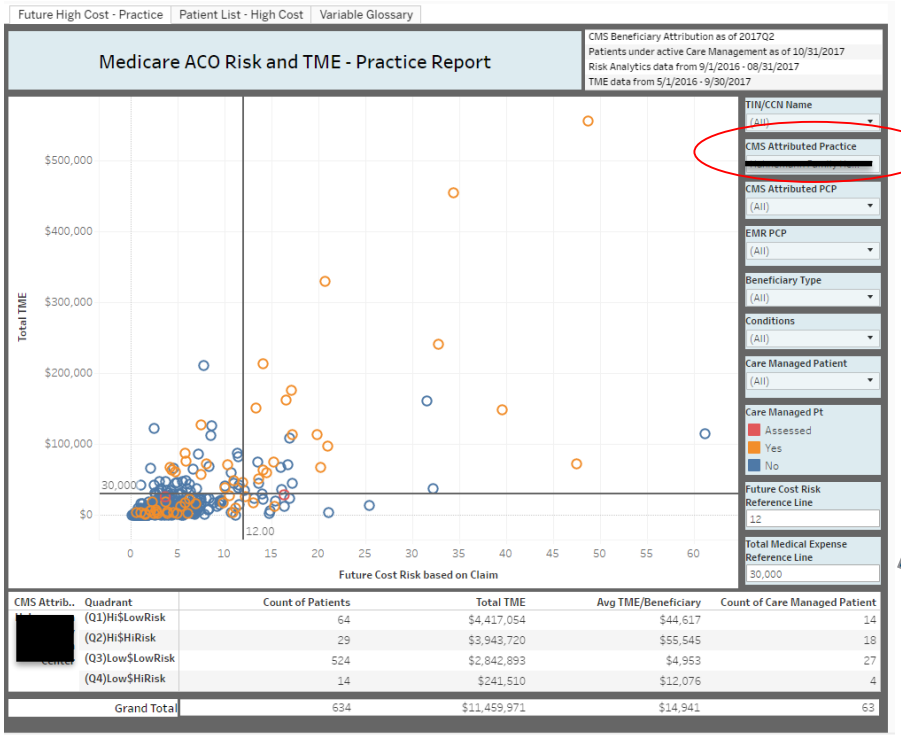


Patient Outreach



	Oct 24-28	Oct 31- Nov 4	Nov 7- Nov 11	Nov 14- Nov 18	Nov 21 - Nov 25	Nov 28 - Dec 2	Dec5 - Dec 9	Dec 12 -Dec 16	Dec 19 - Dec 23	Dec 27 - Dec 30	Jan 3 - Jan 6	Jan 9 - Jan 13	Jan 17 - Jan 20	Jan 23 - Jan 27	Jan 30 - Feb 3	Feb 6 - Feb 10	Feb 13 - Feb 17	Feb 20 - Feb 24	Feb 27- Mar 3	Mar 6 - Mar 10	Mar 13 - Mar 17
% Contacts to Calls	17%	18%	24%	28%	29%	18%	27%	35%	25%	27%	55%	25%	40%	24%	31%	41%	41%	32%	29%	37%	42%
% Appointments to Contacts	47%	45%	39%	37%	54%	27%	46%	37%	61%	64%	56%	37%	58%	77%	66%	50%	58%	79%	78%	60%	59%
% Rejects to Contacts	3%	6%	4%	0%	3%	6%	3%	0%	3%	0%	0%	0%	2%	2%	0%	0%	1%	2%	1%	0%	1%

The 4 Quadrant Patient Risk/TME Matrix



CMS Attrib..	Quadrant	Count of Patients	Total TME	Avg TME/Beneficiary	Count of Care Managed Patient
[redacted]	(Q1)Hi$LowRisk	64	$4,417,054	$44,617	14
	(Q2)Hi$HiRisk	29	$3,943,720	$55,545	18
	(Q3)Low$LowRisk	524	$2,842,893	$4,953	27
	(Q4)Low$HiRisk	14	$241,510	$12,076	4
Grand Total		634	$11,459,971	$14,941	63

Medicare ACO Patient Management Report

UMassMemorial Accountable Care Organization

Medicare ACO Beneficiary List

Data Sources and Time Periods — Click here to see TME report
CMS Beneficiary Attribution Report 2017 Prelim
ACO Care Management–Pts with Care Management as of May 2017
Claims & predictive analytic data update from December 2015 through March 2017

Practice Name	Provider	HICNO	Bene Name	High Cost Bene	High Predictive Risk Bene	Conditions	N of InPatient Visits	N of ED Visits	Care Managed Pt	Enrollment Type
All	All	All	All	All	All	All	All	All	All	All

ACO Beneficiary List — Sort by TIN/CCN Name — N of Selected ACO Beneficiaries [redacted]

