The Role of Quality Improvement in Supporting Oncology Pharmacists

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POEM | YesRx | Univ of MI COP

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Disclosures

- Support for the Michigan Oncology Quality Consortium is provided by Blue Cross and Blue Shield of Michigan as part of the BCBSM Value Partnerships program

Objectives

Summarize the changing landscape of reimbursement in oncology

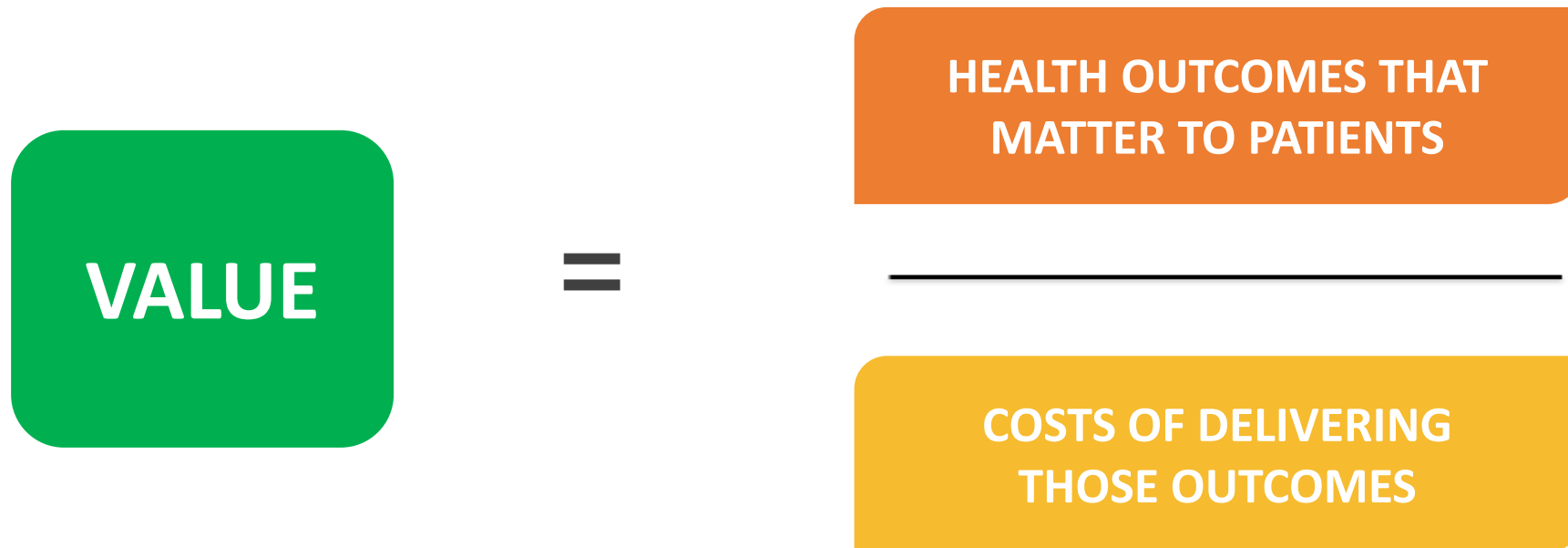Discuss stakeholder perspectives of pharmacist value

Describe successful models of pharmacy care that leverage quality measurement

Review successes and challenges
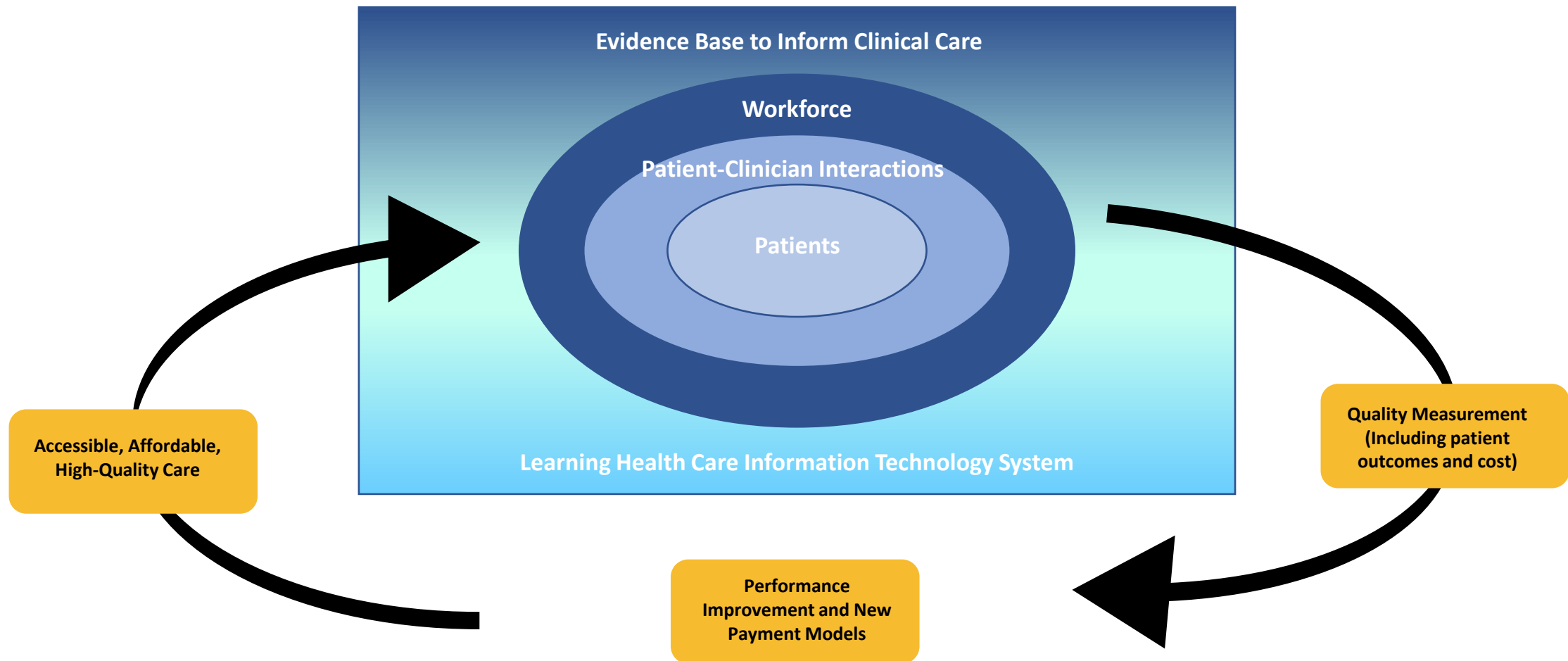
Definition – Value

VALUE $=$ $\dfrac{\text{HEALTH OUTCOMES THAT MATTER TO PATIENTS}}{\text{COSTS OF DELIVERING THOSE OUTCOMES}}$

Porter ME. NEJM. 2010;363:2477-2481

Definition – Quality

- National Academy of Medicine (NAM) definition - "the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge."

