Ohio | Department of Medicaid

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Jon Husted, Lt. Governor

Maureen Corcoran, Director

December 21, 2021

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Ohio Senate President, the Honorable Matt Huffman
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Steven A. Huffman, Senator
Mark Romanchuk, Senator
Cecil Thomas, Senator
Jada Brady, Joint Medicaid Oversight Committee Executive Director

RE: CICIP Report:

Dear Sirs and Madams:

Pursuant to Section 333.60 of Am. Sub. H.B. 110 please find attached a report detailing the efficacy, trends, outcomes, and number of agencies enrolled in the Care Innovation and Community Improvement Program (CICIP). This submission also includes an attachment specifying the total amount of supplemental payments made to the participating agencies (below).

Feel free to contact the Ohio Department of Medicaid through our legislative office with any questions or concerns regarding the information attached.

Sincerely,

Maureen M. Corcoran
Director

50 W. Town Street, Suite 400
Columbus, Ohio 43215
medicaid.ohio.gov

CICIP Amounts Paid to Providers

Managed Care (MC)

Time Period	Reported Base CICIP Payments	Incentive Pool	CICIP Total Payments - MC
July 2020 through Dec. 2020	$113,239,625	$13,324,481	$126,564,107
Jan. 2021 through June 2021	$128,025,131	N/A	$128,025,131
Total	$241,264,756	$13,324,481	$254,589,238

Fee-For-Service (FFS)

Time Period	CICIP Total Payments – FFS
July 2020 through Dec. 2020	$14,104,637
Jan. 2021 through June 2021	$21,462,719
Total	$35,567,356

Ohio | Department of Medicaid

Care Innovation and Community Improvement Program Year 2 Evaluation Report

September 2021

IPRO
Better healthcare, realized.

Corporate Headquarters
1979 Marcus Avenue
Lake Success, NY 11042-1072
(516) 326-7767
ipro.org

Table of Contents

Executive Summary 3
Evaluation Approach 7
Findings 8
- Use of Quality Improvement Science 8
- Use of Data 8
- Selection of Interventions 9
- Engagement 9
- Clear Application of CICIP Funds to Organizations' CICIP Priorities 10
- Response to the COVID-19 Pandemic 10

Collaboration 11
- Task Forces 11
- Collaboration Discussed During Site Visits 12
- Current Assessment of Hospital Systems' Collaboration 14

Site Visits 15
- MetroHealth 15
- Ohio State University Wexner Medical Center 17
- University of Cincinnati Health 19
- University of Toledo Medical Center/Physicians Practice 20

Discussion 23
Appendices 25
References 40

List of Tables

Table 1: Heatmap of Hospital Systems' Collaboration Progress Assessed as of July 2021 5
Table 2: Gaps in CICIP and Suggestions for Improvement 6
Table 3: Examples of Collaboration on Improvement Activities 11
Table 4: Heatmap of Hospital Systems' Collaboration Progress Assessed as of July 2021 14

Executive Summary

The Care Innovation and Community Improvement Program (CICIP) aims to drive innovation in health care for Medicaid beneficiaries. CICIP addresses gaps in care for: pregnant women and newborns; patients with an opioid use disorder; patients admitted to the emergency department (ED) or hospital for mental health care; and patients using the ED who can be treated in non-urgent settings. CICIP is a collaboration between the Ohio Department of Medicaid (ODM), the Centers for Medicare and Medicaid Services (CMS), and four participating Ohio hospital systems – University of Toledo Medical Center/Physicians Practice (UTMC), MetroHealth, University of Cincinnati Health (UC Health), and Ohio State University Wexner Medical Center (OSU). Funding is based on a fixed annual budget and hospitals may receive additional funds if all four meet collective quality targets which are defined in an agreement with ODM and CMS.[1]

ODM has contracted with IPRO, a quality improvement (QI) organization and Ohio's external quality review organization (EQRO), to evaluate CICIP. The evaluation examines:

- hospital systems' progress in designing, implementing, and continuously advancing initiatives to improve quality of care and health outcomes at their institutions for Medicaid beneficiaries;
- hospital systems' adoption of QI science (QIS) and data analysis strategies, inclusion of patients' perspectives, community partnerships, engaged leadership, and targeted use of funding for CICIP priorities; and
- collaboration among systems to leverage the expertise and initiatives of the four hospital systems.

This report summarizes findings from the 2nd year of the CICIP evaluation from August 2020 to July 2021. This executive summary describes: 1) the key findings from both individual hospital systems as well as for the collaboration between hospital systems; and 2) a section detailing gaps observed and suggested next steps to address them.

Key Findings

Individual Hospital Systems

Individually, the four hospital systems have made marked progress in the past year.

MetroHealth

MetroHealth continues to do strong, data-driven work informed by QIS. The value of their approach is particularly evident in their work focused on ED utilization care plans and opioid prescribing. Clinical leaders continue to form new partnerships across the MetroHealth system, such as with the substance use disorder (SUD) treatment linkage and resource referrals, and newly with patient family members and caregivers, such as in the Loved Ones Involved in Network of Care (LINC) Program. They continue to build on their opioid work by making pain management expertise available via e-consult, specialty referrals, and consultations with clinical pharmacists. MetroHealth has also worked with OSU and UTMC to help them adopt systems that can identify and intervene upon high prescribers of opioids.

IPRO suggests the MetroHealth team could do more to elicit and incorporate patient feedback into their work. While they have systemwide patient satisfaction surveys that are conducted on an ongoing basis, these tools are not tailored to assess changes specific to a given intervention and results cannot be stratified to focus on the CICIP population. Particularly given MetroHealth's focus on addressing social determinants of health, IPRO suggests that the team continue to build and expand upon community partnerships related to their CICIP work, in particular.

OSU

OSU continues to leverage their teams to facilitate data-driven quality improvement efforts addressing a wide range of clinical topics within each CICIP domain. One of OSU's key strengths is the engagement of clinical leadership in programmatic planning as well as in the design and implementation of interventions across all four domains. As a larger academic institution, they have also been able to leverage pre-existing resources and expertise to advance the goals of their CICIP work. In addition, OSU distinguishes themselves with respect to both the breadth and the depth of their interventions. In the healthy birth outcomes domain, they expanded the Substance Abuse, Treatment, Education and Prevention Program (STEPP) to include patient and family supports during the postpartum period and have incorporated a family-centered support component in which family members are engaged and provided with education regarding addiction, its treatment, and the recovery process; these changes were made in response to patient feedback. Through this program, they also identified and are addressing an additional need for treatment among patients with a substance

abuse disorder and hepatitis C. Lastly OSU continues to play an active role in the CICIP collaborative, in many cases, sharing existing OSU processes and programs with other hospital systems.

IPRO encourages OSU to incorporate patient feedback (both structured and unstructured) into more of their interventions. We also encourage them to expand upon the community partnerships currently in place and look for opportunities to form new ones as they implement new interventions.

UC Health

UC Health remains the strongest with respect to its application of QIS across domains and individual interventions. As IPRO noted in the previous evaluation, this does, in some cases, impede their progress towards implementation and many of the interventions discussed were still being tested. In the BH domain, staff is engaging patients while still on the inpatient unit to facilitate the process of connecting them to care once discharged. Plans to tailor the intervention based on patient feedback were reported at the visits in March and were still in process during our site visits in June. The team also recently met with UC Health's Community Relations Department to lay the groundwork for a partnership that will allow for a closed-loop system for conducting and tracking referrals to outpatient BH care. Additionally, the UC Health team is working to develop an online community to allow patients another platform for sharing their views about care received. The UC Health team continues to do strong work to reduce inappropriate ED utilization by leveraging data and QIS to create interventions to divert care to more appropriate care settings.

IPRO suggests that the UC Health team ensure active engagement of patients and clinical leadership in their QI efforts. Although the online community will no doubt yield useful information, there is the potential for significant bias in the information shared and population represented. The CICIP population may be disproportionately impacted by certain barriers to accessing the platform and sharing their feedback. Lastly, as we noted last year, we urge the UC Health team to ensure that the rigor with which they apply QIS does not compromise their ability to implement and expand interventions in a timely manner.

UTMC

UTMC has a diverse set of interventions that demonstrate ingenuity and a commitment to addressing the unique needs of their CICIP patient population. Team members are passionate about the CICIP work they are doing, and their interventions are well-supported by the literature. The pain rehabilitation program represents an interdisciplinary approach to treating patients with chronic pain, incorporating medical management, physical therapy, occupational therapy, counseling, and patient education. In the area of BH, the UTMC team continues to make modifications to their process for delivering telehealth in response to patient feedback as well as data regarding no-shows for appointments. UTMC is also working with MetroHealth as UTMC develops its opioid dashboard as well as their reports for high opioid prescribers and patients on concurrent opioids and benzodiazepines. The UTMC team has supported the other systems as they have worked to develop their own discharge/bridge clinics and have also demonstrated leadership in telehealth, particularly in the BH domain. While they do not have the breadth, or in some cases the depth, that the other systems demonstrate, we have seen notable progress, despite the COVID-19 pandemic and the myriad organizational and leadership changes the system has undergone. UTMC's size serves as both a strength and a barrier; it allows them to make changes more rapidly in situations where they have the resources to do so. Due to their small size and the population they serve, however, they also have substantially fewer resources to draw from.

IPRO suggests UTMC seek guidance from the other hospital systems regarding how to expand and spread interventions demonstrated to be effective. We also recognize that the utility of this approach will be somewhat limited given the disparity in the amount and nature of resources to which the other hospital systems have access.

Collaboration

The four hospitals made strides towards the vision of CICIP as a partnership and are working together to achieve significant improvements in care for Medicaid beneficiaries. Notable gains were made this year as the four systems accelerated sharing clinical and QI expertise; explored and adopted innovative practices from each other; and discussed common metrics and data sharing strategies that can enhance benchmarking across institutions. IPRO's findings with respect to the systems' current status related to each area of the D'Amour framework are shown in **Table 1.**

Table 1: Heatmap of Hospital Systems' Collaboration Progress Assessed as of July 2021

Indicators	Assessed Status	Explanation
Governance		
Centrality		Level 2: New, but not-yet-implemented organizational charts signal the coalition is working to restructure committees, roles, and effectiveness. Institutional leaders' responsibilities on CICIP committees have lacked clarity.
Leadership		Level 3: Hospitals share coalition leadership functions, such as developing the Quality Improvement Strategy, working on the preprint, chairing the Executive Committee (two-year rotations), and reorganizing.
Support for innovation		Level 2: Hospitals share information about innovative practices though joint projects are not underway (e.g., community health workers, telehealth). Innovations occur within domains without attention to parallel possibilities in other domains (e.g., opioid dashboarding).
Connectivity		Level 3: Hospitals engage with each other in multiple settings many times a month including at task force meetings, in one-on-one conversation, and at collaboration leadership meetings.
Formalization		
Formalization tools		Level 2: The Quality Improvement Strategy describes the coalition's shared vision. Additional data sharing agreements are needed.
Information exchange		Level 1: Some metrics have been identified, but there is no data sharing process or platform yet.
Shared goals and vision		
Goals		Level 3: Hospitals share the goal of leveraging CICIP funding and coalition expertise to improve care for Medicaid patients.
Patient-centered orientation vs. other allegiances		Level 3: Patient focus is a shared orientation and underpinning to their work. Hospitals differ in the extent to which that exceeds the institution's focus on metrics.
Group- versus individual-institution–centered		Level 2: Hospitals are accelerating their efforts to share best practices and provide support to systems at different places on an implementation spectrum. However, there is a very large opportunity for expansion.
Internalization		
Mutual acquaintanceship		Level 3: Frequent opportunities to meet in different configurations and learn from each other.
Trust		Level 3: Hospitals are sharing experiences with low levels of concern about institutional competition.

However, greater progress towards collaboration has been impeded by competing demands for hospital leadership attention, including the COVID-19 pandemic, resulting in the CICIP staff assuming primary responsibility for leading, driving, and managing institutional engagement. Further, the organizational structure did not provide many opportunities for sharing best practices and innovations across domains. Finally, hospitals faced institutional and regulatory barriers to data sharing.

Looking Forward

Table 2 describes some of the gaps IPRO identified in CICIP as well as the changes we recommend addressing them.

Table 2: Gaps in CICIP and Suggestions for Improvement

Gaps	Recommendations
The domains within and across hospitals remain, to some extent, siloed.	Lessons, resources, and tools should be shared between domains to support spread and sustainability. Develop a shared platform or dashboard with repository of interventions with a message-board on which hospital systems can pose questions to the group or call-out best practices.
Limited growth in community engagement and partnerships.	Consider cross-domain meetings to talk about certain program elements, including community engagement and partnerships, and include existing partners to gain insights from their experiences. Add community engagement to executive committee priorities.
Patient input is not being sought in the design or testing of interventions.	Formalize an approach to engaging patients in the QI process or seeking their input through interviews or surveys.
Hospital executives' engagement with CICIP is uneven across the four hospitals, resulting in some programs not having sponsorship needed to break down barriers and allocate resources.	Define roles for hospital executives in planning, convening, and allocating resources, and removing barriers to collaboration.
Engagement of clinical leadership is uneven across institutions and, within institutions, across domains.	Ensure all interventions have a designated clinical leader(s) to facilitate provider uptake and engagement and inform development and modification of provider-facing interventions.
Variation in team structure leads to variation in team effectiveness.	Establish guidance for the core roles and responsibilities necessary to support the activities of CICIP at each individual institution; ensure that all teams, at a minimum, have individuals with expertise in clinical care, healthcare administration, QI and implementation science, and data analysis and visualization.
Organizational goals and modifications are not yet tied to specific metrics.	Ensure there are process metrics associated with interventions at the organizational or collaborative level as well as clearly delineated, shared definitions of success.
Maturation of the program requires more shared innovations.	Look across domains and institutions for innovations that can be replicated and prioritize finding solutions to allow data sharing.
Reliance on claims data presents challenges in obtaining timely data that are useful for QI.	Consider leveraging alternative data sources to facilitate timely access to data.

CICIP: Care Innovation and Community Improvement Program; QI: quality improvement.

Evaluation Approach

In the second year of the CICIP evaluation, IPRO has continued to examine the progress CICIP hospitals are making in achieving program goals. Specifically, the evaluation has two foci:

- To assess the extent to which CICIP hospitals have planned and implemented changes in care that may have an impact on the Medicaid population and improve performance on the CICIP measures. Specifically, IPRO was looking for evidence of:
  - a culture of improvement incorporating QIS;
  - clear linkages between interventions and measurement;
  - evidence-based approaches to intervention selection and implementation;
  - internal and external partnerships;
  - inclusion of the patient perspective;
  - targeted use of funding and non-financial resources; and
  - leadership engagement.
- To assess the extent to which the hospitals have formed an active collaboration.[2] Specifically, IPRO was looking for evidence of hospital engagement that:
  - promotes sharing of best practices between sites;
  - shares data across systems related to one or more CICIP measures;
  - supports innovation; and
  - operates in a group structure that promotes collaboration.

The evaluation was conducted by a multidisciplinary team comprised of clinical and non-clinical experts in QI and implementation science, data analytics, and health care administration. The team employed qualitative research methodologies to collect evidence about individual hospital and collaborative CICIP activities using semi-annual site visits, quarterly reports, and observations at task force meetings. In 2021, semi-annual virtual site visits took place in the winter and summer, which included semi-structured interviews with each hospital s program office, clinical and non-clinical hospital leaders, and the clinical teams involved in the design and implementation of selected interventions. IPRO also attended task force meetings on a regular basis and interviewed the CICIP executive committee in spring 2021.