TIN/CCN Name	Practice Name	Provider	Bene Name	HICNO	Birth Date	Gender	Deceased Date	Top 5% High Cost–Practice	Top 5% High Cost–Network	N of High Risk Predictive Conditions	N of Mental Health Conditions	N of InPatient Visits	N of ED Visits	N of No Shows	Care Managed Pt
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			[redacted]	[redacted]	[redacted]	F				1					
			[redacted]	[redacted]	[redacted]	F				1	2	1	1		
			[redacted]	[redacted]	[redacted]	M				1	2				
			[redacted]	[redacted]	[redacted]	M				1		1			
			[redacted]	[redacted]	[redacted]	M				1	2				
			[redacted]	[redacted]	[redacted]	F									
			[redacted]	[redacted]	[redacted]	M		Yes							
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			[redacted]	[redacted]	[redacted]	M	11/24/2016	Yes	Yes			2			
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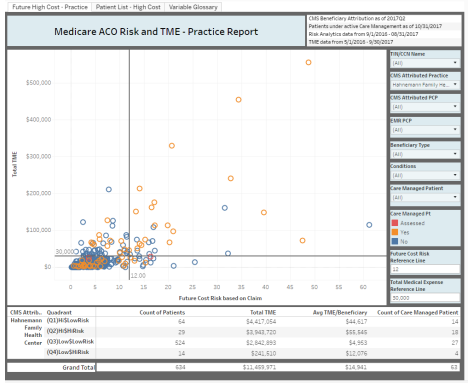
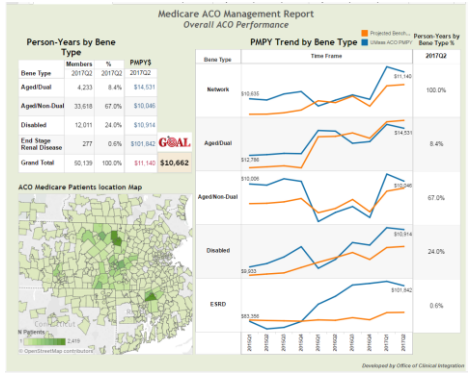
--Report Developed by OCI