- NAM Quality Domains:
  - Effectiveness
  - Efficiency
  - Equity
  - Patient Centeredness
  - Safety
  - Timeliness

Institute of Medicine (IOM). Crossing the Quality Chasm: A New Health System for the 21st Century. Washington, D.C: National Academy Press; 2001.

Quality Indicators

- Structure/System Indicator
  - Characteristics, tools, and resources of the system (site, clinician) that allows good care to be provided
- Process
  - Measures the workflow of care that may affect outcomes
- Outcome Indicators
  - Results of the intervention (disease and toxicity outcomes, quality of life, patient satisfaction, resource utilization, cost)
- Cross-cutting
  - Broadly applicable across multiple providers and specialties

Donabedian A. The Definition of Quality and Approaches of its Assessment. Volume 1: Explorations in Quality Assessment and Monitoring. Ann Arbor, MI: Health Administration Press, 1981.
Donabedian A. *JAMA*. 1988;260:1743-8

Conceptual Framework

Adapted from: Delivering High-Quality Cancer Care, Institute of Medicine of the National Academies. September 2013.

Shift Towards Value-Based Payment

- Medicare ACCESS and CHIP Reauthorization Act (MACRA) passed in 2015 and implemented in 2017

- MACRA Quality Payment Program (QPP) has 2 programs:
  - The Merit-Based Incentive Payment System (MIPS)
    - Traditional MIPS includes 4 areas: Quality, Improvement Activities, Promoting Interoperability, and Cost
    - Alternative Payment Model (APM) Performance Pathway (APP)
    - MIPS Value Pathways
  - The Advanced Alternative Payment Model (APM)
    - CMS Oncology Care Model (OCM) → CMS Enhancing Oncology Model (EOM)

Wen L, et al. Am J Manag Care. 2018;24(3):e93-e98

Transition from Traditional MIPS to MVPs

www.qpp.cms.gov/mips/mips-value-pathways
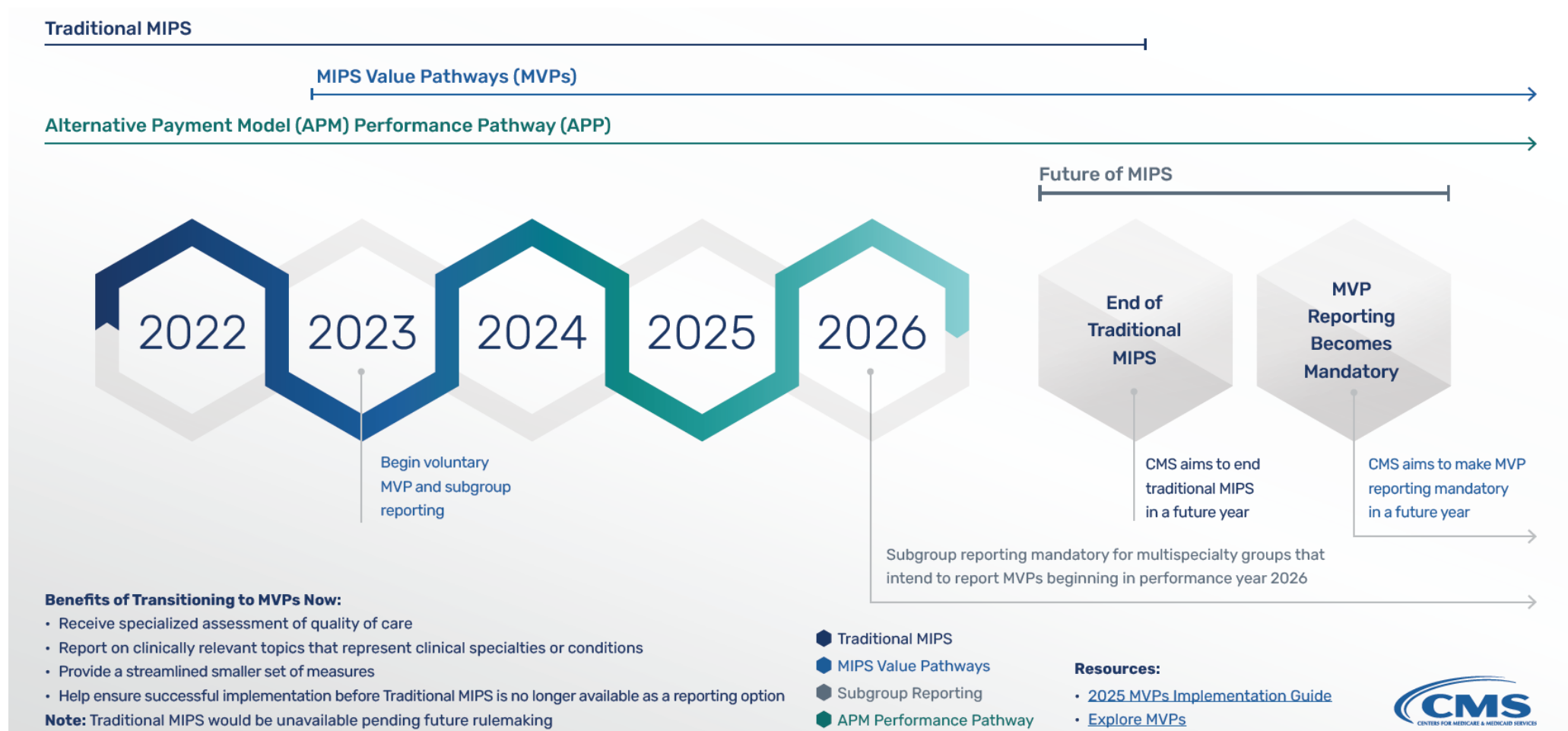
Oncology Quality Metrics