The rubric for assessing progress at each institution and across the collaborative was presented in the Year 2 Evaluation Plan, approved by ODM and provided to the CICIP hospitals in November 2020.

Findings

MetroHealth, OSU, UC Health, and UTMC each demonstrated an advanced knowledge of and commitment to CICIP in the second year of the evaluation. Hospital systems' understanding of ODM expectations has improved since the spring 2020 site visits. Recovering from much of the strain caused by the COVID-19 pandemic in 2020, the four systems were able to solidify many of the organization- and coalition-level logistics necessary for continued success in CICIP. IPRO observed significant progress in CICIP collaboration and program organization but identified room for improvement in the areas of data and data sharing, community engagement, and patient engagement across all the systems.

During 2021 site visit interviews, IPRO found greater use of QIS, progress in implementing and monitoring interventions, exchange of tools and strategies among hospitals, and accountability for resources compared to the previous year. Interventions to improve clinical outcomes advanced and some interventions achieved measurable outcomes. The coalitions demonstrated significant progress in their collaboration practices. Task forces and subcommittees have been established and sharing between systems is routinized and normalized. The systems demonstrated a lack of progress in increasing and strengthening their community partnerships and patient engagement. Most systems had no new partnerships to report since the first set of site visits conducted in 2020, nor had they made meaningful progress in incorporating patient feedback into interventions. The systems also faced barriers in building their data capacity.

Use of Quality Improvement Science

- The four systems have increasingly incorporated quality improvement science (QIS) into their interventions and overall CICIP activities.
    - This has been achieved by hiring personnel with quality expertise, linking QIS with CICIP funding applications, enhancing tests of change processes, and embedding PDSAs, key driver diagrams (KDDs), run diagrams, etc., within their CICIP work.
    - There has been a notable increase in incorporation of QIS in activities at both the site level as well as across the collaborative. In some cases, however, we continue to observe that use of QIS is impeding some systems' progress in implementing and expanding interventions.

The four systems were uneven in their levels of progress with QIS. Overall, systems advanced their use of QIS in their CICIP domains, but to varying effect. Some systems demonstrated success including mandatory PDSAs in their application for any CICIP funding; this dictated the inclusion of QI and data analytics in interventions from an early stage. Other systems have significantly grown their data analytics teams while others are yet to establish a data or QI position in their program office. Each system used the recommendations from the year-1 evaluation to their benefit and expanded their use of QIS contingent of their own resources. IPRO did note that the systems with more actively engaged clinical leadership were better able to perform meaningful QI stemming from their patient care interventions.

Use of Data

- The hospitals demonstrated much greater use of data pertaining to all four CICIP domains this year. Existing hospital information systems were used to extract targeted information and process measures were selected for most interventions, including those that had not yet been implemented.
- The ED utilization and opioid prescribing domains were the areas where IPRO saw the most widespread use of data to track and inform modifications to interventions.

Overall, each of the systems showed some progress in their data utilization. All four systems are using at least one CICIP-related dashboard and have made advances in correlating quality metrics to their interventions. Each system also reported that they are still working on strengthening their data and analytics teams. OSU and others reported some challenges related to data sharing across systems but are optimistic the newly formed data governance workgroup will enable them to collaborate even more. Having three out of the four hospital systems in Epic® facilitates the exchange of CICIP processes and interventions across these systems.

Important elements of the systems' data capabilities remain limited. Many of the sites are still unable to collect measurable CICIP- or domain-specific data. In some cases, systems may not have access to or may not be utilizing data tools and resources, while in other cases data collection is not facilitated in interventions. Increased data collection and

analysis would provide hospitals with increased capacity to strengthen interventions, look across domains, and collaborate with other systems.

Selection of Interventions

- The four systems have successfully implemented new and expanded existing interventions in each of the four domains.
    - Many of the systems' interventions are evidence-based and are re-evaluated using PDSAs and KDDs. There is, however, some variability with respect to the rigor with which QIS is being applied across both systems and domains.
    - Additionally, MetroHealth's sickle cell care plans, which they created based on OSU's model, emerged from gaps in care which were identified through their QI work on the Red Carpet Care Program. The capacity to collect and track data significantly contributed to the sustainability of systems' interventions.
    - Interventions appear to have varying levels of sustainability. IPRO observed that interventions in the ED particularly, were being reviewed and refined based on targeted analyses of EMR data.
    - Barriers to effective and sustainable interventions include not being able to identify and target Medicaid patients, retrofitting CICIP onto existing QI or innovation projects, and the COVID-19 pandemic impacts, including diversion of resources and changes in practice patterns, among others.

The interventions that systems reported on, appeared to be, at least in part, informed by health equity. By addressing the healthcare needs of their Medicaid patients specifically, systems developed interventions which include consideration of social determinants of health (SDoH), mental health, and a range of other psychosocial factors. This was less successful when systems were unable to link interventions with the Medicaid patient population directly. Reasons for this barrier varied; some systems do not have the resources to track their Medicaid population, while there are some interventions that came out of existing QI projects without a specific Medicaid focus.

Engagement

Patient

- Systems showed little evidence of formal patient involvement in intervention development or modification. IPRO identified few, if any, interventions that engaged patients or patient feedback at an early stage.
    - In specific cases, project leaders integrated patient surveys or informal feedback into intervention development, but this did not appear to be widespread.
- Hospitals cited ongoing, systemwide patient satisfaction surveys as a means of obtaining patient feedback, however, these tools are not tailored to assess changes specific to a given intervention or to assess satisfaction among the CICIP population, specifically.

Provider

- The systems demonstrated varying levels of provider engagement. It was evident that in some cases, such as in the naloxone prescribing alerts at MetroHealth, provider feedback was elicited and used to inform changes to the intervention.
- Interventions and clinical areas with evidence of substantial clinical leadership engagement, generally appeared to be more successful.

Leadership

- All four systems formalized some level of leadership engagement via executive and steering committees, as well as expanded reporting structures.
- IPRO observed progress in the mobilization of leadership at all four hospitals with some advancing more than others. For example, MetroHealth and OSU both established executive-level CICIP committees, UTMC strengthened ties between the physician group and medical center, and UC Health formalized their leadership process for reporting and accountability.

Community

- All four hospital systems reported that the COVID-19 pandemic slowed advancement of their community partnerships and patient engagement. At both sets of site visits in 2021, it appeared little progress had been made since site visits conducted in 2020, with occasional exceptions such as OSU's Mid-Ohio Farmacy Program.
- Although all four systems identified partnerships or planned partnerships with community organizations, few included clearly established workflows or closed loop systems for tracking referrals or receipt of services.

The COVID-19 pandemic was a significant barrier to expanding engagement of patients, providers, hospital leadership, and the community. Patient and community engagement appeared to be most hampered by changes in practice patterns as well as the operations of many of their planned and existing community partners.

Clear Application of CICIP Funds to Organizations' CICIP Priorities

- The systems have shown some advancement in their application of CICIP funds specifically to CICIP priorities.
- Systems with successful application have formalized their funding applications, their reporting structures, and their emphasis on QIS in intervention development.
- Barriers to appropriately applying funds to CICIP priorities include an inability to truly track revenue once it has been distributed, as well as limited leadership oversight.

All four sites have demonstrated progress in their mechanisms for tracking and reporting CICIP revenue. In accordance with strengthening their leadership involvement, formalized committees and meeting schedules have also helped the systems enhance their funding processes. OSU has shared their funding applications and other fiscal planning tools with all systems in task force meetings, and other systems have adopted these processes and applications to advance their own CICIP revenue tracking. Some systems have executive oversight for their funding, while another directs a portion of CICIP funds to provider grants. Challenges remain for systems that are not targeting their funding specifically at interventions and domains. In addition to increasing accountability, intervention-based funding allows a system's CICIP to also assign QIS or patient feedback requirements to their reporting activities.

Response to the COVID-19 Pandemic

Of the many ways in which the COVID-19 pandemic affected the CICIP systems, IPRO found that the four most detrimental to the program were:

- the shift in responsibilities of clinical personnel involved in CICIP interventions to meet the surge in demand for specialized care;
- fewer non-COVID-19 patient-health system interactions, reducing the opportunities to test process redesigns;
- reductions in in-person meetings with and between departments reducing opportunities to promote new programs (as well as overall CICIP); and
- reduced attention of senior leaders whose directives could have accelerated CICIP work.

Collaboration

In the past year, the four hospitals have made substantial progress in functioning as a collaborative. The CICIP Executive Committee developed new organizational charts and subcommittee charters to clarify roles and expand the forum for collaboration. They formed a data governance committee to address information-sharing across systems. CICIP hospitals have accelerated sharing clinical and QI expertise. They have explored and adopted innovative practices from each other and discussed common metrics and data sharing strategies that can enhance benchmarking across institutions. The CICIP Executive Committee chair is about to transfer from MetroHealth to UC Health as is planned for every 2 years.

During site visits, all four systems reported meaningful advancement because of the coalition collaboration and experienced significant benefits and actionable lessons resulting from task force meetings. Task force meetings displayed formalized and routinized domain-based meetings, detailed presentations on specific interventions, and ongoing and cooperative communication between systems.

The limitations of collaboration and task forces primarily resulted from the challenges of data sharing between systems. Progress was also impeded by competing demands for hospital leadership attention, including the COVID-19 pandemic, resulting in the CICIP staff assuming primary responsibility for leading, driving, and managing institutional engagement. We also observed an emphasis on innovations specific to each domain without sufficient cross-domain learning.

It was evident that project managers are integral to the program's success. They are adept at describing their organization's activities. They attend all meetings to create ties between committees and task forces. It appeared the more senior leaders we met with were less informed and primarily rely on project management staff and Sellers Dorsey to facilitate connections and information sharing between systems.

Task Forces

IPRO attended task force meetings over the past 6 months to observe and assess collaboration. The IPRO team kept a log of issues discussed, participants, institutions, and type of engagement (e.g., presenting innovations; discussing data, measurement, or metrics; and comparing approaches to similar challenges).

The most frequently occurring type of meeting was one where a single institution presented a project and the other three engaged with them in discussion. All four institutions presented frequently. Participants made plans for follow-up discussions outside of the task force meeting and sometimes planned to attend events at other CICIP hospitals. **Table 3** provides examples of specific collaborations discussed during site visit interviews and task force meetings.

Table 3: Examples of Collaboration on Improvement Activities

Example	Description	Domain	Metro-Health	OSU	UC Health	UTMC
Developing shared process metrics	Process metric definition documents drafted by each task force	All	X	X	X	X
Program to connect patients with SDoH services	MetroHealth spoke to group about UniteUs SDoH service, and all systems are planning to introduce the service at their institutions.	All	X	X	X	X
Notification for messages in-basket	OSU adopted UC Health's notification system, which alerts providers to messages received and items requiring attention in Epic.	All	-	X	X	-
System for allocating and tracking CICIP funds	The other three hospital systems adopted more rigorous approaches to tracking and allocating CICIP funding like the approach taken by OSU.	All	X	X	X	X
Bridge/Discharge clinic	UTMC developed a bridge clinic using the STEDI model to facilitate transition from inpatient to outpatient setting. They shared their model	Behavioral health	X	X	X	X

Example	Description	Domain	Metro-Health	OSU	UC Health	UTMC
	with the other health systems which have all adopted elements of their approach, including branding the clinic as a bridge rather than discharge clinic, having interdisciplinary staff, and leveraging telemedicine.					
Early identification of pregnancy program	UC Health communicated with OSU regarding potential development of a similar program. MetroHealth also worked with UC Health to provide information about their Patient Navigator Program for early identification of pregnant patients and enhancing access to timely prenatal care initiative.	Birth outcomes	X	X	X	-
Complex care planning	OSU had developed interdisciplinary care plans to direct and coordinate care for frequent ED utilizers. MetroHealth is working to integrate this type of care plan into the Red Carpet Care program.	ED utilization	X	X	-	-
Food prescription program	UTMC is working with OSU to introduce food prescription organization into their system after learning about the Farmacy Program from OSU.	ED utilization	-	X	-	X
Sickle cell clinic	OSU presented to the ED Task Force regarding their sickle cell clinic. MetroHealth has decided to create their own sickle cell clinic and OSU has been sharing best practices and lessons learned.	Opioid prescribing /ED utilization	X	X	-	-
Controlled substance peer review	MetroHealth presented their Controlled Substance Peer Review (CSPR) Committee design to the Opioid Task Force and is now working with UC Health as they investigate adopting a similar program.	Opioid prescribing	X	-	X	-
Opioid dashboards and reports	MetroHealth has been helping UTMC as the UTMC team works to develop dashboards and reports focused on opioid prescribing.	Opioid prescribing	X	-	-	X
Enhanced surgery recovery protocols	OSU worked with UTMC to help them implement enhanced protocols to improve pain-related prescribing.	Opioid prescribing	-	X	-	X

OSU: Ohio State University Wexner Medical Center; UC Health: University of Cincinnati Health; UTMC: University of Toledo Medical Center/ Physicians Practice; SDoH: social determinants of health; CICIP: Care Innovation and Community Improvement Program; STEDI: stabilization, treatment, evaluation, and disposition; ED: emergency department;
X: discussed during site visit interviews and task force meetings, hyphen (-): not discussed during site visit interviews and task force meetings.

Collaboration Discussed During Site Visits

- Interviewees from UTMC reported that the collaboration with other CICIP hospitals has been tremendously helpful for UTMC, because they are a smaller system. Although they lead the Behavioral Health Task Force, other hospitals have helped improve the model UTMC developed for transitional care clinics. In addition, UTMC benefits from the new, cross-system data meetings and QI meetings. According to interviewees, learning from other hospitals' experiences helped them to proactively identify and address potential pitfalls and adopt best practices, resulting in the avoidance of time-consuming tests of change.
- UC Health reports that, over the past year, CICIP project leaders across the four systems developed an excellent working relationship. UC Health both offered and received valuable operational insights from other systems. UC

Health described their processes for rapid access to BH and how, through coalition meetings, they discuss barriers and billing codes. They have a robust program to begin medication for opioid use disorder (MOUD) treatment in the ED that they have shared with the other systems. UC Health is sharing insights with OSU about their patient navigator experience in obstetrics. MetroHealth presented to UC Health its provider peer review process for opioid prescribing.

- UC Health reported they enhanced their formal CICIP funds request process with insights from the process employed by OSU.
- MetroHealth believes they have benefitted from participating in task force meetings by both hearing new ideas and receiving feedback when they present their own initiatives. MetroHealth's Controlled Substance Peer Review (CSPR) Committee design was showcased at the Opioid Task Force meeting; UC Health expressed interest in this type of committee and is in the discovery phase of adoption. MetroHealth collaborated with OSU on ED utilization, learning from their Sickle Cell Clinic, and developing and deploying care plans. Related to BH, MetroHealth learned about the UTMC stabilization, treatment, evaluation, and disposition (STEDI) clinic model, which serves as a transitional clinic for timely follow-up until BH patients have established a medical home, and then redesigned their discharge clinic to incorporate features of UTMC's STEDI components, such as social worker and clinical pharmacist roles. All four systems are collaborating to develop process measures for selected, pertinent CICIP measures.
- MetroHealth found the examples of other hospitals' strategic processes valuable and has begun examining those they could adopt to support their work. For example, MetroHealth is creating a dashboard like the one employed by the OSU Wexner Medical Center (OSUWMC) to increase tracking of process measures that will drive improvement and target resources. In addition, they have added more QI expertise and data capacity to their teams. MetroHealth is also looking at OSUWMC's review process for allocating CICIP funds as a guide to create a similar process at MetroHealth.
- OSU is working with other CICIP systems on an opioid use disorder (OUD) screening project to determine appropriate and specific care processes that can be shared. The four sites are engaged in detailed conversations to understand each other's differences and opportunities for alignment. They noted that differences may be appropriate, but this level of review allows them to ask themselves whether different choices in their system make better sense. In addition, OSU is leading the creation of a coalition data governance subcommittee and developing a validation tool for the ODM data that each system can use.
- Some of the programmatic ideas being shared between systems include OSU's high utilizer dashboard for identifying patients who need complex care plans, the use of patient navigators for timely prenatal care, and replication of the Farmacy program in other parts of Ohio. OSUWMC noted that they received valuable information from the other systems, such as UC Health's automated Epic "in-basket" notification, and MetroHealth's collaboration with UniteUs, and their Patient Navigator Program patient outreach process for early identification of pregnant patients and enhancing access to timely prenatal care initiative.