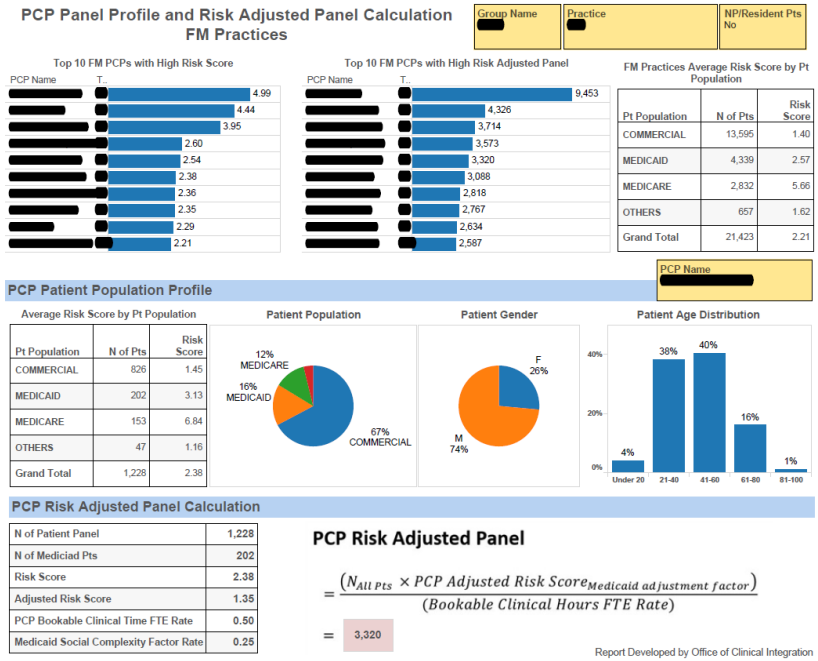
Secure Executive Buy-in





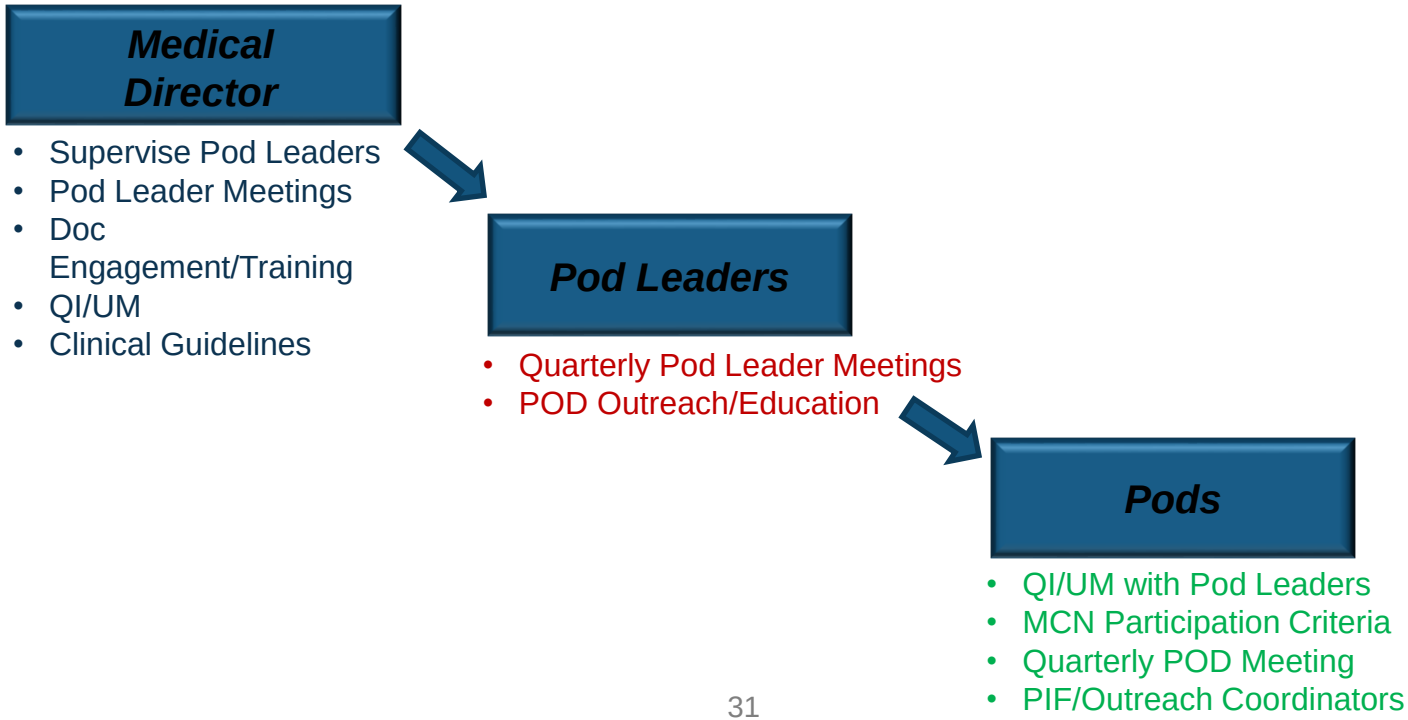
- OCI's biggest challenge: Change not only mindset, but also behaviors that directly impact program success
- Senior executives needed to drive cultural and behavioral change
- Broad change needed to be preceded by a change in mindset on the part of system leaders
- The key to executive buy-in: ***data and analytics***
  - Analytics showed that streamlining systems helped generate consistently accurate clinical and financial information

Secure Physician Buy-in



- OCI's next biggest challenge: garnering support from physicians
  - Changed monetary incentives
  - Pod structure where physician groups are organized regionally
  - Generate reports on how individual physicians are performing against peers
  - Allow physicians to express concerns and outline how they can best be supported
  - Ongoing education

POD Structure



Logistical Barriers

- Use actionable data and analytics that highlight actual savings and impacts to patient care
  - Report cards / score cards help provide visuals of ‘actual’ performance and opportunities for:
    - Financial improvements
    - Reductions in TME
    - Patient engagement
    - Provider engagement
    - Rising risk populations – preventable events
    - Care management interventions

Results Attributed to OCI

To help UMass Memorial Health Care accomplish it's population health objectives, the Office of Clinical Integration provided the following support:

- Provided practice improvement facilitators, who conducted about 100 practice visits for month and served as practice level resource
- Provided outreach support to help practices contact patients; they made more than 9,000+ calls to patients
- Conducted approximately 230 HCC coding audits to support coder efforts to more accurately demonstrate the burden of illness
- Offered care management team, which has managed more than 7,000 patients

Results Attributed to OCI (cont.)

With the help of data from the Office of Clinical Integration, the system's Medicare Shared Savings ACO saw a sharp improvement in key metrics for patients receiving care management:

- Average inpatient admissions per patient decreased by 15%; control group increased by 1%
- Average 30-day readmission rate per patient decreased by 15%; control group decreased by 4%
- Average ED visits per patient decreased by 18%; control group decreased by 1%
- Average skilled nursing admissions per patient increased by 19%; control group increased by 41%

Education & Communication

- Senior leadership site visits to network
- Board engagement and education
- POD structure
- Community collaborative efforts (partnering)
- Patient engagement tools for community services
- Weekly blog from president
- Updates weekly (via CRM) about:
  - Regulatory changes
  - GPRO processes
  - Program updates
- PHM WINS – Weekly webinars to educate network and others

Image Credit: http://juntaedelane.com/category/articles/articles-articles/marketing-research/

Recommendations

- Develop clear population health management strategy
- Consider all pieces of the care delivery continuum must be considered
  - Staffing
  - Budgets
  - Care management
  - Education and training
  - Reporting
- Secure executive and physician buy-in
  - Develop a clear financial plan for PHM return on investment
- Create and support dedicated teams to lead PHM strategies and execute PHM programs
- Get the right systems in place
  - Data and analytics
  - Start with a clearly defined PHM strategy and a clearly defined path to value
  - Then need a series of systems to support goals
  - Most health systems will likely need more than one

Image Credit: http://allthingsd.com/files/2012/03/Change-Is-Good-You-Go-First-Button-0956.png

Questions

- Questions?
- Please complete online session evaluation
- Renee Broadbent contact information:
  Renee.Broadbent@umassmemorial.org

UMassMemorial Health Care