QPP-relevant quality metrics
- MIPS
- OCM

Other relevant measures
- American Society of Clinical Oncology (ASCO) Quality Oncology Practice Initiative (QOPI)
- National Comprehensive Cancer Network (NCCN)
- American Board of Internal Medicine (ABIM) Choosing Wisely Measures
- Commission on Cancer (CoC)
- National Quality Forum (NQF)
- Pharmacy Quality Alliance (PQA)
- Subspecialty Groups

Who Are We Providing Value To?

Payer Perspective

Improved patient outcomes at lower cost

Cost considerations

Total cost of care

Unplanned healthcare utilization costs

Other opportunities

Closing gaps in care

Demonstration projects or pilots

Practice Perspective

Improved patient outcomes with reimbursement to offset salary

Reimbursement opportunities

Value based contracting

Billing opportunities

Care management billing codes

Provider workload metrics – safety

Nonmonetary benefits

Safety

Satisfaction

Burnout reduction

Impact in Primary Care – Diabetes Example

Total N = 7145	A1c Tests	LDLC Test	LDLC < 100	On Statin	Monitor for Nephropathy	Eye Exam	Foot Exam
UMHS TARGET GOAL	93%	90%	56%	96%	90%	71%	85%
Non-PharmD Patients (N = 6329; 89%)							
No. of Patients Met Goal	6057	5287	3690	4528*	5573	4976	4568
% of Patients Met Goal	96%	84%	58%	92%	88%	79%	72%
UMHS Goal Met?	Yes	No	Yes	No	No	Yes	No
PharmD Patients (N = 816; 11%)							
No. of Patients Met Goal	810	736	551	628**	770	686	660
% of Patients Met Goal	99%	90%	68%	96%	94%	84%	81%
UMHS Goal Met?	Yes	Yes	Yes	Yes	Yes	Yes	No
* Eligible patients: 4908	** Eligible patients: 656						

Payer Support

- Blue Cross Blue Shield of Michigan (BCBSM) saw the prior model and supported the launch of MPTCQ (Michigan Pharmacists Transforming Care and Quality Collaborative) beginning in 2016.

- What did support look like?
  - BCBSM Provider Delivered Care Management (PDCM) Program
  - Provider-led care coordination
  - Opportunity for interdisciplinary team members (including pharmacists) to bill care management codes
  - PDCM program has been successful in lowering cost and improving quality across the State

- Program launch support – support to the coordinating center to launch MPTCQ, provide educational support, data analysis, and upfront pharmacist salary support

MPTCQ Integration Across the State

52 practice sites	**30 pharmacists**
11,529 unique patients	**38,600 patient encounters**

Coe AB, et al. Pharmacists providing care in statewide physician organizations: findings from the Michigan Pharmacists Transforming Care and Quality Collaborative. J Manag Care Spec Pharm. 2020;26(12):1558-66.
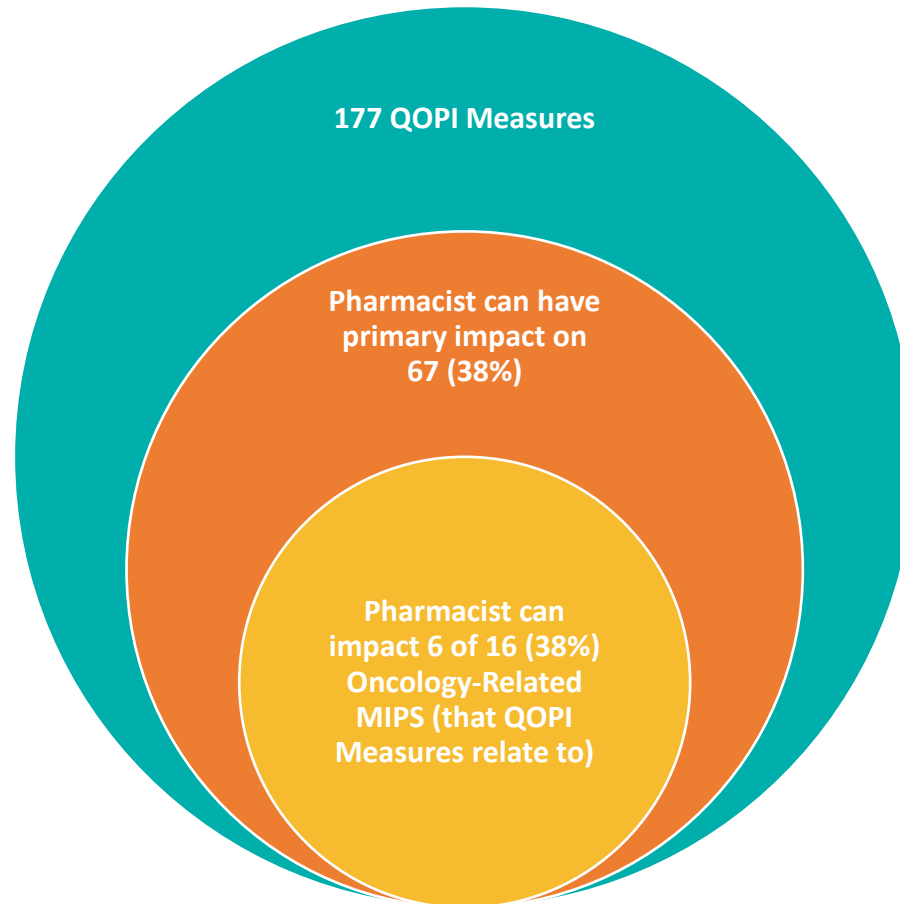Choe HM, et al. Michigan Pharmacists Transforming Care and Quality: Developing a Statewide Collaborative of Physician Organizations and Pharmacists to Improve Quality of Care and Reduce Costs. J Manag Care Spec Pharm. 2018;24(4):373-378.