Current Assessment of Hospital Systems' Collaboration

IPRO applied the collaboration rubric[3] adopted for this project based on hospital system interviews, progress reports and supporting documents, and CICIP executive committee and task force meetings. **Table 4** summarizes the CICIP Coalition's progress since the evaluation began 20 months ago based on the rubric. The status is given as one of three tiers: level 1 (red) means potential or latent collaboration; level 2 (yellow) indicated steps taken to collaborate; and level 3 (green) means widespread, active collaboration.

IPRO recommends:

- as the Executive Committee implements upcoming changes, define roles for hospital executives in planning, convening, allocating resources, and removing barriers to collaboration;
- support innovation by looking across domains and institutions for innovations that can be replicated; and
- prioritize finding solutions to allow data sharing.

Table 4: Heatmap of Hospital Systems' Collaboration Progress Assessed as of July 2021

Indicators	Assessed Status	Explanation
Governance		
Centrality		Level 2: New, but not-yet-implemented organizational charts signal the coalition is working to restructure committees, roles, and effectiveness. Institutional leaders' responsibilities on CICIP committees have lacked clarity.
Leadership		Level 3: Hospitals share coalition leadership functions, such as developing the Quality Improvement Strategy, working on the preprint, chairing the Executive Committee (two-year rotations), and reorganizing.
Support for innovation		Level 2: Hospitals share information about innovative practices though joint projects are not underway (e.g., community health workers, telehealth). Innovations occur within domains without attention to parallel possibilities in other domains (e.g., opioid dashboarding).
Connectivity		Level 3: Hospitals engage with each other in multiple settings many times a month including at task force meetings, in one-on-one conversation, and at collaboration leadership meetings.
Formalization		
Formalization tools		Level 2: The Quality Improvement Strategy describes the coalition's shared vision. Additional data sharing agreements are needed.
Information exchange		Level 1: Some metrics have been identified, but there is no data sharing process or platform yet.
Shared goals and vision		
Goals		Level 3: Hospitals share the goal of leveraging CICIP funding and coalition expertise to improve care for Medicaid patients.
Patient-centered orientation vs. other allegiances		Level 3: Patient focus is a shared orientation and underpinning to their work. Hospitals differ in the extent to which that exceeds the institution's focus on metrics.
Group- versus individual-institution–centered		Level 2: Hospitals are accelerating their efforts to share best practices and provide support to systems at different places on an implementation spectrum. However, there is a very large opportunity for expansion.
Internalization		
Mutual acquaintanceship		Level 3: Frequent opportunities to meet in different configurations and learn from each other.
Trust		Level 3: Hospitals are sharing experiences with low levels of concern about institutional competition.

Site Visits

MetroHealth

Program Overview

Leadership Engagement

MetroHealth's CICIP activities continue to expand and demonstrate success in multiple domains. Led by Chief Clinical Officer Dr. Bernard Boulanger and with Program Manager Katie Cucullu, MetroHealth's CICIP team benefits from leadership support and oversight. Building from last year's evaluation MetroHealth's CICIP strategy transitioned from running quality initiatives that improve CICIP metrics to establishing a strategic process that emphasizes broad changes to meet the healthcare and non-healthcare needs of their Medicaid population. The CICIP team's goal was to "sew CICIP together" to unify interventions and thereby more cohesively support their patients. In 2021, MetroHealth instituted performance models that strategically direct resources toward MetroHealth and ODM's shared agenda. They have utilized the Y1 evaluation as an instrument to garner support for the changes.

With those changes in mind, MetroHealth has established a CICIP Executive Committee, which includes the CEO and other executive leaders who meet quarterly to review CICIP work. The committee's charter is to provide oversight and ensure the system's CICIP work is continually aligned with the overall program goals, the coalition's Quality Improvement Strategy, and MetroHealth's strategic goals. The committee addresses barriers faced by the program office and creates a formal structure around the MetroHealth team's analytics and reporting processes. Dr. Boulanger also discussed the inclusion of CICIP in MetroHealth's annual systemwide goals in 2022. The precise goals for the program have not yet been determined.

MetroHealth centralizes monitoring and communication regarding CICIP initiatives in the CICIP office. The CICIP team reported they are working to expand communication between departments and CICIP task forces.

Funding

MetroHealth's CICIP Executive Committee makes all final decisions about use of CICIP revenue. Transitioning CICIP financial oversight to the executive level has allowed MetroHealth to establish a regular reporting cycle, more formalized guidelines for funding, and better alignment with overall CICIP strategy. Similarly, the CICIP team indicated that having a fiscal strategy at a system level is an important element of CICIP administration and program sustainability.

CICIP revenue supports more than 20 initiatives aimed at improving care for the Medicaid population by developing or expanding healthcare delivery strategies, reducing barriers to care, addressing social and non-medical determinants of health, and better understanding the needs of the Medicaid population and their healthcare trajectories. Forty-three (43) physicians and staff members are supported, at least in part, by CICIP funds and 22 others are involved in CICIP activities but are not CICIP-funded. Other large non-personnel expenditures include Thrive Peer Services, the Office of Opioid Safety operating expenses, and contracts with Lyft® and Ohio podcast company, Evergreen Podcasts.

Quality Improvement

As reported in the Year-1 Evaluation Report, MetroHealth already had a strong QI staff. Interviewees reported there was widespread knowledge of QI; however, not everyone on the CICIP projects used the same QI tools and vernacular. Since that report, MetroHealth allocated additional QI resources (i.e., training, technology, staff) to each CICIP intervention to facilitate teams' use of essential elements of QI theory and tools. CICIP intervention teams now comprise a QI specialist, project manager, and front-line clinicians and staff. Dr. Joan Papp, medical director in the Office of Opioid Safety, is another valuable QI resource for CICIP. Dr. Papp recently completed the Institute for Healthcare Improvement (IHI) basic certificate in quality and safety and began working with the CICIP intervention teams to integrate additional QI principles into their work.

MetroHealth now complements their outcome measures with process measures, which are more useful in guiding improvements and engaging internal stakeholders. For example, clinicians who prescribe controlled substances are given report cards comparing their prescribing patterns to those of their peers. Report card data are pulled from Epic and the statewide opioids prescribing database, Ohio Automated Rx Reporting System (OARRS). MetroHealth reports

that 90% of primary care doctors receive report cards. Additionally, the MetroHealth team is using utilization data in addition to process metrics to modify their approach to identifying and intervening upon high ED utilizers. Based on data that demonstrated that the efforts of their Red Carpet Care and Complex Care planning program were limited with patients demonstrating highest levels of ED utilization, they modified their approach to focus on rising high utilizers.

Finally, CICIP team members reported that they want MetroHealth to become a continuously learning, evidence-based organization, where change is the norm and it is acceptable not to have all the answers. They see CICIP as a vehicle for introducing these concepts. For example, as they communicate internally about CICIP being about improving population health rather than achieving CICIP measures, there will have to be some reallocation of funds. The team hopes the institutional metrics resulting from implementing CICIP measures demonstrate MetroHealth is doing an even better job of addressing the Medicaid population's needs than is evident from the CICIP metrics alone.

Data

Currently, MetroHealth is limited in their capacity to identify and refine necessary data. They maintain active opioid and ED dashboards, but still share BH data manually. Catalyzed in part by monthly data sharing meetings and task forces, they have been able to build tracking for process metrics benchmarking. MetroHealth's CICIP principle, Kinsey Joliff, and Ms. Cucullu explained that they want to ensure their data are digestible and that there are action items tied to data they collect. With that goal in mind, the CICIP team shared their plan for building their data team and a new CICIP-funded analytics expert role. The Executive Committee approval will be instrumental.

Collaboration

MetroHealth reports benefiting greatly from collaboration with the other CICIP systems. They have accomplished much more in a shorter amount of time by using information shared by the other systems. MetroHealth project managers presented their progress on ED interventions, their discharge clinic, and the hub model to the other systems in task force meetings. They drew from OSU's experience regarding how to better organize their leadership structures around CICIP. Ms. Cucullu characterized the progression of the CICIP coalition in the past 2 years as moving from sharing information to relationship building, and ultimately to "raw transparency." The collaboration allows them to leverage each system's strengths for best practices.

Patient Engagement

Building from their CICIP work in the last year, MetroHealth received a one-million-dollar grant for digital connectivity in the community. This follows recent data indicating internet access as a major healthcare barrier for patients in the communities MetroHealth serves. MetroHealth anticipates digital connectivity to improve patient engagement.

The MetroHealth CICIP team reported that patient feedback is a primary driver of programs like LINC and Thrive Peer Support. MetroHealth did not share any new efforts to engage patients in interventions and/or the development of new interventions.

Community Partnerships

MetroHealth's community engagement strategy is to strengthen the key partnerships with Project H.O.P.E and UniteUs. Project H.O.P.E. provides MetroHealth patients with extensive health-related resources and referrals to other community organizations. UniteUs places community health workers throughout the hospital to connect patients with services. Recently, 128 organizations are serving northeast Ohio (mostly Cuyahoga County) have joined the UniteUs Ohio network, adding to an already robust system of community referrals. The MetroHealth CICIP team discussed that a commitment to identifying and addressing issues related to SDoH is fundamental to the way they approach care at a system-level. The infrastructure which documents and facilitates these efforts is embedded into their EMR and all their CICIP work.

Strengths and Opportunities for Year 3

MetroHealth continues to do strong, data-driven work informed by QIS, though data expertise in the program office is thinner than at other hospitals. MetroHealth's data-driven approach is particularly evident in their work focused on ED utilization and opioid prescribing. Clinical leaders continue to leverage new partnerships across the MetroHealth system, such as with the SUD treatment linkage and resource referrals, and newly with patient family members and caregivers, such as in the LINC program. They continue to build on their opioid work by making pain management expertise available via e-consult, specialty referrals, and consultations with clinical pharmacists. In the healthy birth outcomes

domain, they are partnering with community organizations to provide resources to patients from the moment that a positive pregnancy test is documented and are also leveraging UC Health's experience with the Baby Scripts program to facilitate their implementation process.

MetroHealth continues to play a key role in the collaborative. Dr. Bernard Boulanger, Executive Vice President and Chief Clinical Officer for MetroHealth, has led the CICIP executive committee for the past 2 years. MetroHealth has worked with OSU and UTMC to help them adopt systems for identifying and intervening upon high prescribers of opioids. Additionally, they have also worked collaboratively with OSU to expand their Red Carpet Care Program to include complex care plans similar to those initially developed at OSU. Through their One Path podcast, MetroHealth is making lessons learned from their CICIP work available to a larger audience beyond the CICIP team.

IPRO suggests the MetroHealth team could do more to elicit and incorporate patient feedback in their work. While they have systemwide patient satisfaction surveys that are conducted on an ongoing basis, these tools are not tailored to assess changes specific to a given intervention and results cannot be stratified to focus on the CICIP population exclusively.

Ohio State University Wexner Medical Center

Program Overview

Leadership Engagement

The OSU CICIP leader, Dr. Andrew Thomas, and the project team, Melissa Unger and Bill Hayes, have made progress in achieving organizational CICIP goals in the past year. They are turning to "CICIP 2.0" to bring heightened attention to both the sustainability of the program and OSU's capacity for continued collaboration as a leader in the coalition. The OSU CICIP team also believes that as they continue to improve and expand their CICIP interventions for their Medicaid patient population, attending to CICIP's objectives and overall vision will benefit all their patients.

On July 1, OSU welcomed a new chief operations officer and a new chief nursing executive, who are expected to engage with CICIP. The CICIP team reported that senior leadership at OSU is regularly updated on CICIP activities. In addition to OSU's existing clinical and population health steering committees, a CICIP Steering Committee was established to provide oversight and engage leaders.

The OSU team reports that they continue to work on centralizing the CICIP project within OSU; they want to ensure the program is well-known within the system and that clinicians and staff continue to be engaged.

Funding

OSU's fiscal planning and strategy are central to their CICIP work. Since the onset of CICIP, OSU has built an organizational structure to ensure tracking and accountability for their CICIP Revenue. The CICIP program office continues to use their formalized funding application process to maintain oversight for CICIP interventions. At the time of the site visit, OSU had 34 approved intervention projects funded by CICIP and 15 under review. OSU has shared their funding model with the coalition in task force meetings.

Personnel make up the largest portion of OSU's CICIP spending. To date, 230 roles are fully or partly funded by CICIP. However, because of delays and challenges resulting from the COVID-19 pandemic, 63 of these positions remain unfilled. Fifty-one individuals provide a portion of their time to CICIP-related work without drawing CICIP funds. Most of these personnel participate in CICIP coalition or OSU workgroups. Non-personnel funds are used for various components of OSU's interventions, including food for the Farmacy Program, maintenance and operation of the community care coach, modifications needed to provide effective space for expanded or new programs, peer support research, transportation subsidies, clinical equipment, software, and other administrative supplies.

Quality Improvement

OSU's funding application process has been the primary tool by which the CICIP program office ensures that all interventions use QI processes and tools. In the last 10 months, the program office has used QIS and processes to place greater emphasis on documenting care gaps and links between the goals, measures, and outcomes. Funding applicants

must develop an aims statement and a KDD, identify process measures, and plan their data use strategy. In quarterly progress reports, intervention teams describe their work and demonstrate ongoing alignment of the interventions, data, tools, and resources. In 2021, OSU gained new institutional leadership for data and research, which benefits CICIP. The institution's new chief research information officer reviewed the CICIP domains and is able to share data resources and quantitative expertise as needed. The new chief analytics officer is embedding additional analysts across the institution, including assigning some to CICIP projects and the CICIP program office.

Data

While OSU does not have a centralized site for all CICIP-related data and information, they have continued to grow their data capabilities and have developed dashboards in each domain. They are currently working on data ingestion and strategies for data utilization in the Epic Caboodle® program. OSU reported some challenges relating to data sharing across systems, but are optimistic the newly formed Data Governance Workgroup will enable them to collaborate even more. Having three out of the four hospital systems in Epic facilitates the exchange of CICIP processes and interventions across these systems.

Collaboration

OSU continues to be a leader of collaboration in the CICIP coalition. In addition to sharing their funding model, OSU presented their Emergency Department Multi-Visit Patient Complex Care Plan and Systemwide Medication-Assisted Treatment for Opioid Use Disorder Program in task force meetings. At least one of the other systems has been able to lift workflows and EMR templates directly from OSU for their own interventions. Even though OSU is often further along in development of interventions than some of the other systems, they value the collaboration. They have taken lessons from other systems' healthy birth outcomes projects and gained invaluable insight on what will and will not work for their own patient populations.

Patient Engagement

OSU leveraged patient engagement in a few CICIP domains. Most notably, before establishing STEPP, a group counseling program for mothers, the obstetrics team, led by Dr. Rood, began their project by surveying patients to identify patient needs and priorities. OSU has a strong peer support group for addiction and recovery through Thrive and is currently attempting to engage new patient populations through an at-home colon cancer screening project. OSU's other examples of patient engagement focused on their patient-centered interventions and programs.

Community Partnerships

While community organizations like Thrive and Partners Achieving Community Transformation (PACT) are involved in some CICIP interventions, new community partnerships appeared minimal. The CICIP team stated that when there are community-based projects, community partners are included in steering committee meetings and involved in the development of programs or interventions. As discussed below, OSU also maintains a strong partnership with the Mid-Ohio Food Collective as the Farmacy Program expands.

Strengths and Opportunities for Year 3

OSU continues to leverage their teams to facilitate data-driven QI efforts addressing a wide range of clinical topics within each CICIP domain. One of OSU's key strengths is the engagement of clinical leadership in programmatic planning as well as in the design and implementation of interventions across all four domains. As a larger academic institution, they have also been able to leverage pre-existing resources, including expertise, to advance the goals of their CICIP work. The role of CICIP funding in supporting innovative solutions has been promoted throughout the organization and solidified through use of a multi-step review process for funding applications (described in more detail in the 2020 Annual Report). Their QI efforts are supported and enhanced by a robust data infrastructure which they leverage to drive both selection of new interventions as well as enhancements of existing interventions. In addition, OSU distinguishes themselves with respect to both the breadth and the depth of their interventions. In the healthy birth outcomes domain, they expanded STEPP to include patient and family supports during the postpartum period and have incorporated a family-centered support component in which family members are engaged and provided with education regarding addiction, its treatment, and the recovery process; these changes were made in response to patient feedback. Through this program, they also identified and are addressing an additional need for treatment among patients with SUD and hepatitis C. The OSU team also used data relating to prescribing practices to inform the expansion of their TOFAS program. OSU continues to do strong work to address SDoH (complex care plans, STEPP, McCampbell Fourth Trimester Project

[planned]). Lastly, OSU continues to play an active role in the CICIP collaborative, in many cases, sharing existing OSU processes and programs with other hospital systems.

With respect to opportunities in the upcoming year, IPRO encourages OSU to incorporate patient feedback (both structured and unstructured) into more of their interventions. We also encourage them to expand upon the community partnerships currently in place and look for opportunities to form new ones as they implement new interventions.

University of Cincinnati Health

Program Overview

Leadership Engagement

UC Health's CICIP project office continues to be led by Dr. Evie Alessandrini, chief medical officer and executive vice president, with support from Program Manager Livia Sabato and Program Principal Lindsey Cencula. UC Health has begun holding quarterly meetings led by clinical leaders of CICIP interventions and including more senior leadership and department vice chairs than in the past. Project leaders report on CICIP processes, successes, and barriers. Senior leaders formalize resource commitments to the work. Ms. Cencula reported that although CICIP is located primarily in the Population Health Department, the CICIP team is continually working to better align their resources and more fully integrate CICIP with other UC Health activities. This year, CICIP's success was added to the enterprise strategy goals, helping to establish CICIP as a priority throughout the system.

Funding

UC Health allocates CICIP funding through an application process which was standardized this year. UC Health adopted OSU's formal tracking system for CICIP funds. Applications come from clinical teams and include details of previous testing, "proof of concept," and a development plan for the proposed intervention. Teams use the PDSA approach to test an idea or identify a gap in care delivery. CICIP funds have also allowed the addition of a quality improvement specialist who is helping to expand and improve CICIP activities and their impact. UC Health reported that as of June 2021, 83 staff members are funded, at least in part, by CICIP revenue. This includes 13 physicians, 11 social work staff, 10 care management staff, and 18 CICIP administrative staff, among others. Additionally, $94,000 was designated for the construction of the online patient community platform, Experience Exchange.

Quality Improvement

As was evident in the first year of the evaluation, UC Health has a robust QI Program. The team continues to strategically use the tools of QIS (e.g., KDDs, process mapping, PDSAs, and process metrics) to drive improvement. To support additional change testing, more process and outcome metrics have been incorporated in a monthly data review. The team conducts broad strategy meetings in which they keep track of everything in PDSAs and regularly update the KDDs. UC Health's response to IPRO's year-1 recommendation to accelerate its QI initiatives was to reduce the size and scope of its huddle teams and promote small tests of change. UC Health hired new staff for specific teams to expand capacity and has since started to accelerate testing and project implementation.

Data

The UC Health CICIP team is working on CICIP data transparency to support monitoring activities. UC Health reported they are in the final steps of launching a CICIP dashboard that will present CICIP data and metrics across all four domains and will be viewable by the CICIP team as well as other individuals in leadership. It will be live in September 2021. UC Health still has little CICIP-specific data to analyze or track. The UC Health system is tracking other metrics as part of some of their value-based care programming, but the CICIP team has yet to develop shared measurement tools or resources that would support analysis of CICIP metrics specifically.

Collaboration

UC Health reports that the CICIP coalition and their collaboration through task force meetings are invaluable. Ms. Sabato finds working with her counterparts very useful, especially in refining their CICIP organizational structure. The CICIP team reports that collaborating with the other systems also significantly hastens the testing processes for potential interventions. Further, they stated that they expect establishing data transparency within the coalition will facilitate further progress. UC Health reported that they appreciate having common process metrics and benchmarks for shared data and that it will allow them to manage the CICIP domains with more clarity.

Patient Engagement

The CICIP team reported that engaging patients is a priority across all domains. UC Health has used CICIP funding to build a patient engagement platform called the Experience Exchange. The platform will be an opportunity for patients to give timely feedback about their healthcare experiences, respond to questions from UC Health, and join facilitated, online discussions on a range of topics. UC Health is actively recruiting patients to join the online community based on a mix of demographic and payer-related criteria. No other CICIP-related patient engagement is occurring.

Community Partnerships

UC Health continues their partnerships with Greater Cincinnati Behavioral Health Services (GCBHS) and Health Care Access Now (HCAN) Community Health Workers which they reported last year. The CICIP team expanded their internal resources by establishing a reciprocal relationship with UC Health's Community Relations Department, giving them access to information about community resources that the Community Relations Department maintains. They report that they have recently started tracking referrals to community resources and using this data to inform what new organizations to partner with. The CICIP team also reported being very involved with an upcoming community health needs assessment which will be a source of information for CICIP partnership development.

Strengths and Opportunities for Year 3

UC Health remains the strongest of the four CICIP hospitals with respect to its application of QIS across domains and individual interventions. As IPRO noted in the previous evaluation, this does, in some cases, impede their progress towards implementation and many of the interventions discussed were still being tested. In the BH domain, staff are engaging patients while still on the inpatient unit to facilitate the process of connecting them to care once discharged. Plans to tailor the intervention based on patient feedback were reported at the visits in March and were still in process during our site visits in June. The team also recently met with UC Health's Community Relations Department to lay the groundwork for a partnership that will allow for a closed-loop system for conducting and tracking referrals to outpatient BH care. Additionally, the UC Health team is working to develop an online community to allow patients another platform for sharing their views about care received. UC Health is doing strong work in the area of healthy birth outcomes where CHWs are working collaboratively with providers and patients, to address patient's needs related to SDoH towards the goal of reducing preterm births as well as racial disparities in birth outcomes. As part of their healthy birth outcomes work, the team is also working to increase access to care by 1) decreasing the amount of time between patients' initial contact with the system and when they are seen for a visit; and 2) providing postpartum visits via telehealth. The UC Health team continues to do strong work to reduce inappropriate ED utilization by leveraging data and QIS to create interventions to divert care to more appropriate care settings.

IPRO suggests that the UC Health team ensure active engagement of patients and clinical leadership in their QI efforts. Although the online community will no doubt yield useful information, there is the potential for significant bias in the information shared and population represented. The CICIP population may be disproportionately impacted by certain barriers to accessing the platform and sharing their feedback. Lastly, as we noted last year, we urge the UC Health team to ensure that the rigor with which they apply QIS does not compromise their ability to implement and expand interventions in a timely manner.

University of Toledo Medical Center/Physicians Practice

Program Overview

Leadership Engagement

The UTMC CICIP team continues to be led by Dr. Cheryl McCullumsmith, Chair of the Psychiatry Department, with support from Courtney Beckwith, Program Manager, and Timothy Poplawski, Director of Strategy and Value-Based Contracts. Importantly, the team is gaining resources to expand their data analytics capacity and the QI expertise available to CICIP teams. In the March 2021 site visit, UTMC demonstrated a remarkable intention to address gaps identified in IPRO's Year 1 Evaluation.

Since then, the UTMC team has sought executive and clinical leaders' engagement with CICIP in part by highlighting the linkage between CICIP and value-based purchasing (VBP), which has greater visibility in the institution. In July, it was

reported that CICIP will be discussed at monthly meetings of the Physician Practice Leadership Group which includes the hospital chief executive officer (CEO) and other hospital executives.

Dr. McCullumsmith expressed confidence that UTMC can achieve CICIP objectives, but also noted ways in which UTMC differs from the other three CICIP systems. First, it is challenging for UTMC to identify attributable patients at an institutional level because it is not the dominant healthcare site in the Toledo market. Patients included in the denominator for many CICIP metrics receive ambulatory care outside the system. Second, the system's small size impacts their capacity for data analytics. UTMC also has more limited funding and resources at an institutional level that could be leveraged to support CICIP efforts. Dr. MCullumsmith asserts, however, that, because most hospitals in Ohio look more like UTMC than other CICIP hospitals, UTMC may be a model for how CICIP can promote spread of CICIP's innovative interventions across the state.

Funding

UTMC's mini-grant program continues to provide CICIP funding for clinician-initiated projects that address patient care gaps. CICIP is currently funding seven mini-grant projects several of which relate to reducing ED use. The CICIP team has now formalized mini-grants by adding memoranda of understanding with project leaders. CICIP funds also support the expansion of data analytic and quality improvement staff noted above.

UTMC follows the process described last year by which funds are allocated to the clinical departments that provide care to Medicaid patients, but funds do not have to be linked to the four CICIP domains. Interviewees stated that funds are primarily used for physician compensation, "following the spirit of an upper payment limit program so that physicians are getting paid closer to what they would for seeing commercial patients." CICIP revenue supports 96 individuals who receive at least a portion of their compensation from CICIP funds in 2021. Recipients include 11 physicians who participate in task forces, 20 internal medicine providers, 21 family medicine providers, and 18 psychiatry providers. Other staff funded in part by CICIP includes data analytics staff, social workers, care managers, and others in administrative roles. Funds also directly support the mini-grant and pain rehabilitation programs, as well as the value-based care office, of which CICIP is part.

Quality Improvement

UTMC continues to distribute the majority of its CICIP resources to clinical departments without a requirement that spending be tied to CICIP goals. As a result, the CICIP team has little leverage to improve the use of QI tools to achieve CICIP goals. They have requested the departments that receive funds to identify specific projects they are undertaking for Medicaid patients and, if metrics are being collected, to report those metrics monthly to the CICIP office. Results of this effort are not available. Where possible, the CICIP office offers assistance with QI methodologies and training. UTMC added a full-time quality specialist to the CICIP office to work across multiple initiatives, with the goal for each CICIP intervention to have an action plan, run charts, KDDs, and track cycles of improvement. Initiatives were also expected to employ other tools appropriate to the intervention. However, because funding is not tied to use of QI, take-up has been uneven.

Data

UTMC faces challenges in using existing data systems for CICIP-related quality measurement and improvement. The team reports their electronic medical record (EMR) capacity is insufficient for these purposes, and they eagerly await the Epic implementation in fall 2022. In the interim, they utilize dashboards for ED utilization and opioids, and have created a dashboard for their Medicaid patient population, which they will begin using soon. The new senior analyst will manage the dashboards and help build UTMC's data capacity.

Collaboration

UTMC finds great value in the opportunities for the four CICIP hospital to learn from each other. UTMC has collaborated with other CICIP systems on their complex care program. They have taken lessons from their participation in the ED Utilization Task Force and as a result are adding community health workers and care transition workers to increase care plan management and make connections with community resources. UTMC has shared progress on their BH and opioid interventions at task force meetings and recently highlighted their expansion of BH into primary care. As a relatively new program manager, Ms. Beckwith attributes her understanding of CICIP to attending the task force meetings as well as conversations with her counterparts from the other systems.

Patient Engagement

UTMC reports many of their efforts to engage patients in CICIP were stalled by the COVID-19 pandemic. They have implemented informal patient feedback into interventions such as the Pain Rehabilitation Program. The team reports that all funded mini-grants are patient-facing, and patient experience is considered. UTMC plans to increase their attention to patient engagement in the coming year.

Community Partnerships

UTMC has partnerships with area fire and police departments, relating to BH programs though not directly tied to existing interventions. UTMC's ED social workers and case managers have relationships with social services organizations to coordinate housing, transportation, and other supportive services and produce community resource guides for patients and staff. In their Quarter 4 report, UTMC's CICIP team documented new collaboration with the Zepf Center (Neighborhood Health Association) for their medication-assisted treatment (MAT) programs and Thrive Peer Support for potential alignment of peer support with ED social workers. As they build their mother-baby dyad care program (described below), UTMC intends for community engagement to be a significant component.

Strengths and Opportunities for Year 3

UTMC has a diverse set of interventions that demonstrate ingenuity and a commitment to addressing the unique needs of its CICIP patient population. Team members are passionate about the CICIP work they are doing and their interventions are well-supported by the literature.

The pain rehabilitation program represents an interdisciplinary approach to treating patients with chronic pain, incorporating medical management, physical therapy, occupational therapy, counseling, and patient education. UTMC has created surveys to collect patient feedback at several points throughout and following completion of the program. Additionally, in response to patient feedback, they developed a less intensive version of the program that will be more accessible to those working full-time. In the area of BH, the UTMC team continues to make modifications to their process for delivering telehealth in response to patient feedback and as well as data regarding no-shows for appointments. UTMC is also working with MetroHealth as they develop their opioid dashboard as well as their reports for high opioid prescribers and patients on concurrent opioids and benzodiazepines. The UTMC team has supported the other systems as they have worked to develop their own discharge/bridge clinics and have also demonstrated leadership in telehealth, particularly in the BH domain.

While they do not have the breadth, or in some cases the depth that the other systems demonstrate, we have seen notable progress, despite the pandemic and the myriad organizational and leadership changes the system has undergone. Dr. McCullumsmith leverages her clinical and academic expertise, as well as a motivated team to support UTMC's CICIP interventions, but they face a number of barriers. The system has undergone substantial changes over the past year and program staff is working to establish CICIP's place within the new organizational structure.

Although significant progress was made in the use of data to track and inform improvements to their interventions, there is still room for improvement. Their efforts to promote data-driven QI continue to be hampered. IPRO encourages them to continue to draw from the work of the other hospital systems as they develop dashboards and reports. UTMC's transition to Epic will facilitate their ability to adapt tools developed by other systems. Finally, UTMC's size serves as both a strength and a barrier; it allows them to make changes more rapidly in situations where they have the resources to do so. Due to their small size and the population they serve, however, they also have substantially fewer resources to draw from. As a result, they have struggled with scaling interventions that prove effective. We suggest they seek guidance from the other hospital systems regarding how to expand and spread interventions demonstrated to be effective. We also recognize that the utility of this approach will be somewhat limited given the disparity in the amount and nature of resources to which the other hospital systems have access.

Discussion

UTMC, MetroHealth, UC Health, and OSU demonstrated substantial progress in the second year of the CICIP evaluation. All four systems exhibit a commitment to improving care for Medicaid patients and have leveraged QI and collaboration to drive improvements. In this section, IPRO will summarize some of the key achievements of the CICIP hospitals as well as opportunities for continued collaboration and improvement between sites moving forward.