MPTCQ Clinical Outcomes

- ## Diabetes
  - ### Initial A1c 8% - 8.9% (n=489 pts)
    - Pharmacist care resulted in mean decrease of 0.8 – 0.9% in 3 months
  - ### Initial A1c $\geq$ 9% (n=864)
    - Pharmacist care resulted in mean decrease of 1.9 – 2.5%

- ## Hypertension
  - ### Pharmacist care resulted in systolic and diastolic blood pressure decreases
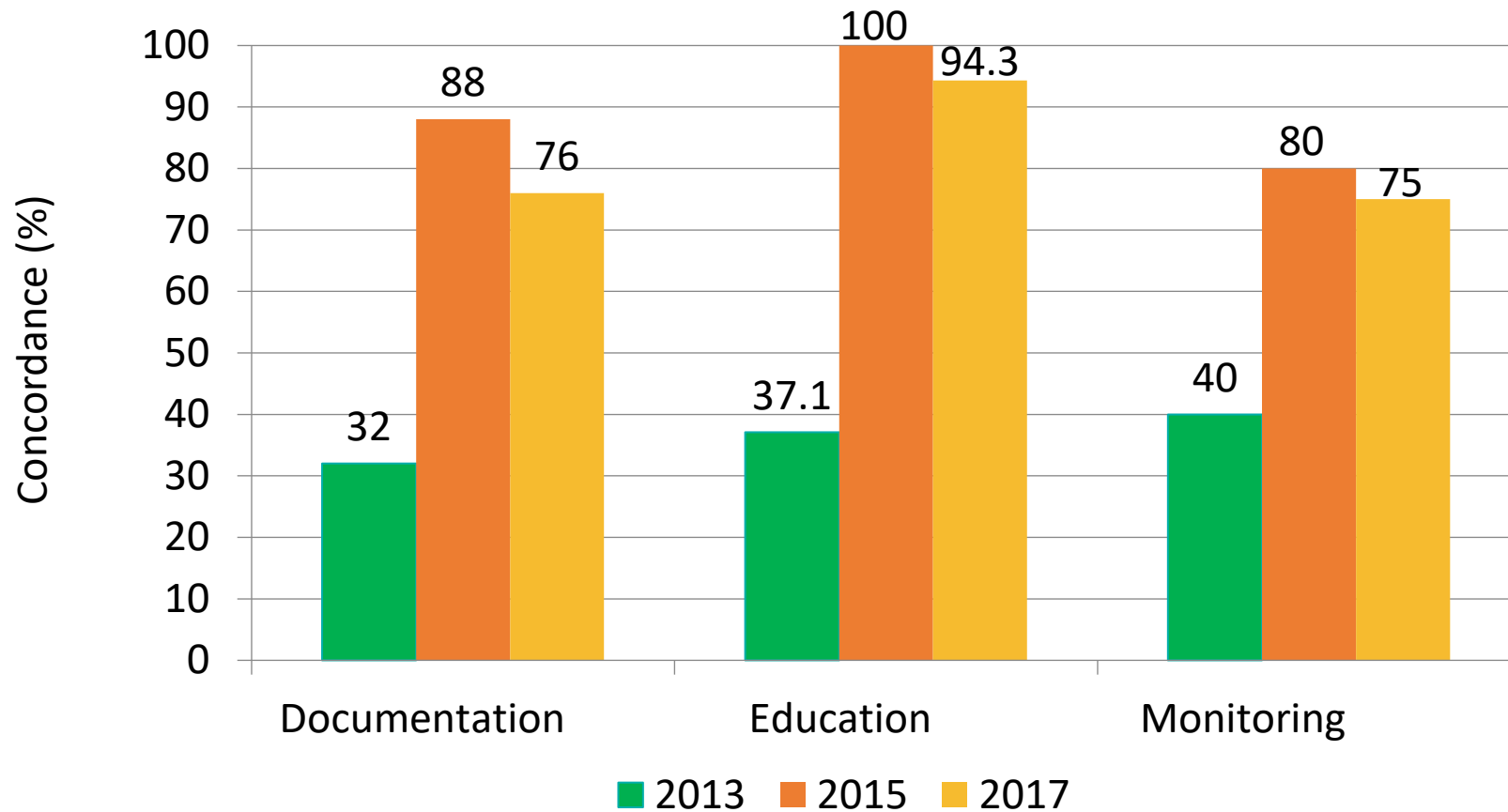
Coe AB, et al. Pharmacists providing care in statewide physician organizations: findings from the Michigan Pharmacists Transforming Care and Quality Collaborative. J Manag Care Spec Pharm. 2020;26(12):1558-66.
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Targeting Oncology Quality Metrics

177 QOPI Measures

Pharmacist can have primary impact on 67 (38%)

Pharmacist can impact 6 of 16 (38%) Oncology-Related MIPS (that QOPI Measures relate to)

Primary Pharmacist Services
- Patient counseling & education
- Participation in protocol-based care
- Managing symptoms & providing supportive care
- Medication reconciliation

Vulaj V, et al. J Oncol Pract 2018:14(6):e403-e411.

Example: Oral Oncolytic QOPI Measurement Improvement

Mackler E, et al. J Oncol Pract 2018;14(5):e304-e309.

Example: NK1RA Overutilization

Methods

Baseline assessment of
    Performance
    Prescriber knowledge and beliefs
    Pre-populated antiemetic order sets
Performance reporting
State-wide education
Value-based reimbursement (VBR)

NK1 Receptor Antagonist or Olanzapine administered for low or moderate emetic risk Cycle 1 chemotherapy (lower is better)

VBR Target = 30%
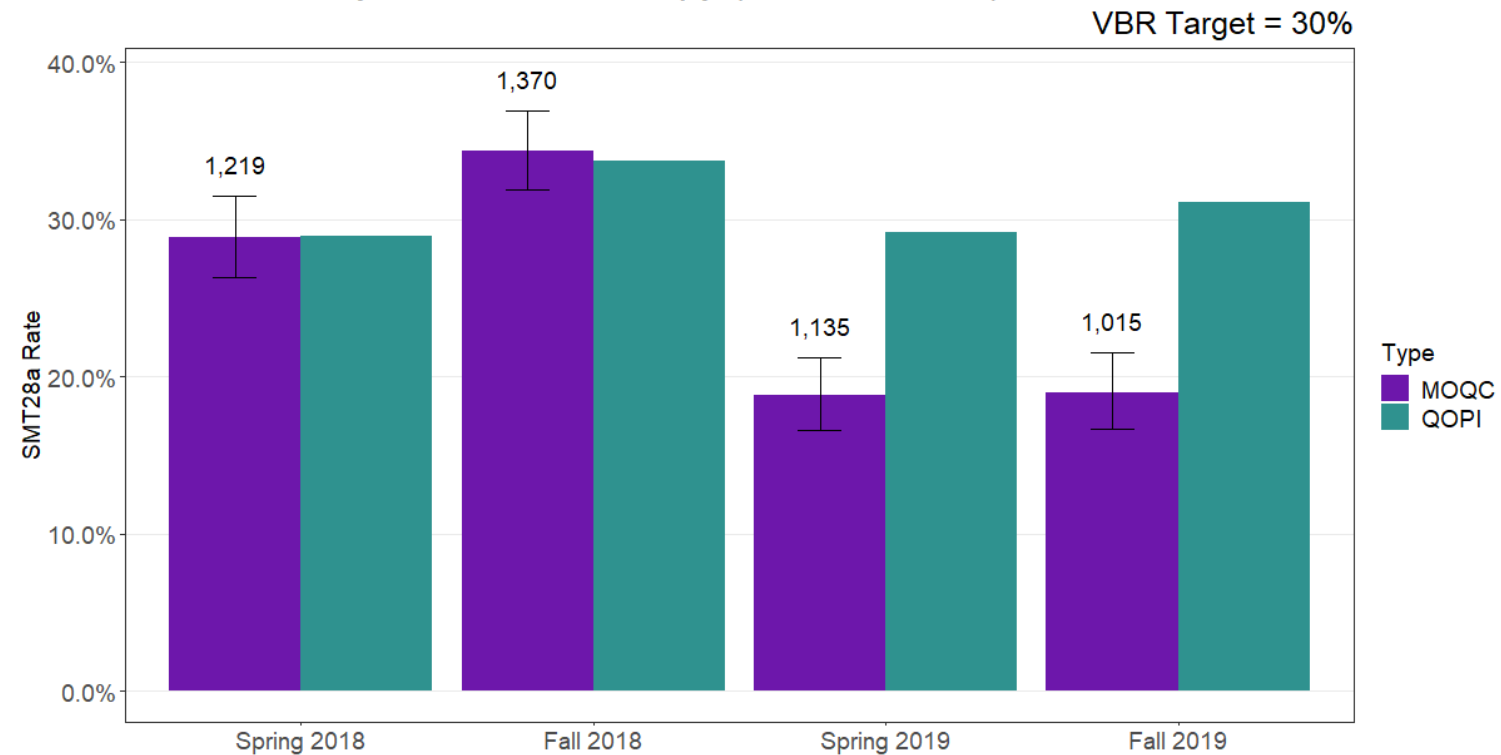
Note: Error bars represent 95% confidence intervals, and the number of patients are displayed above the error bars.

Example: OAM Follow Up

Methods

QI focused on improvement of OAM adherence and toxicity assessment measured by documentation in the EMR

Of note, also resulted in a reduction in unplanned visits related to OAM toxicity or adherence

Documentation of Toxicity and Adherence -
Percentage of Tasks Completed
p-Chart with 3 sigma
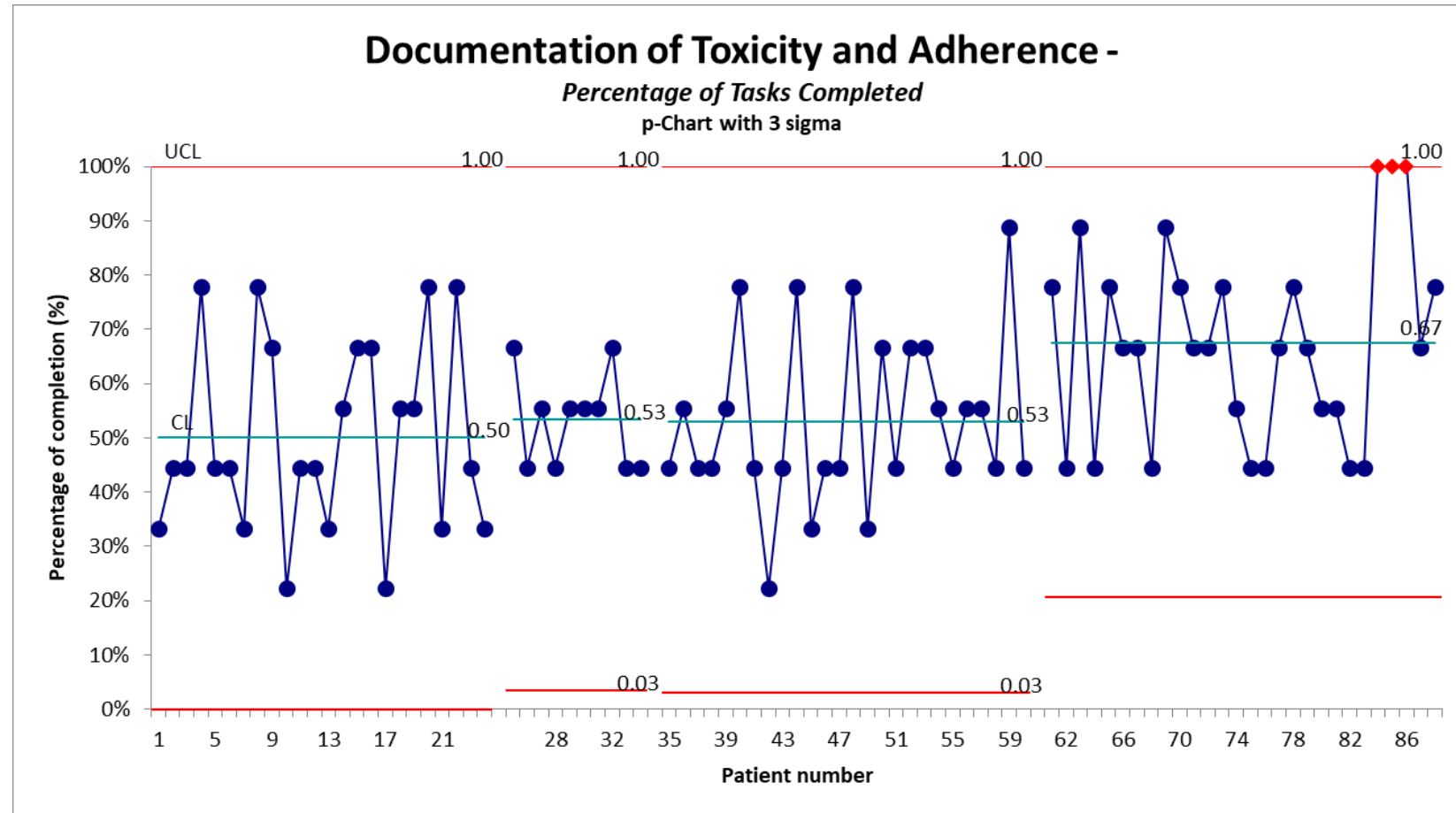
Pharmacists Optimizing Oncology Care and Excellence in Michigan (POEM)