During 2021 site visit interviews, IPRO found greater use of QIS, progress in implementing and monitoring interventions, exchange of tools and strategies among hospitals, and accountability for resources compared to one year earlier. Process and outcome metrics were clearly defined for individual interventions and the task forces selected domain-specific process measures that were shared on an ongoing basis. IPRO saw cross-system sharing of data tools and strategies, particularly among the three hospital systems currently using Epic. Lastly, all four systems adopted a version of the CICIP funding review process described by OSU during last year's site visit.

Strong organizational infrastructure bolstered by both executive and clinical leadership was a key factor in the nature and extent of systems' achievements in year 2. MetroHealth and OSU's formalized leadership involvement and integration into systemwide strategic goals facilitated CICIP oversight and solidified CICIP as an institutional priority. Engagement of clinical leaders appeared to be a significant predictor of sustainable CICIP interventions. This was particularly notable in MetroHealth's ED utilization, opioid prescribing, behavioral health and healthy birth outcomes work; UC's healthy birth outcomes and behavioral health work; OSU's ED utilization, healthy birth outcomes, behavioral health, and opioid prescribing work, and UTMC's behavioral health and opioid prescribing work.

In year 1, community partnerships were an area of notable strength across all four systems. Unfortunately, progress in this year has slowed overall and, in some cases, stopped altogether. Although, in some cases, this was unavoidable due to complications of the COVID-19 pandemic, IPRO suggests that in the upcoming year, resuming and building upon these efforts will be critical to the program's success. Further, for some partnerships, establishing feedback loops to avoid incomplete handoffs may improve outcomes.

Patient engagement was another area where IPRO noted a lack of progress since year 1. Despite some exceptions, such as the Pain Rehabilitation Program at UTMC and the FARMACY program at OSU, the majority of examples that the hospital systems provided for eliciting patient input involved standardized patient experience surveys which were not specific to CICIP patients nor to CICIP interventions. One notable effort to engage patients at UC Health through an online community is also not CICIP specific and will likely lead to under-representation of CICIP patients due to the barriers this population will disproportionately face in accessing the system and providing written feedback. The IPRO team encourages all four systems to prioritize obtaining targeted patient feedback moving forward.

Whereas systems faced many of the same barriers in year 1 due to the pandemic and establishing systems and processes to support their CICIP efforts, the differences between the hospital systems, the challenges they face, and, in some cases, the advantages they have, became more apparent in year 2. Over the past year, it appears that the larger hospital systems continue to leverage existing resources, including data infrastructure, staff, and funding, to support their CICIP work. The UTMC team has noted, however, that they lack many of the resources that the other systems draw upon to support their CICIP activities. This disparity is particularly noteworthy given the goals of the CICIP program and the fact that, as Dr. Cheryl McCullumsmith remarked, the majority of hospitals in Ohio are more comparable to UTMC than to OSU. This finding underscores the importance of fostering collaboration across systems to facilitate sharing of resources and best practices so that smaller systems can benefit from the learnings of the larger systems. In the next years as hospitals think about sustainability and spread, this size and resource differential will have to be a consideration.

Recommendations

Individual Hospital Systems

- Formalize an approach to engaging patients in the QI process or seeking their input through interviews or surveys.
- Ensure all interventions have a designated clinical leader(s) to facilitate provider uptake and engagement and inform development and modification of provider-facing interventions.
- Adopt process measures associated with system-level strategic goals related to CICIP that target all levels of institutional stakeholders to ensure that concrete progress is made, and adjustments can be made in cases where this doesn't occur.

Collaborative

- Develop a shared platform or dashboard with repository of interventions with a message-board on which hospital systems can pose questions to the group or call-out best practices.
- Consider having cross-domain meetings to talk about certain program elements, including community and patient engagement and add both of these elements to executive committee priorities.
- Establish agreement regarding the core roles and responsibilities necessary to support the activities of CICIP at each individual institution; ensure that all teams, at a minimum, have individuals with expertise in clinical care, healthcare administration, QI and implementation science, and data analysis and display.
- Ensure there are process metrics associated with interventions at the organizational or collaborative level as well as clearly delineated, shared definitions of success.
- Consider leveraging alternative data sources, such as a health information exchange (HIE), to facilitate timely access to data.

Appendices

MetroHealth

Selected Interventions

Opioid Safety

Controlled Substance Peer Review

MetroHealth's CSPR has begun a year-long quality improvement project in the palliative care program; in the program, they found that a recently retired provider was prescribing opioids in a manner and with a frequency inconsistent with current clinical guidelines. The physician who inherited this provider's patients approached the team for assistance. During this QI project, they will look at four issues: benzodiazepines co-prescribed, naloxone prescribed as recommended, total daily morphine equivalent daily doses (MEDDs), and completed informed consent agreement for the treatment of sub-acute and chronic pain. The goal is to reduce the percentage of patients co-prescribed a benzodiazepine with opioids by 5%, increase co-prescribed naloxone from baseline, decrease total MEDDs by 25% and increase percentage of completed informed consents of 0 to 100%, all by April 30, 2022. Additionally, the team has completed 16 e-consults, 3 pharmacy consults, 14 referrals to primary opioid management, and 4 referrals to the general pain and healing department.

Opioid Prescribing Safety Monitoring Dashboard

The MetroHealth team shared their recently updated Tableau® dashboard featuring the top 15 prescribing providers. Within this dashboard, they can filter by revenue source, system provider department, Medicaid vs. non-Medicaid patients, acute and non-acute needs, top prescribers, and MAT or non-MAT. The team has seen a significant reduction in opioid prescribing. On the Epic dashboard, providers can see their own data compared to other providers in the system. As mentioned above, MetroHealth also produces report cards for PCPs which compares providers' opioid prescribing behavior to that of their peers. Finally, they have an opioid stewardship report card for safer prescribing and narcotic report cards that go out quarterly to primary care and other high prescribing departments. Initially, they solicited feedback from providers; all feedback has been positive. Some providers have asked questions, but the team reports that no one feels like they are being targeted. The team plans on adding a benzodiazepine and stimulant report card and is currently working with the medical examiner to see what people are taking when overdosing.

Pain Pharmacy Management Consult

In 2021, the pain management pharmacist interacted with 142 individual patients at 126 total visits as well as through 16 e-consults; some were through the primary care opioid management clinic and others occurred via e-consults (16 e-consults in 2021 and 3 in 2020). Most e-consults came from the new palliative care provider, and the pharmacist is making recommendations to begin to taper opioids in those patients. The pharmacist is not formally collecting patient feedback. Informal feedback received from the physicians suggests they appreciate the pharmacist interactions with the patient. The pharmacist is not currently tracking whether patients are on Medicaid.

One Path Podcast

In February 2021, the MetroHealth team launched the One Path podcast series intended to help other healthcare systems and providers learn about opioid safety. Some topics covered so far include what the CICIP office does, the psychology of addictions, peer review, roles of pharmacists, MAT in the ED, and personal accounts related to opioids and opioid safety. The podcast includes a series called "CICIP 101," targeted at the CICIP coalition. Sessions 1 through 10 include best practices, successes, and outcomes. Each podcast is 45 minutes long. The podcasts have been downloaded 324 times from February 28 to June 30, 2021. Currently, the MetroHealth team is working with the opioids task force to see if they want to partner with MetroHealth for the podcast's second season. In the future, the MetroHealth team would like to provide physicians who listen to the podcasts with continuing medical education credit. The marketing department at MetroHealth has been working to advertise the podcast; they have been on the news and in the paper and have also been advertised by word of mouth. This MetroHealth podcast team is also presenting at an upcoming Epic user group meeting.

Clinical Decision Support for Naloxone Prescribing

To support providers prescribing naloxone, MetroHealth added relevant clinical decision support (CDS) to the EMR. Best practice alerts and order validation tools were created to increase naloxone prescribing. The CICIP team observed over a 600% increase in prescriptions for naloxone following implementation. The team collected end-user feedback to inform improvements to the interface. Based on provider feedback and a review of the clinical informatics literature, the team added an image of a naloxone bottle–with a description–to the alert. Prescribers are alerted for new prescriptions every 2 years. This intervention is fully funded by CICIP and was one of MetroHealth's first interventions with CICIP.

Behavioral/Mental Health

Post-discharge Clinic

Located at their main campus, MetroHealth's post-discharge clinic connects patients to BH services within 1 week of discharge. The clinic employs a patient navigator who schedules appointments, places reminder calls for those appointments, and provides assistance related to social needs, including housing and transportation. The clinic opened in December 2020 and the patient navigator started in April 2021. The navigator started with a caseload of 8 patients, which has now been increased to 12. In the month of June, there were a total of 44 patients discharged; 100% of patients had an appointment scheduled within 7 days of discharge, 21 patients attended their appointments, and 23 no showed (47.7% attendance rate).

Loved Ones Involved in a Network of Care

Northeast Ohio Medical University (NEOMED) created the curriculum and conducted training for the LINC program at MetroHealth. LINC was launched in April 2021; to date 12 (9 inpatient, 3 outpatient) patients have been oriented. The primary goal of the program is to engage a second person early in the patient's care to serve as an additional support for the patient, as well as an additional connection for the care team to leverage in difficult cases. They sometimes find that the support person identified by the patient is not willing to participate. There are surveys in the NEOMED curriculum that the patients and support people receive when they complete the program. MetroHealth is collecting patient feedback, but the only data that have been shared to date are anecdotal.

Motivation and Engagement Clinic

MetroHealth's Motivation and Engagement Clinic is located at their main campus and is bridging treatment for those who are coming in for suboxone or who need intensive outpatient treatment or MAT. This is a drop-in clinic that will run on Tuesday and Thursday afternoons. The opening was planned for July 13, 2021. Patients will be able to meet with a NP for medication and attend group education and counseling sessions. MetroHealth plans to have two NPs seeing patients for 3 hours; they could see 36 patients a day for medications and have 12 participants in the group at a time.

Substance Use Disorder Treatment Linkage

Patients can be referred to SUD treatment during an ED visit, admission to an inpatient medical or psychiatric unit, or outpatient visit. If SUD is identified while a patient is admitted, providers order an addiction consult team referral to conduct a level-of-care assessment, and once completed, social work coordinates care and discharge planning. If the patient is engaged in the ED, a similar referral process takes place, though discharge planning and care linkage is facilitated by the patient navigator. In the outpatient setting, and specifically at a primary care visit, if a patient screens positive for SUD, the provider again orders a referral. There is peer support in both the inpatient setting and outpatient settings. Of note, the MetroHealth team has exceeded their outpatient addiction consult targets each month; their target was approximately 500 visits per month for all locations and there has been over 600 each month. In response to concerns regarding potential exposure to COVID-19, the team began conducting individual and group sessions via telehealth.

Emergency Department Utilization

Medicaid Red Carpet Care Program

MetroHealth added to the scope of Red Carpet Care Program with an ED-based care coordinator. Since our last site visit, the team has enrolled nearly 300 patients. Later this summer, the MetroHealth team will be adding additional pharmacy support for patients and providers.

Care Plans

The focus of this intervention is to decrease ED utilization by creating individualized care plans that address both clinical and social factors. The team drew heavily from the complex care plan work being done at OSU. To start, the MetroHealth team looked at 300 ED high utilizers between June 2019 and June 2020 and categorized them by chief complaint. Categorizations included no primary care provider, addiction, and sickle cell crisis. Initially, the population of interest was high utilizers, defined as those with 20–39 ED visits annually (n = 65). The MetroHealth team tested this approach using the PDSA methodology and, based on their findings, determined that focusing on the high-utilizer population was likely not the best way to decrease utilization. The team instead decided to focus on rising utilizers, defined as those with 10–19 ED visits annually (n = 161).

The team recognized that patients with sickle cell disorder represent a significant proportion of patients in this group. As a result, the team decided to start by focusing their intervention on this patient population. MetroHealth currently does not have a sickle cell clinic and there is nothing in place to comprehensively manage the care these patients receive.

In terms of the intervention itself, the MetroHealth team implemented a high-utilizer alert pager whereby the social worker receives an automatic alert triggered by any patient who has had at least 10 ED visits in the past year. The social worker then reads the chart and decides what action should be taken. A referral can be sent to the community health worker (CHW) based in the ED, who will conduct SDoH screening. The results of this screening are then entered into the patient's electronic health record (EHR), where they are featured prominently in the patient's chart. At this time, the team is currently retooling their approach to focus on the population with sickle cell disorder. Social workers expressed that it can be challenging to get into the room with the patient, as their ED visits may be quick. Through this program, the team developed new sickle cell care plans and they plan to incorporate the SDoH data into these care plans.

Sickle Cell Care Plans

The MetroHealth team met with the OSU team and is using their templates and staffing models for their sickle cell care plan program. The MetroHealth team has created 15 care plans thus far for sickle cell patients; 100% of these patients are Medicaid patients. The team, made up of BH providers, ED leadership, ED and sickle cell physicians, and pharmacy services, meets weekly to discuss patients. MetroHealth also has a high-utilizer ED social worker who follows up with patients weekly. BH is partially embedded in the sickle cell clinic, allowing them to see patients in real time when possible.

Community Health Workers/HUB Model

At MetroHealth, there is an ED-based CHW who carries a pager to notify them any time a high utilizer comes into the ED; this CHW only works with Medicaid patients. The CHW then connects the patient to resources as needed. CHWs also address referrals from the social worker or through UniteUs using the HUB. CHWs follow the patient until the need is met. They can run reports on the number of patients enrolled, "HUB pathways" they have closed, and outreach efforts they've made. MetroHealth is looking to expand this work and has submitted a proposal for a nurse care coordinator.

Tableau Dashboard

The MetroHealth ED utilization dashboard created in Tableau includes diagnoses, location where patients present, and whether they have a primary care provider. The dashboard allows the user to view information in the aggregate and to drill-down to the patient level and direct resources appropriately.

Healthy Birth Outcomes

Clinic Education – Baby Scripts

The Baby Scripts mobile application went live at MetroHealth on July 1, 2021. The application provides education to new and expectant mothers in English or Spanish and facilitates remote patient monitoring. Providers can order Baby Scripts in Epic and a blood pressure cuff will be delivered to the patient's home to allow for remote monitoring. MetroHealth currently has 300 blood pressure cuffs for the program. They also have a subscription that allows up to 3,000 patients to obtain the app; around 95% of eligible mothers are on Medicaid. The staff that engage with patients using the clinical education tool are partially CICIP funded. UC Health is also using the Baby Scripts app and the MetroHealth team plans to draw from UC Health's experience as they implement their program and potentially adopt some of the related tools, processes, and workflows.

Free Walk-In Pregnancy Tests, Connecting with Community Health Workers

MetroHealth promotes free pregnancy testing at the hospital. When patients come in for a free pregnancy test, staff help patients schedule appointments and immediately begin connecting them with resources. In some cases, they assist patients in applying for Medicaid. The social worker is also engaged in this process to address any barriers patients are facing to accessing care. The team is currently tracking how patients became aware of the free testing as well as the number of patients successfully connected to care.

The team is working with MetroHealth's marketing department to advertise the free pregnancy testing; they also have recorded a promotional message that plays when callers to the MetroHealth system are placed on hold. The team notes that because of the number of hospitals in Cleveland, some of the patients with positive pregnancy tests opt to receive prenatal care elsewhere; this presents challenges when assessing successful connections to care.

MetroHealth has a dedicated obstetrician CHW that reaches out to the patients and connects them to resources. The intervention team shared an anecdote describing a CHW obtaining a mattress for a newly pregnant patient who had been sleeping on the floor. In other cases, the CHW helps patients sign up for the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) or secure transportation to and from appointments. The CHW also tracks and follows up with clinic no-shows on the day of the appointment. The CHW follows patients through the baby's 1st year. The CHW, social work department, and care coordination department work collaboratively to address barriers related to SDoH. The team shares data monthly, including outreach numbers and closed pathways (referrals). MetroHealth has shared their obstetrician CHW approach with the coalition.