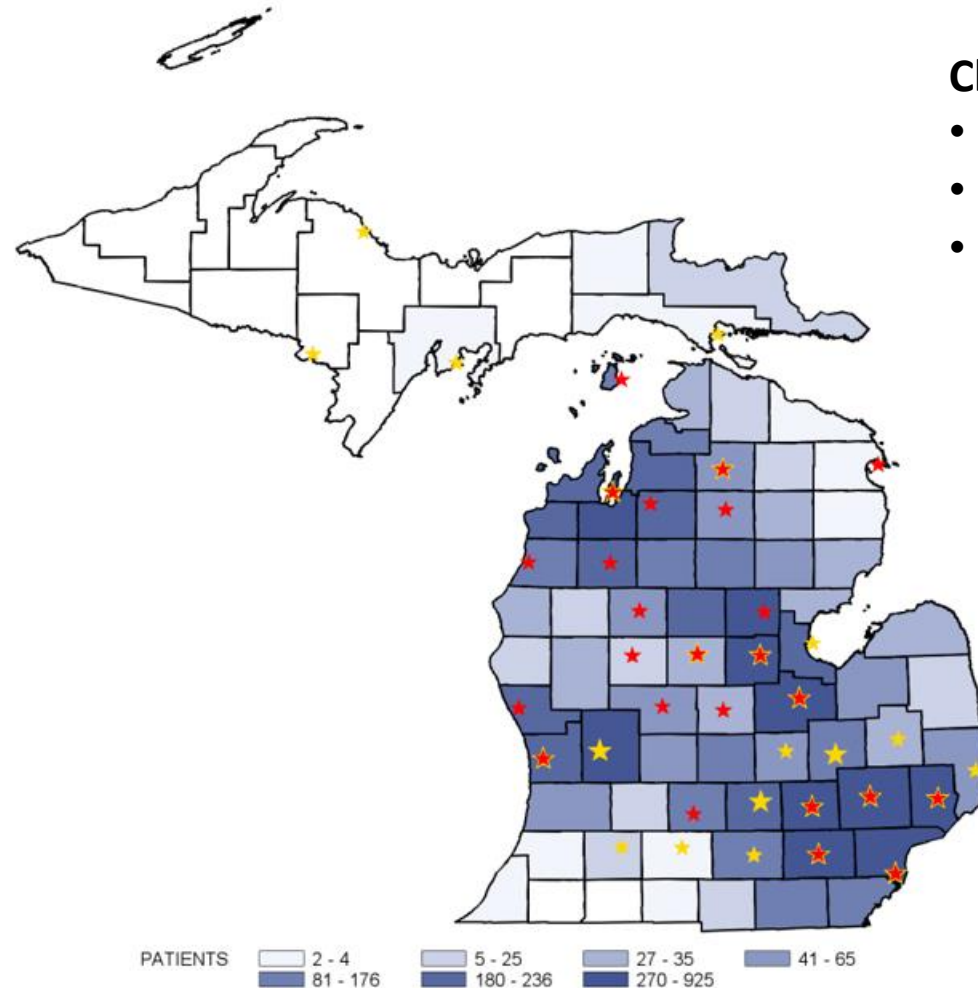PHYSICIAN ORGANIZATIONS AND PRACTICE MODELS

CLINICAL FOCUS

QUALITY OUTCOME MEASUREMENT

POEM Program Reach

Launched October 2020

9 Clinical Oncology Pharmacists
7 Physician Organizations
20 Oncology Sites
66 Physicians

Patients Served*

- 9,680 Patients
- 31,314 Encounters
- 31,052 Interventions

Clinical Focus Areas:
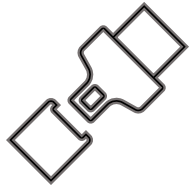- Oral anticancer agents
- Immunotherapy
- Symptom management and optimization

PATIENTS
- 2 - 4
- 5 - 25
- 27 - 35
- 41 - 65
- 81 - 176
- 180 - 236
- 270 - 925

*POEM practice in county
*MOCQ practice in county

*Data as of 3/31/25

Outcome Assessment

- Pharmacist Report – RedCap
  - Patient Demographics
  - Encounters
  - Interventions

- Patient Satisfaction

- Physician Satisfaction

- Care Management Billing Optimization

- Site-Specific Metrics & Outcomes
  - Abstracted pre- vs post-POEM
  - Time Studies

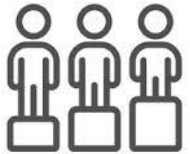- Reimbursement for Services & Program Participation

POEM Pharmacist Impact

SAFETY

OUTCOMES

EQUITY

SATISFACTION

POEM Pharmacist Impact – Safety

Patient Safety

- POEM pharmacist identification of wrong oral anticancer medications or wrong dose/instruction dispensed to patients
- Drug interaction screening
- Side effect identification and management

30% (n=1,723) of the POEM pharmacists' 5,765 medication related interventions were due to a safety indication

- 627/1,723 (36%) of all safety medication related interventions were antineoplastics. Most (n=522) of them being oral anticancer agents.

POEM Pharmacist Impact – Safety

Workforce and Patient Safety

- Decreased interruptions for physician team members
- More time available for nurses, APPs, and physicians when pharmacists are embedded within the team
    - Mean of 8 hours/week in physician/APP time saved by the POEM pharmacist (and 11 hrs/week of nurse time)

"Since working with our POEM pharmacist, I haven't received any off-hour calls about side effects from medications. The POEM pharmacist provides incredible education and support to our patients, giving them confidence in self-management and improving their quality of care! Every oncology practice would benefit from having a clinical pharmacist embedded within their clinic."

Dr. David P. Michelin, MD – Munson HC

POEM Pharmacist Impact – Equity

- 46% of patients cared for by the pharmacists live outside of a metropolitan area
- 17% of patients are from a rural area or small town – a group shown to have a greater disparity in care and cancer outcomes in our State

Medication equity via Cancer Drug Repositories started with our POEM pharmacists!

- YesRx came from this collaboration
- All the POEM pharmacists are part of the YesRx Network and spearhead equitable access to cancer medications across Michigan
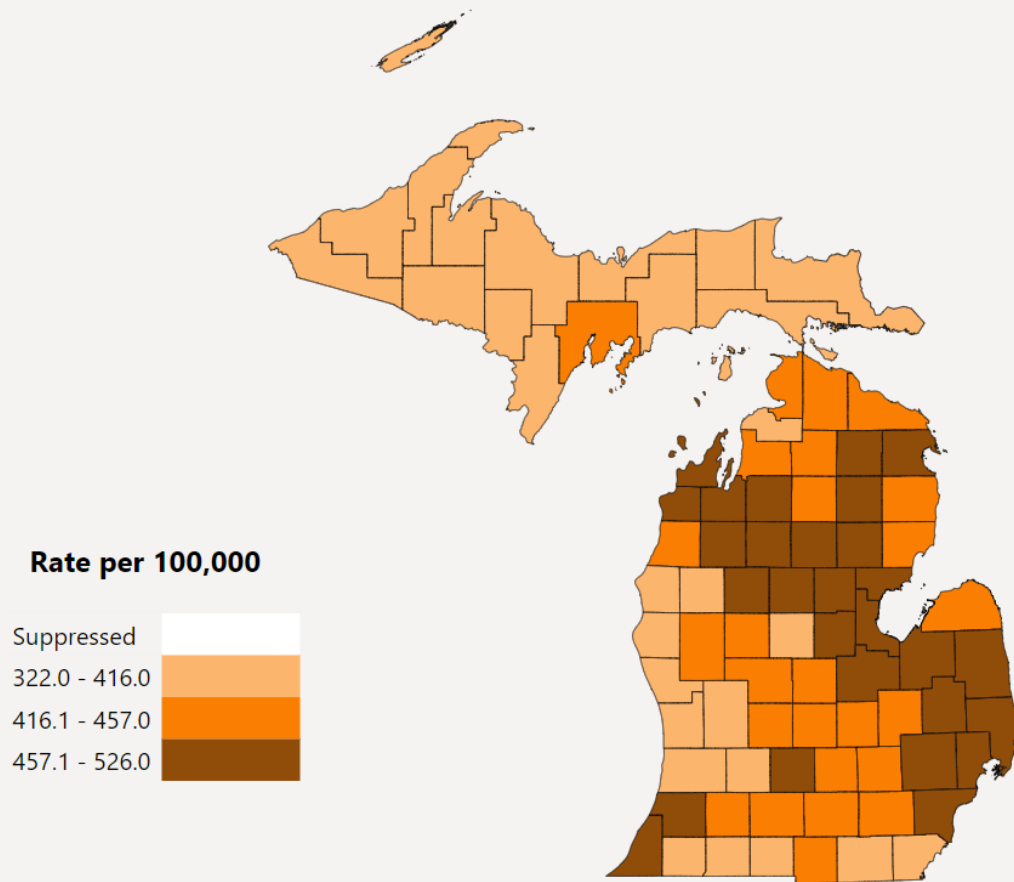- $14 million in cancer medications provided at no charge to MI patients in need over last 20 months

yesRx   www.yesrx.org

POEM Pharmacist Impact – Equity

**Overall Cancer Incidence, by County, 2015-2019**

Rate per 100,000

Suppressed
322.0 - 416.0
416.1 - 457.0
457.1 - 526.0

POEM program is adding clinical pharmacist care to community practices in the State with highest cancer incidence

Vulnerable populations receiving care:
- **From rural counties**
- **From counties with low mean household incomes**