Multidisciplinary Approach for Obstetrician Access, Postpartum Telehealth Visits

At MetroHealth, all patients are scheduled for an in-person visit for postpartum care. If the patient doesn't come, the staff will try to convert the appointment to a telehealth visit. The team uses reports to track missed appointments. These reports are reviewed by care navigators who then attempt to contact the patients. MetroHealth also offers a tip sheet with different rewards from managed care plans (MCPs) to incentivize patients to attend postpartum visits.

Telehealth expanded greatly during the pandemic. In early 2021, the conversion rate of missed in-person to telehealth appointments was approximately 27.7%. Currently, nurses call patients directly and, in some cases, entire obstetrician/gynecologist (ob/gyn) intake appointments are conducted over the phone. In 2020, a total of 8,341 ob/gyn telehealth appointments occurred. Nurses conduct Edinburgh Postnatal Depression Scale screenings at initial intake visits, at the third trimester visit, and during postpartum. Any patient with a diagnosis of depression (or other mental health issue, unspecified by the interviewee) is offered a follow-up call to discuss mental health within a week of giving birth. Mothers with hypertensive disorders and/or preeclampsia are provided with home blood pressure monitors (and education regarding use) so nurses can conduct blood pressure checks via telehealth visits.

Site Visit Participants

Jennifer Bailit, MD – Physician Executive and Service Line Medical Administrator, Women and Children's Health and Wellness
Amanda Benedetti – Pain Management Pharmacist
Mary Borovicka – Clinical Pharmacy Specialist – Psychiatry
Bernard Boulanger, MD – EVP, Chief Clinical Officer
Jennifer Conti – Process Improvement Specialist
Karen Cook – Director, Healthy Families & Thriving Communities
Katie Cucullu – Special Assistant to the Dyad
Michael Dalton, VP of Executive Projects
Amy Delp – Executive Director, Population Health Innovation Institute
Dana Dravenstott – Social Worker
Nicholas Dreher, MD – Medical Director, Population Health
Kimyette Finley – Sr. Internal Communications Specialist
Kandra Flavell – ODM Rep
Kim Green, OB/GYN Community Health Worker
Gregory P. Heintschel, DDS, Department Chair of Dental Medicine
Kinsey Jolliff – Principal, Health Policy and Payment Innovation
Nisrine Khazaal, Director, Quality, Informatics & Analytics
Peter Lawson, Manager of Business Intelligence
Kristen Liviskie – Manager, Outpatient Psychiatry & MetroHealth Recovery Services
Edwin Luciano, EM Community Health Worker
Brian Mercer, MD – Chairperson, Obstetrics & Gynecology
Joan Papp, MD – Medical Director, Office of Opioid Safety

Jonathan Siff, MD – Associate Chief Medical Informatics Officer
Nina Smolinski – Clinical Practice High Risk Coordinator
Nicholas Sukalac, VP of Hospital Operations
Rashell Tallent, Nurse Care Coordinator
Danielle Warren, Outpatient Social Worker, OB/GYN
Karolyn Tibayan – Director, Office of Opioid Safety
Shellakee Turner – Community Health Worker
Redelle Waters – Patient Navigator
Danielle Warren, Outpatient Social Worker, OB/GYN
Brook Watts, MD – SVP and Chief Medical Officer, Community & Public Health

Ohio State University Wexner Medical Center

Selected Interventions

Opioid Safety

Systemwide Medication-Assisted Treatment for Opioid Use Disorder Program

A systemwide MOUD program is OSU's largest CICIP undertaking. The MOUD program guideline uses three common medications, methadone, buprenorphine (Suboxone®), and naltrexone (Vivitrol®), to treat OUD. The MOUD program connects opioid safety services at all levels of care, utilizing high-quality, evidenced-based care for addiction services in the ED, inpatient units, and primary care. OSU initiated care coordination for patients' progression through the program in January 2021. Patients with OUD are screened with the Brief Opioid Stigma Scale (BOSS), which helps to indicate appropriateness of either antagonist or agonist medication treatment. The MOUD program is also incorporated with the Talbot Hall Drug and Alcohol Treatment (Talbot) Program and STEPP for maternal health.

OSU has extended the hours of Primary Care Addiction Med (PCAM) Clinic to 5.5 days/week. PCAM is a dedicated site for OUD patient access to primary care and MAT for substance use. The clinic also facilitates patients' transition from the ED to inpatient or outpatient settings. Currently, 40 of 100 x-waived certifications were obtained for residents and OSU medical students. Additionally, 95% (43/45) of clinicians from OSU East ED and 15–20 PCPs have x waivers. Clinicians use order sets to ensure appropriate prescribing.

OSU is addressing stigma in their MOUD program. There is a People with Addiction Stigma Subcommittee monthly meeting with residents, fellows, and employees of the Ohio State Health Group as well as 4–5 other hospitals. Topics discussed include neurobiology of addiction, language and myths of Suboxone, and medication use in general.

Medication for Opioid Use Disorder Dashboard

The OSU MOUD Dashboard provides a centralized location for MOUD data. The dashboard was created in Epic Navigator® and displays volume and medication summaries for buprenorphine and naltrexone, as well as patient volumes, patient encounters, and the number of patients in active treatment. Data can be filtered by care site including ED, inpatient, ambulatory sites, STEPP Clinic, and Talbot. Clinical area and information on x-waivered providers are not yet fully incorporated in the dashboard. OSU has shared the dashboard and query specifications at the task force meetings which has enabled improved alignment for the systems using Epic.

Peer Support

Thrive Peer Support provides 24/7 coverage to engage patients starting when they first begin treatment. Patients are encouraged to share their stories during a time of crisis. The program started in OSU East ED in spring 2021 and has now expanded to Talbot and the inpatient hospital unit. Thrive Peer Support provides consultations for the three sites to address stigma, deter patients from leaving against medical advice, coordinate with providers engaged in a patient's care to ensure treatment plan alignment, and assist with addressing care gaps during recovery. Since April 2021, 94 patients were seen across all the OSU Thrive sites.

Toward Opioid-Free Ambulatory Surgery

OSU's Toward Opioid-Free Ambulatory Surgery (TOFAS) intervention is targeted at decreasing opioid prescribing in ambulatory surgery and educating patients and providers on opioid alternatives. Adult ambulatory surgery patients without a history of OUD are eligible to participate, of which approximately 20% are Medicaid members. OSU tracks metrics related to self-reported pain control and ratios of opioid use and opioid prescriptions. The TOFAS intervention

team, also implemented an Epic order set with CDS for alternating NSAIDs and small-dose opioids. Enrollment began in May 2021.

Narcan® Kit Distribution Expansion

OSU expanded their capacity for naloxone prescribing with Project DAWN. This protocol has been implemented in select high-risk clinics, including the palliative care clinic and primary care addiction medicine clinic. Nurses target patients with histories of overdose or SUD or who are on high doses of pain medications and provide education on naloxone administration. OSU established protocols that allow patients' families and friends to also fill prescriptions. In the past year, the rate of prescribing naloxone at discharge has doubled, totaling in approximately distributed 1,500 kits. The intervention includes patient education, community outreach, flyers in outpatient clinics, and extending Narcan distribution into the food pantry.

Mindfulness Pain Management for Sickle Cell Patients

OSU developed a mindfulness pain management program for patients with sickle cell disorder. This intervention aims to address the high rates of opioid use in the sickle cell patient population, as well as stigma around pain and assumptions of drug seeking behaviors. The intervention seeks not only to address the physical pain these patients experience, but also to address the many psychosocial needs of this population. This initiative will involve home visits as well as a smartphone application that is currently being beta-tested. Currently, interviews are being conducted as part of the app development. The app will provide guidance on breathing, mindfulness, and yoga as techniques to manage pain.

Behavioral/Mental Health

Mid-Ohio Farmacy Expansion

OSU continues to use CICIP funding for their Farmacy Program, most recently to support an expansion over the past year to aid all patients with food insecurity. To date, prescriptions have been provided at 1,500 visits for 800 unique patients and their families (~45% Rx fill rate). Virtual enrollment for eligible patients provides them with a unique prescription number to present to the Mid-Ohio Health Food Collaborative. Following the expansion, the program now includes two family medicine residency clinics, The Total Health and Wellness Federally Qualified Health Center (FQHC), the Fetal Health Clinic for mothers with diabetes, an endocrinology clinic, and two primary care sites. OSU is hoping to partner with MCPs to cover the cost of the program expansion. OSU is tracking process metrics, such as utilization, enrollment time, and prescription fill rate, as well as clinical outcome measures, including body mass index (BMI), blood pressure, and HbA1C. OSU has collected qualitative and quantitative feedback from patients, providers, faculty, and staff. So far, the data shows improvements in patient satisfaction and quality of life. The team used this information to make a number of modifications to the program including providing additional supports to facilitate virtual enrollment as well as efforts to facilitate referrals from all provider types. OSU is in conversations with UTMC and UC Health to collaborate in establishing similar programs.

Behavioral Health Immediate Care (Bridge Clinic)

BH immediate care offers bridging BH services for discharged patients and helps to facilitate ED utilization alternatives. The bridge clinic links patients to outpatient providers, including ob/gyn, ophthalmology, and nephrology. Referrals come from inpatient BH clinics and the ED. Since April 2021, the bridge clinic provided services to 101 patients; visits focused largely on medical management, therapy, and case management. Approximately 40% of the patients seen to date are Medicaid members and 60% are between the ages of 20–29 years. Quality initiatives include the implementation of PDSA methodology tools to improve the patient registration system and to improve care during post-suicidal ideation presentation. Patient feedback has focused on the value patients place on the ease of accessing care through telehealth. Strategies to promote walk-in appointments and increase an online presence are current priorities.

Increasing the Colorectal Cancer Screening Screen Rates in the African American Population Project

Increasing the Colorectal Cancer (CRC) Screening for the African American Population Project has been recently approved in two outpatient clinics, Care East and Reardan. Spearheaded by Dr. Gail Grey, a gastrointestinal (GI) physician, the goal of the intervention is to increase CRC screening of African American patients ages 45 years and over from 60% to 70% in the first year by utilizing mailed fecal immunochemical test (FIT) kits (400 kits for year 1). Additional goals are to decrease ED utilization (patients with GI cancer have an annual 7.75% ED utilization rate) and increase PCP and specialist engagement with patients. CICIP funding for the project ($11,000) was secured on June 1st, and a list of FIT kit recipients (the majority of whom are Medicaid members) is being generated based on characteristics associated

with decreased likelihood of completing screening. Kit processing will occur at the two outpatient clinics, and patients with unreturned kits will be contacted after 2 weeks.

Chancellor's Interprofessional Community Scholars – Improve Digital Health Literacy

Andrea Pfeifle, the chair of OSU's Interprofessional Community Scholars Improve Health Literacy Program, obtained CICIP funding June 1st to increase digital health literacy. The program will also improve resources and access to care for Medicaid seniors with complex medical conditions in the Near East Side neighborhood. Based on positive results from a pilot study of five patients and five family medicine residents, the next phase of work will involve collecting data related to changes in digital health literacy score, percentage of goals achieved, quality of life improvement, types of referrals, perceived of value, number of community services provided/utilized, and ED utilization. Patient satisfaction will be tracked. Current enrollment is 50 patients, with goals of 75 new patients in fall 2021 and spring 2022.

Ohio State University East Emergency Department Social Workers

The OSU East Emergency Department Social Workers Program will provide psychosocial support and resources to Medicaid patients with mental health needs in the Moms2B program. They plan to hire an additional social worker by the end of July 2021.

Emergency Department Utilization

Emergency Department Multi-Visit Patient Complex Care Plan

OSU collaborated with MetroHealth to add components of MetroHealth's Red Carpet Care Program to their complex care planning. As part of this expansion, they have added additional staff and providers to the interdisciplinary team who create and modify the plans. The current team includes ED doctors, PCPs, specialty providers, a social worker, a CHW, and two case managers. Currently, 15–20 plans are created each month and 320 complex care plans have been created in total. OSU's goal is to have 400 active plans by the end of 2021. Direct patient feedback is obtained through the case managers and the social worker. Feedback received from staff reflects increased staff comfort and decreased moral distress when making challenging decisions about patient care. Moving forward, the team is working on building connections to the Long Stay Committee's personal care plans (to assist with low-volume ED visits, but high-volume stays) and expanding staff with relevant expertise (they recently hired a staff member with an oncology background).

Ohio State University East Immediate Care Clinic

In fall 2021, OSU will open an OSU East Immediate Care Clinic. This clinic will provide urgent care access for walk-in patients and patients presenting with low acuity issues. Operating hours will be 4–10 p.m. during the week and 10 a.m.–6 p.m. on weekends. The initiative was developed based on data showing that 55% of Medicaid patients (n = 5,278) in the Lower East community use the ED for conditions that can be treated in a clinic setting. The clinic can serve up to 6,000 patients a year; 40–50% of the slots will be CICIP funded. The team estimates that 1,000–2,000 ED patients' care can be transferred. Staffing will include one ED physician and possibly a social worker, both of whom will have access to current EMR. They will also be able to draw upon the OSU ED's resources, including connections to ambulatory care and case management. Metrics for assessing the program's effectiveness will include numbers of visits; transfers; successful referrals to PCPs, social work, and care management; and repeat visits within 48 hours.

Healthy Birth Outcomes

Momi PODS

The OSU team continues their efforts to address SDoH among women living in specific, high-risk ZIP codes as part of the Momi PODs program. Though currently offline due to the pandemic, the Momi PODS program's goals are to create a safe home for mothers and babies and to decrease disparities in birth outcomes, particularly among mothers with gestational diabetes. Momi PODs utilizes a community care coach, and partners with Moms2B to engage mothers who are currently followed via telehealth. They will be tracking several metrics, including maternal morbidity, blood pressure control, HbA1c, quality of gestational diabetes care, enrollment rates, completed infant visits, and vaccination rates for the 1st year of life. They plan to expand program capacity from 100 mother-baby dyads in year 1 to 400 dyads in year 3.

Moms2B

The OSU Moms2B Program is a program that was expanded to Dayton, Ohio in 2021. The program is designed to support pregnant women with education, food, and newborn supplies. Moms2B served 600 pregnant women in Dayton

in 2020 and has 312 enrolled this year. The program is currently navigating the transition to a hybrid in-person and telehealth model following the past year, during which all services were provided remotely. CICIP funding supports the salaries of a part-time social worker, an early childhood specialist, two patient navigators, a teaching aide, and part of the salary of the program's medical director, Dr. Kamilah Dixon-Shandley. Based on feedback from patients and providers as well as data regarding referrals, the program made the decision to transition to Epic to facilitate sharing of information as well as ease of referrals. The program successfully transitioned their documentation to Epic in November 2020 and has since received over 200 referrals via EMR workflows. To date, 83% of mothers have attended a postpartum visit, 95% of whom are on Medicaid. Patient feedback surveys are conducted at the end of the visit.

Ohio State University East Obstetrics Expansion

The OSU East Obstetrics Expansion involves the development of an outpatient obstetrics office to address the dearth of obstetrics care available in this neighborhood. Clinic capacity has increased first from 10 to 20 patients per month, and now to 60 patients per month (> 90% Medicaid). As of June, approximately 90 patients have established ongoing care at the clinic, and since April 2021, the clinic has provided care to 216 mothers, delivered 100% live births, reached 89% home or self-care discharges, and performed 245 ultrasounds. An NP delivers care for lower-risk patients while higher-risk patients, including those with mental health issues, are seen by a physician. The team has not yet incorporated screening for social needs into their workflow, as they want to first ensure that they have the infrastructure to address needs that are met.