PATIENTS   2 - 4   5 - 25   27 - 35   41 - 65
81 - 176   180 - 236   270 - 925
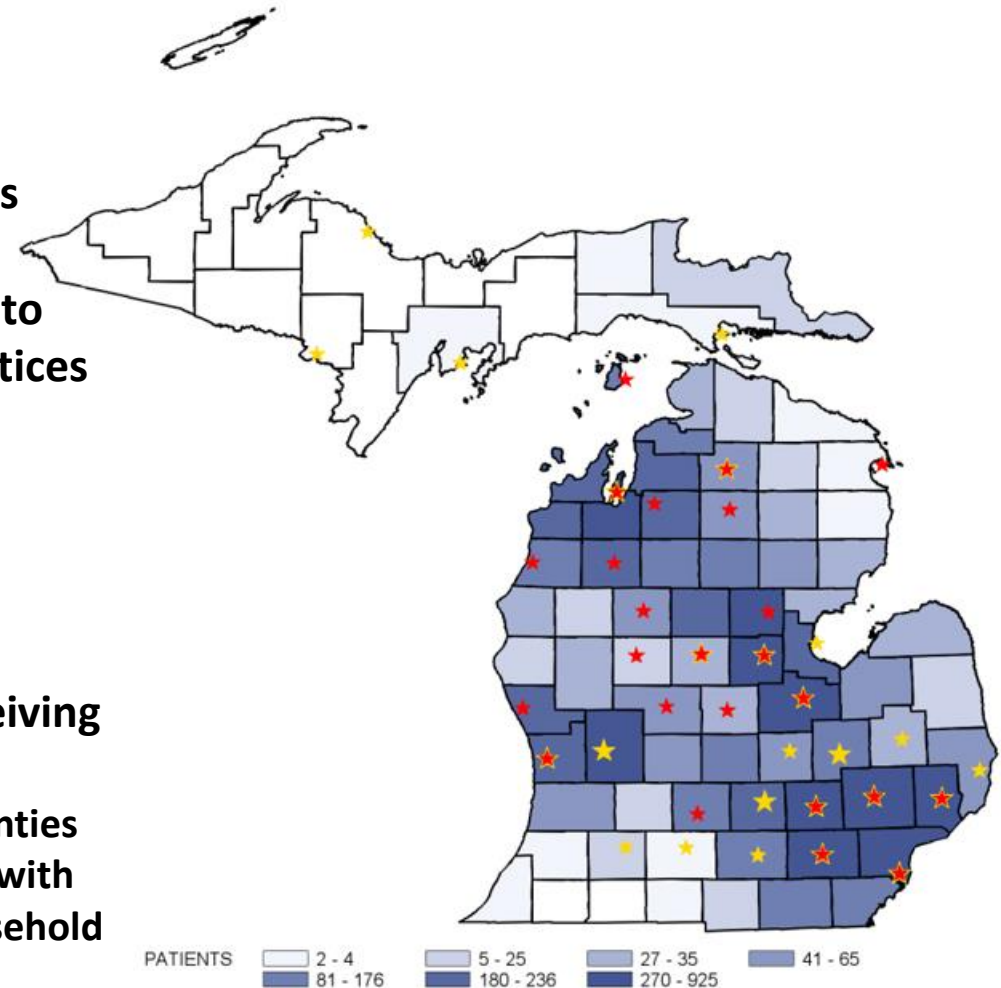
*POEM practice in county
*MOCQ practice in county

POEM Pharmacist Impact – Outcomes

- Decrease in unplanned healthcare utilization
  Hospitalizations* **41% vs 24%** ED Visits* **46% vs 28%**

- Improved dose intensity (correlates to improved survival)* **68% vs 42%**

- Improved adherence to guideline-concordant care* **63% vs 22%**

- Decreased time to start oral anticancer therapy* **4-day reduction**

- Earlier patient follow-up after starting oral anticancer therapy*
  8-day reduction

- More patients receive education prior to starting anticancer treatment*
  45% vs 88%

*Statistically significant improvement
compared to pre-POEM non-pharmacist care

POEM Pharmacist Impact – Satisfaction

98% of patients surveyed (n= 394) expressed agreement that their POEM pharmacist increased their knowledge and confidence in managing their cancer therapy and felt it was important to meet with the pharmacist.

Physician (n=40) overall satisfaction rate is 96%. Notably, they felt their patients received high value care with the pharmacist involved and that they felt the pharmacist enhanced their own knowledge and made their job easier.

POEM Pharmacist Impact – Satisfaction

The pharmacist was kind and knew everything we needed to know. We are always grateful for the hard truths. She covered those with professional grace. Thank you. – *Cancer Patient*

Clinical pharmacist is an excellent resource for me to find help to improve care. – *Oncologist*

More dedicated pharmacists. Replicate the model everywhere. – *Oncologist*

The pharmacist was fantastic! I seriously consider this time with her extremely helpful! – *Cancer Patient*

The pharmacist has made a huge impact on the quality and safety of oral chemotherapy in my patients. – *Oncologist*

The clinical pharmacist is doing a great job. I can't imagine caring for our patients without her help. – *Oncologist*

The pharmacist was very thorough and also very receptive to my many questions which is important to me. She also followed up on an additional question I emailed her a little later in the day. I feel the opportunity to speak with her was very helpful as I begin treatment with many possible side effects– *Cancer Patient*

POEM – Payer Perspective

Improved patient outcomes at lower cost ✓

Cost considerations

Total cost of care

Unplanned healthcare utilization costs ✓

Other opportunities

Closing gaps in care ✓

Demonstration projects or pilots

POEM – Practice Perspective

Improved patient outcomes with reimbursement to offset salary ✓

Reimbursement opportunities

Value based contracting ✓

Billing opportunities

Care management billing codes ✓

Provider workload metrics – safety ✓

Nonmonetary benefits

Safety ✓

Satisfaction ✓

Burnout reduction

Challenges

- Measures are not perfect – Keating, et al re: reliability and correlation of quality measures in oncology
- Quality improvement should ensure inclusion of equity data in order identify the greatest opportunities for improvement
- Opportunities for pharmacist reimbursement remain limited
- Analysis challenges
  - Data collection (balance of clinical care vs research)
  - Timing of comparator groups (pre- vs post-COVID, new drug approvals, etc)
  - Knowledge gaps – pre-intervention practice
  - Cost analysis is complex
  - Inconsistencies in clinical practice

Keating NL, et al. Evaluation of Reliability and Correlations of Quality Measures in Cancer Care. JAMA Netw Open. 2021;4(3):e212474

Getting Started

- Learn
- Assess the quality landscape where you are
- Get involved in inter-professional quality committees and organizations
- Engage patients AND address disparities
- Develop and assess clinical services with quality indicators in mind
- Include quality and value in the training curriculum for students and residents
- Share your successes and opportunities for improvement
- Collaborate
- Advocate

Acknowledgement – POEM Team

Questions

Contact: estunteb@umich.edu or emily@yesrx.org