Women and Infant Home Visitation Program (Nationwide Children's Hospital Partnership)

The Women and Infant Home Visitation Program led in partnership with Nationwide Children's Hospital (NCH), is a complementary program to the Moms2B program in collaboration with the Help Me Grow Program; the goal of the program is to decrease infant mortality. Pregnant women under 28 weeks of gestation are eligible and home visitors currently have a caseload of 25–30 mothers. The collaborative hopes to leverage data collected across hospital sites as well as the insights of the UC Health team to improve the effectiveness and, ideally, the sustainability of the program.

Substance Abuse, Treatment, Education, and Prevention Program; Update on Postpartum Expansion, Hepatitis C, and Parent Groups

STEPP staff members use Specific, Measurable, Achievable, Realistic, and Timely (SMART) goals training, Triple P Parenting, and finance training to better serve their postpartum patients with SUD. In addition to providing treatment, patients' families are also educated on addiction, MAT, differences between MAT and SUD, and options for mother and baby postpartum. STEPP started with a cohort of 14 women at a single clinic, and as of March 2021, was operating out of several clinics, with 50 patients seen weekly. Success of the program is attributed to supportive and close-knit group care, which supports patients in continuing treatment. Through this program, the team has engaged an infectious disease specialist who helps to manage the treatment of postpartum patients with hepatitis C. Historically, this sub-population has been difficult to treat due to provider hesitancy to prescribe medications while patients are breastfeeding; however, seven women in the program have been treated successfully.

Site Visit Participants

Eric Adkins, MD, Vice Chair of Operations
Christina Ayers, Behavioral Health Immediate Care Center Social Worker
Brenda Akins, Associate Director of Population Health
Haley Bauers, ED Social Worker
Brooke Bellamy, Senior Director of Access
Haley Bowra, Social Worker, East Emergency Room
Leisa Boakye-Dankwah, OBGYN Nurse
Stacy Brethauer, MD, General Surgery, Vice Chair of Quality and Patient Safety, Department of Surgery
Mary Cairns, MD, Family Medicine, Psychiatry
Jennifer Carlson, Vice President of External Relations and Advocacy
Jeffery Caterino, MD, Chair of Emergency Medicine
Aaron Clark, DO, Family Medicine Physician, Office of Population Health, Medical Director, ACO
Maged Costantine, MD, Director of Maternal Fetal Medicine
Keri Cooper, Senior Quality Manager in Patient Quality and Safety Department
Kristen Daughters, RN, Nursing Program Manager, Moms2B
Kamilah Dixon-Shambley, MD, OBGYN Assistant Professor; Medical Director of Moms2B

Linda Dodge, MBOE, MBA, LSSBB, Project Manager, Office of Population Health, Post-Acute and Home-based Care Division
Arick Forrest, MD, Vice Dean, Clinical Affairs, President of OSU Physicians and Faculty Group Practice
Heather Frey, MD, Maternal Fetal Medicine, Obstetrics and Gynecology
Martin Fried, MD, General Internal Medicine
Patricia Gabbe, MD, OB/GYN, Founder of Moms2B
Tameka Hairston, BSN, RN, ACM, Manager, Case Management and Social Work
Christine Harsh, Director, Family Medicine Services Ambulatory Care
William Hayes, Director of Health Policy
Amy Headings, PhD, RD, LD (Mid-Ohio Food Collective) Director, Research and Nutrition
Michelle Humeidan, MD, PhD, Medical Director ESR
Phuong Huynh, MD, Family Medicine – Addiction Medicine
Karen Jackson, Director, Center for Virtual Health
Cara Jordan, LISW, Social Worker in Addiction Medicine, Psychiatry
Mohamed Kandeh, MAT social worker, Psychiatric Emergency Services
Emily Kauffman, DO, MPH, Clinical Assistant Professor, Emergency Medicine, Hospital Medicine; Assistant Program Director, Emergency Medicine/Internal Medicine
Courtney Kuyper, Associate Director, OBGYN
Justin Larson, CDCA (Thrive Peer Support) Director of Health Systems
Tina Latimer, Associate Executive Director, Quality and Operations
Edward Levine, MD, Gastroenterology; Medical Director, Prison Medicine and Virtual Health Services
Amanda Lucas, Executive Director, Neurological Institute & Harding Hospital
Alison Miller, Project Coordinator of Addiction Behavioral Health & Opioid Prescribing Activities
Holly Milosevich, Population Health Project Manager
Jean De Dieu Mukunzi, Population Health Project Manager
Shalina Nair, MD, MBA, FAAFP, Family and Community Medicine
Taylor Ollis, MSW, Social Worker
Matt Onorato, LISW, Director of Social Work
Andrea Pfeifle, EdD, PT, FNAP, Associate Vice Chancellor, Interprofessional Practice and Education
K. Luan Phan, MD, Chair of Psychiatry & Behavioral Health
Arun RajanBabu, Data Analytics Specialist
Mark Rastetter, MD, Vice Chair for Community Health
Kristen Rundell, MD, FAAFP, Family and Community Medicine

University of Cincinnati

Selected Interventions

Opioid Safety

Opioid Prescribing Dashboard

The MOUD team has designed and implemented the Opioid Prescribing Dashboard using Epic to track opioid prescribing throughout the organization. The dashboard contains filters for payer, prescriber specialty, prescriber department, patient sex and ethnicity, and MEDDs. Also incorporated into the dashboard are the Pain Stewardship Committee's metrics for quantifying patients with benzodiazepine prescriptions (dose and pill count), tracking patients who receive other therapies for pain management, state monitoring and testing results (e.g., urine drug screen), and naloxone prescriptions. UC Health collaborated with MetroHealth to improve opioid prescribing practices, which supported the creation of UC Health's Practice Enhancement and Collaborative Healing (PEACH) Committee. The committee was formed to conduct opioid prescribing reviews for selected providers to improve patient monitoring and therapy. Monthly Tableau provider reports will be given to selected providers. Providers will receive education and guidelines for adherence with 6-month evaluation and further escalation if non-adherence occurs. The program is currently being tested with one provider.

Standardized Opioid Prescribing

UC Health's Pain Stewardship Committee created a new order set for post-operative pain severity based on the Leapfrog Group's post-operative guidelines. Interviewees noted the alignment of the intervention with the CICIP goals of community and patient engagement. Used in combination with the patient portal, patients receive pain medication

education and schedule post-operative follow-up appointments. Standardized opioid prescribing order sets were rolled out to the Ear, Nose and Throat Division in January 2021. Over 3 months, there were 460 uses of the patient discharge order set, with standard opioid order set utilization of 130. Based on the those that used the standardized order set, ED utilization was 0.07% compared to 1.2% among patients for whom that order set was not used. Best practice order sets for opioid prescribing are now being utilized in the Labor & Delivery, Gynecology, Trauma, and Orthopedics departments.

Medication-Assisted Treatment for Opioid Use Disorder in Ambulatory Program

UC Health's MOUD in Ambulatory program receives patients that have screened positive for SUD, have a history of SUD and are ready for addiction treatment, or are referred from the ED. Patients meet with an addiction counselor who arranges same-day MAT with Addiction Sciences. Addiction counselors provide group therapy over 2 months and linkages for community resources. The Alcohol and Other Drug/Medication-Assisted Treatment (AOD/MAT) in ED Program "Harm Reduction Process" provides needle distribution, safe-sex education, resources to obtain transportation, housing, diabetes test strips, naloxone via the pharmacy, and community referrals to Hamilton County Quick Response Team. In June 2021 the AOD/MAT in ED Program linked 22 patients to treatment.

Naloxone Best Practice Advisory

The Pain Stewardship Committee held a live meeting to discuss naloxone providers' best practices for naloxone use with the aim to decrease overdoses. Since the program's inception, naloxone prescriptions increased 806% (487 to 3,924). The team has noted a decrease in the average number of tablets prescribed from 30 tablets to 28 tablets. Epic issues an alert if a prescription is placed for more than 80 tablets; subsequent prescriptions from triplicates do not trigger a naloxone pop-up. For patients with high copays, free naloxone is obtainable with a quick response (QR) code provided by UC Health. The Advisory also conducted a PDSA analysis around naloxone alerts. Based on their findings, they modified the programming in their EMR system, removed the International Classification of Diseases, 10th revision (ICD-10) code for history of opioid intolerance, and deactivated the advisory for a naloxone refill unless the patient is present.

Behavioral/Mental Health

Bridge Clinic

Stemming from their winter 2021 initiative to increase scheduling, UC Health established a BH bridge clinic. The main goal of the early initiative was to increase follow-up appointments for patients within 7 days of their BH discharge, both to establish a bridge to a long-term psychiatric home for patients and to continue stabilization after acute clinic care. The UC Health Bridge Clinic collaborated with MetroHealth to facilitate patient engagement feedback mechanisms and MetroHealth supplied a list of questions for patients to answer within 1 week. UC Health also learned that the other CICIP hospitals are at various stages in their bridge clinic implementation and use different approaches for interacting with nurses and social workers as well as with community groups.

Currently, the UC Health Bridge Clinic has a 45% follow-up rate for referrals and compliance with clinic-scheduled visits, 90% new referrals scheduled, and 50% of patients complete visits within 7 days. The clinic is working on selecting and collecting data for appropriate metrics to measure project success. Currently, barriers to successful appointment attendance are delineated from the social workers' perspective, although project staff are searching for a validated tool for bridging social workers to use with patients in identifying patients' barriers and needs. Upcoming task force meetings will address closing the equity gap and Population Mental Health Connections. The clinic primarily serves Medicaid and Medicare members.

Greater Cincinnati Behavioral Health Services Collaboration

The partnership with GCBHS has been a productive one. Through UC Health inpatient BH unit, a designated UC Health floor bridge case manager regularly interacts with eligible patients to increase familiarity with them and facilitate the warm hand-off transition to a GCBHS point of contact. Best practice meetings occur 3 times per month and entail data review as well as input and feedback from the GCBHS director and the supervisor for case management. Specific measures being tracked include the number of group referrals and the number of patient follow-ups in 7 days.

ED Utilization

High Utilizer Care Plan Flag Expansion

The UC Health High Utilizer Care Plan Program has four patients enrolled, with five additional patients recently added and six more anticipated to be added this summer for a capacity of 15 total patients (half of whom have Medicaid) with standard active care plans. Identified patients (with a chart review showing hemoglobin A1C [HbA1C] > 9, four ED visits per year, or two inpatient visits per year) are contacted once a week by one of three CHWs (1/2 full time equivalent [FTE] with dedicated CICIP funding) to address social needs and barriers to care. The CHW works with GCBHS in cases where BH services are needed, outside community resources for identified SDoH needs, and the pharmacists to facilitate medication compliance. Barriers to the program's success are CHW's ability to connect with patients, ensuring patients are being captured as seen in healthcare clinics, scheduling at the system level, and health literacy. The program is hoping to add an additional CHW.

Collaboration with Registered Nurse Care Coordinators in the Primary Care Setting

UC Health continues to work on helping patients navigate the healthcare system and reducing inappropriate ED utilization. Collaboration between registered nurse (RN) care coordinators in primary care and emergency medicine clinicians has been established. When a patient presents at the ED, they can be referred to an RN care coordinator by a clinician or by chart review conducted by the CHW based in the ED. A basic needs assessment is conducted to identify barriers for that individual. The program focuses on patients who meet one or more of the following criteria: HbA1c >9, four ED visits, or two inpatient visits in the past year. With CHW assistance, the RN care coordinators conduct outreach, arrange for specialist referrals, establish primary care patient relationships, and perform medication reconciliation and compliance with pharmacists.

ED staff maintains a list of high utilizers, approximately 50 individuals that use the ED frequently and do not have a PCP. The CHW can review patient charts in Epic and then contacts these individuals. At the time of the interview, there were four patients with active flags. Their charts were reviewed, so the CHW could track interventions and follow-ups within Epic; this process also allows service referrals and completion to be tracked. The social work supervisor for this project conducts weekly supervision, trains staff on interviewing skills, and facilitates a weekly huddle with other ED staff; the social work supervisor's salary is funded through CICIP. CICIP funding is used to employ another 1.5 full-time staff; however, the project is seeking funding for the remaining 0.5 needed for another full-time employee, potentially a nurse care manager.

Healthy Birth Outcomes

Early Identification of Patients and Barriers to Care

UC Health's Early Identification of Patients and Barriers to Care Program facilitates early connections to prenatal care. Newly identified pregnant mothers (90% are Medicaid patients, 75–85% are African American) are proactively contacted within 7 days to review SDoH needs (food insecurity, transportation issues for care, smoking cessation education, housing needs, institutional racism, and domestic violence). UC Health has a patient navigator who identifies pregnant patients and facilitates scheduling their first prenatal visit. The navigator has two methods for initial contact: a list from the obstetrics call center and an EMR in-basket message of a positive pregnancy test. Positive cases in the ED flag an in-basket message in real time, prompting the patient navigator to review the chart and contact the patient to schedule an appointment. Patients are made aware that the appointment has been made, and the navigator helps to address any barriers the patient may face. Transportation and food insecurity are the most common barriers, followed by housing insecurity or houselessness, which can be referred to the social worker.

UC Health tracks several metrics, including time from first patient contact to clinic visit, open appointment slots, and follow-up time for rescheduled or no-show appointments. Specialist referrals are obtained as needed for urology, family medicine and other related referrals. UC Health is investigating obtaining a Medicaid grant to sponsor a doula to assist women of color during pregnancy, in the hopes of promoting trust and decreasing extreme preterm birth.

Telehealth Services for Postpartum Visits

UC Health's Telehealth Services for Postpartum Visits (PPV) program utilizes encrypted cell phones to communicate with patients via text regarding upcoming appointments, scheduling appointments, or rescheduling appointments as needed. UC Health's Telehealth Services for PPV program has a signed contract with HCAN to identify the best CHW workflow.

Collaborations with the process improvement team and other task force members provided guidance which allowed UC Health to optimize their patient adherence practices for postpartum care. Patient satisfaction is assessed through an open-ended patient experience survey as well as tracking in Epic.

Community Health Worker or Care Management Integrated into Care Team

The UC Health CHWs continue to support patients utilizing the HUB model to assist patients by addressing barriers to care, particularly those related to SDoH. The CHW receives a referral alert and proactively engages patients through a hospital-encrypted cell phone to schedule or reschedule appointments with real-time tracking on a Microsoft® Excel® spreadsheet. The team is making a concerted effort to assess the needs of individual patients and recognize that barriers and challenges vary even if patients have similarities. This fact is emphasized in their approach to care in general, and to the CHW program in particular. Of note, both staff currently in CHW roles are trained social workers and not certified CHWs. Although the social work training has been beneficial in some instances, the team reports that moving forward, they will only hire CHWs because of their in-depth knowledge of systems and resources.

Site Visit Participants

Kelly Abeln, Manager, Care Management
Evie Alessandrini, MD, Chief Medical Officer and interim Chief Operating Officer
Kara Bortz, Associate General Counsel
Clair Boyle, Manager, Social Services
Marisa Brizzi, PharmD, Pain Stewardship Pharmacist
Christine Burrows, MD, Internal Medicine
Lindsey Cencula, Director, Performance Improvement
Amy Chima, Assistant Vice President, Performance Improvement
Kia Davis, Community Health Worker
Brittney Dickerson, Care Plan Coordinator
Peter Fox, Director, Psychiatry Administration
Lauren Goodwin, Supervisor, Clinical Operations
Katy Hall, Manager, Business Intelligence, Data and Informatics
Trish Hunter, Manager, Performance Improvement
Elizabeth Kelly, MD, Vice Chair, OB/GYN, Community Women's Health
Daulton King, Intake Coordinator
Joel Krazl, Analyst, Business Intelligence, Data and Informatics
Debra Langford, Community Health Worker
Shawna Langworthy, Sr. Director Ambulatory Services
Michael Lesko - Manager, Social Work (also manages the Community Health Workers that support ED Utilization)
Abigail Marker, Interim Director, Telehealth
Cathy Meisel, Sr. Director System Finances
Eli Meyer, Manager, Business Intelligence, Data and Informatics
Kathy Miller, Manager, Social Services
Lindsey Molloy, Intake Coordinator (part of the ED Addiction Services team)
Steven Petrovic, Executive Director, Business Administration
Tracy Pinnell, Addiction Counselor
Mariella Richardson, LISW
Hilja Ruegg, MD, Psychiatry
Stephen Rush, MD, Psychiatry
Rick Ryan, MD, Emergency Medicine Physician
Livia Sabato, Traction Manager
Candace Sabers, VP, Advocacy and Government Relations
Amy Seidel - Operations Director, Ambulatory Psychiatry
Stephen Shehy, Manager, Advocacy and Health Policy
Kim Stauffer, Director, Clinical Services
Erin Thase, MD, Psychiatry
Michael Thomas, MD, Chair, OB/GYN
Nita Walker, Sr. VP, Ambulatory Services
Shelly Wiest, PharmD, VP Pharmacy Administration
Brittany Woolf, PharmD, Clinical Pharmacist
Josh Zetterberg, Executive Director, Business Administration

University of Toledo

Selected Interventions

Opioid Safety

Pain Stewardship Management Module

UTMC's Pain Stewardship Management Module has been updated with best practice "Safety Test Bank" teaching modules, slide sets, and order sets, including dosing plans for providers, physician assistants, nurse practitioners (NPs), and students. UTMC is building capacity to track usage electronically going forward. To date, they have seen lower-than-expected clinician adoption. In the outpatient clinic, pain management has moved to physical medicine rehabilitation sites for improved interdisciplinary engagement. UTMC is creating educational pamphlets on disease processes, diagnoses, treatment options, and other information relevant for both inpatients and outpatients. Twenty (20) are completed and 30 are planned. Rollout will begin shortly.

Alternative to Opioids in the Emergency Department

Using the institution's own order-sets, UTMC promotes alternatives to opioids for pain management. These order sets include non-steroidal anti-inflammatory drugs (NSAIDs), acetaminophen, Toradol®, and ketamines. Nursing resistance to use of ketamines was addressed through clinical education. UTMC intends to assess the success of these interventions by tracking the number of opioid prescriptions in the ED using Epic.

Pain Rehabilitation Program

UTMC hired a pain therapist who, as February 2021, leads the UTMC Outpatient Clinic for Pain Rehabilitation Program. The Pain Rehab Program has both an in-person and a hybrid (virtual) module that teaches a range of non-drug techniques for pain reduction. The team includes a physician, occupational therapist, physical therapist, and counseling services, all of whom patients work with individually. Patients also participate in groups that provide education and support related to pain and pain medicine, as well as attend weekly team conferences to discuss their progress. UTMC's Pain Rehab Program grounded in the biopsychosocial model.

New additions to the program are nutrition education with a licensed dietician, eye movement desensitization and reprocessing (EMDR)-based therapy, holistic and inclusive spirituality sessions, and nurse-instructed, low-impact Tai Chi. To date, 18 patients have been referred to the program, 6 of whom are Medicaid patients; 11 are enrolled and 3 have graduated. UTMC is exploring a quarterly booster session for patients who have completed the program to promote continued engagement. Barriers to faster growth include reduced opportunities to market the program to other departments due to the COVID-19 pandemic, patient hesitancy to engage in program requiring ongoing in-person meetings in the setting of the pandemic, and space constraints associated with maintaining social distancing. The Pain Rehabilitation Team tracks a range of metrics. Informal patient feedback suggests the need for increased focus on quality-of-life improvements.

Expansion of Medication-Assisted Treatment

UTMC has had limited growth in the number of providers and locations offering MAT. Barriers include insufficient training access for clinicians, pandemic-related resource changes, and a lack of local treatment centers available for follow-up. The CICIP team recently met with staff at the Zepf Center who shared ideas and resources to help UTMC further their MAT efforts.

Behavioral/Mental Health

Emergency Department Social Worker

UTMC hired a social worker to work in the ED to connect ED patients with BH services, such as the 50-bed psychiatry unit and hospital detoxification services, and to better facilitate care transitions. The social worker ensures patients have a scheduled appointment with a BH provider within 7 days of discharge, helps to remove follow-up barriers, connects patients to community resources outside UTMC, and collaborates with the Community Outreach Drug and Alcohol Response Team (DART). The social worker's current caseload includes three patients in detox.

Additionally, the social worker supports patients receiving support from the Department of Care Management (DCM) for more extensive youth hospitalization needs and conducts outreach to the Overdose Response Team (ORT). As we heard during our site visit in May/June 2020, this involves the ED, fire, police, and emergency medical services. The DCM has monthly meetings with the ORT, as well as a joint annual meeting with community leaders, judges, DART leaders and a Federal Bureau of Investigations (FBI) designee. This activity is 50% CICIP funded grant and 50% Opioid Response grant. Information regarding this program has been shared with OSU, MetroHealth, and UC Health, as well as with similar community-based programs in Kentucky, Massachusetts, New York, and Pennsylvania.

Expand Behavioral Health Capacity

UTMC is in the midst of a 6-month expansion of BH capacity to family medicine to address unmet needs among children with attention-deficit/hyperactivity disorder (ADHD) and autism, as well as their parents. The Collaborative Care Clinic has 109 children who have been referred over 4 months. Both group and individual therapy sessions are offered in addition to patient education sessions. UTMC is looking to expand the program in the next month to increase access to BH services in pediatric primary care. They will assess the impact of the program by tracking changes in Patient Health Questionnaire (PHQ-9), PHQ-9 Modified for Adolescents (PHQ-A), and General Anxiety Disorder-7 (GAD-7) scores, total number of referrals, and number of completed referrals.

Expand Integration of Behavioral Health into Primary Care Practice

UTMC has expanded integration of BH into primary care to increase access to BH services. There are currently three BH managers in four primary care areas which were selected based on patient volume and needs. Patients are screened with PHQ-9 and referred for BH services as necessary. Over 6 months, 218 referrals were made. Program impact will be assessed through measures of patient engagement, PHQ-9 scores, and GAD-7 scores.

Behavioral Health Telehealth Appointment

From March 2020 to March 2021, 95% of UTMC's outpatient BH visits were conducted via telehealth. Prior to late 2019, UTMC offered no telehealth visits; since then, the team established telehealth administrative policy and the systems necessary to deliver robust and reliable telehealth service. Additionally, they completed education for providers and patients and now have designated staff who can assist patients with any challenges accessing telehealth visits. Based on feedback collected from both patients and providers, the team reported that telehealth visits have improved access to care, particularly by alleviating transportation barriers. The UTMC BH team has seen a significant improvement in their no-show rates, from 17% in January 2020 to 10% in January 2021. They have also implemented individual therapy and group therapy with a mental health or addiction focus, available both in-person and via telehealth.

Emergency Department Utilization

Transitional Care Management

UTMC has established transitional care management to decrease ED utilization. Transitional care managers work with patients in the ED to mitigate the impact of SDoH by connecting patients with services and other supports, referring patients to social workers or BH providers, arranging care management for longitudinal or episodic care, and collaborating with pharmacists and community resources like Area Offices on Aging. All care managers have EMR access, and their notes can be viewed by other providers involved in the patient's care.

Longitudinal Care Management in Family Medicine

Care managers provide transitional care management based on risk scores to help prevent future ED visits. Care managers perform an in-depth assessment to determine root causes for repeat readmissions to the ED or inpatient facilities. Patients receive a "Call Us First" flyer, encouraging patients to contact their care manager and schedule a visit with a primary care provider (PCP). Patients set weekly goals with their care team using Athena Updates®. The patient-centered collaboration between the CM, pharmacist, clinicians, and patients promotes lifestyle changes and care maintenance. Data tracking occurs through CliniSync® and daily interactions with the care team. The care team formally meets twice weekly to discuss patients, value-based care collaboration, community resources, barriers, and successes.

Complex Care

Originally piloted by University of Toledo Physicians (UTP), UTMC has adopted the Complex Care program to decrease ED admissions and address barriers to care for patients with physical, behavioral, and social needs. The program will

start with 12 patients who have had six or more ED visits within the year. UTMC will seek community partnerships as they expand this intervention's reach.

Project DAWN

Project DAWN (Death Avoidance with Naloxone) was initiated in December 2020. This project involves distributing free naloxone kits through the emergency department (ED). Anyone can request a kit by filling out a form. Instructions are included in the kit, and the ED staff is available to provide training in naloxone administration. Naloxone kits are offered to patients being discharged, to their family members or friends, as well as to hospital employees. The system maintains an inventory of 10 kits in the ED. Project DAWN receives a set amount of money from the Ohio Department of Health and orders the kits directly through the department. Because Project DAWN is in its early stages, there has been little data collected and there was no update offered in June 2021.

Healthy Birth Outcomes

Connect Patient Care Management at Delivery

UTMC care managers are involved in coordinating care for patients delivering at ProMedica. Care managers make referrals for postpartum care in the UTMC clinic or family medicine department and address SDoH. UTMC has a partnership agreement with ProMedica to increase postpartum care access. Care managers address social needs through a robust network of social services. Programs to assist postpartum care access include Mom2Baby dyad appointments and Moms+, a collective postpartum learning collaborative. The team faces significant challenges in sharing quality metric data since ProMedica utilizes Epic, while UTMC has a legacy system.

Partner with ProMedica to Increase Prenatal Capacity

UTMC has a partnership with ProMedica regarding prenatal care. Care managers identify high-risk patients and refer them to the high-risk clinic. UTMC's high-risk clinic staff, in collaboration with the ProMedica teaching program, address the patients' clinical and social needs. The team notes that they face several barriers to increasing prenatal capacity, including the presence of a large regional physician group that delivers primarily high-risk Medicaid patients.

Site Visit Participants

Angela Ackerman, Administrative Director of Orthopedic Services & Outcome Management
Courtney Beckwith, MPH, CICIP Program Manager
Marci Cancic-Frey, DPT, MBA, Senior Administrative Director-Clinic Operations
Rosalinda Ditommaso, Sellers Dorsey Project Manager
Jamie Dowling, PhD, Assistant Professor, UT College of Medicine & Life Sciences
Michael Ellis, MD, PhD, Chief Medical Officer
Lindsey Etniear, PharmD, BCPS, AAHIVP, Director of Pharmacy
Danielle Farnan, Project Manager and Value-based Care Program Manager
Nitin Goyal, M.D., Associate Program Director of Pain Fellowship
Renuka Gupte, Ph.D., Senior Program Manager Data Analytics
Danielle Kasack, BSN, RN, Manager of Outcome Management
Ashley Kopaniasz, LPCCS, LICD-CS, Senior Care Manager
Agnes Lasu, MBA, Dept. Administration of Psychiatry
Caitlin Masters, Director of Strategy and Value-based Care
Maribel Mendoza, Ambulatory Care Coordinator
Cheryl Mccullumsmith, M.D., Ph.D., Chair of Department of Psychiatry
Timothy Poplawski, B.B.A, Director of Strategy and Value Based Care
Bryan Pyles, MBA, Chief Financial Officer at University of Toledo Physicians
Keith Riley, PharmD, BCPS, Clinical Staff Pharmacist
William Saunders, MD, Professor, Emergency Director
Ashley Schneider, M.D., Director of Pain Management and Rehabilitation Program
Russell Smith, PharmD, MBA, BCPS, Chief Pharmacy Officer, UTMC
Peter Stebli, Data Analyst
Wendy Steusloff, Manager, Ambulatory Care
James Van Hook, M.D., Chair of Department of Obstetrics and Gynecology
Taylor Walton, Quality Improvement Specialist, Family Medicine
Lindsey Watson, MSW, MBA, Administrative Director of Psychiatry
Ginny York, LPC, Outpatient Administrative Director Psychiatry
Cynthia Zapotosky, RN, Nursing Director

References

[1] Centers for Medicare and Medicaid Services, Section 438.6(c) Preprint, 7/31/17.

[2] D'Amour D, Goulet L, Labadie J-F, et al. A model and typology of collaboration between professionals in healthcare organizations. *BMC Health Services Research* 2008; 8:188. doi:10.1186/1472-6963-8-188.

[3] The measures of collaboration are from: D'Amour D, Goulet L, Labadie J-F, et al. A model and typology of collaboration between professionals in healthcare organizations. *BMC Health Services Research* 2008; 8:188. doi:10.1186/1472-6963-8-188.

Appendix - CICIP System Response

October 8, 2021

Dr. Mary Applegate, Chief Medical Officer
Ohio Department of Medicaid
Mary.Applegate@medicaid.ohio.gov

Dear Dr. Applegate,

Thank you for your ongoing support for the Care Innovation and Community Improvement Program (CICIP). With the first two years of the program being focused on establishing the infrastructure and foundation for the program amongst our four health systems, we look forward to the next two years focused on increasing cross collaboration, advancing two collective learning projects and embedding Performance Improvement principles into our collective work. Additionally, as discussed, we believe that evaluating our progress towards mutually agreed upon metrics and identified outcomes is an integral aspect of our collective learning. We appreciate your openness to receiving our feedback on how the evaluation process can be revised to accurately capture our collective progress and effort.

We are in receipt of the IPRO Final Fiscal Year 2021 Evaluation, and upon review, we've identified a number of items that we would like to discuss with you. However, our primary concern is the IPRO assessment of our progress on "Information Exchange: Level 1: Some metrics have been identified, but there is no data sharing process or platform yet", which they scored as "red". The IPRO assessment that "there is no data sharing process or platform yet" is incorrect. Since establishing process metrics and developing data analytics capability were explicit goals in our FY21 Quality Improvement Strategy (QIS), our work in this area has been documented.

During the evaluation period (August 2020 – July 2021), our health systems:

1. Began process selection and definition in November 2020.
2. Shared initial data submitted for ED, BH and Opiate process metrics in May 2021 with the initial results shared at the June Task Force Meetings. The Healthy Births metrics were finalized at the June meeting for reporting of 2 12-month periods in August.
3. Compiled, analyzed and shared metric comparison reports for the 3 Opiate Prescribing measures and began development of a power BI database to automate dashboard distribution for future reporting.
4. Continue to work through the Data Governance Subcommittee to refine process metric definitions and logic.

Our progress towards achievement of this goal is documented in each quarterly progress report, and we've attached the following documents for your review:

1. Quarterly Reports
2. CICIP 2021 q2_q3 Process Metrics report

We acknowledge that there is more work to do to develop a digital dashboard; however, we respectfully request that the IPRO score be changed to accurately reflect our progress on metric identification and shared data from a Level I to a Level 2, "yellow".

Thank you for your time and consideration of our request. We look forward to hearing from you.

Sincerely,

Dr. Evie Alessandrini
Chief Medical Officer and Interim Chief Operating Officer at UC Health

Dr. Bernard Boulanger
Chief Clinical Officer at MetroHealth

Bernard Boulanger, MD

Dr. Cheryl McCullumsmith
Chief Medical Officer at University of Toledo Medical Center

Dr. Andrew Thomas
Interim Co-Leader and Chief Medical Officer
The Ohio State University Wexner Medical Center