CPC+ Michigan ED and Inpatient Utilization High-Performing Practice Study
Summary Findings

Produced by: The CPC+ Michigan Multistakeholder Care Interventions Subcommittee
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Introduction

Improving performance on emergency department (ED) and inpatient utilization is central to value-based design and optimizing quality of patient care. Accessible, effective primary care can be a key contributor to preventing unnecessary ED and inpatient utilization[1]. Despite its central role and the spread of advanced primary care capabilities, substantial opportunity exists to decrease avoidable tertiary care use[2][3]. Utilization also figures prominently in CMS multipayer demonstration projects such as Comprehensive Primary Care Plus (CPC+) and Primary Care First.

In Michigan, the Michigan Multipayer CPC+ Care Interventions Subcommittee selected ED and inpatient utilization as the basis for analysis aimed at identifying and learning from the best performing CPC+ practices.

Methods

Four methods were utilized to assess and better understand the enablers of high performance:

1) Literature review to identify national high-performers;
2) Compilation of subcommittee-contributed processes and subcommittee member expert insight regarding high-performing national systems;
3) Claims-based comparative performance analysis to identify Michigan high-performing CPC+ practices with low levels of ED and inpatient utilization; and
4) Site visits and interviews with Michigan high performers and national health systems recognized as leaders in team-based care.

The first two methods guided selection of the national high-performing health systems for site visits or interviews. The last two methods leveraged quantitative and qualitative approaches to identify and learn from high performing practices and systems.

Michigan practices in the Comprehensive Primary Care Plus (CPC+) Michigan demonstration, and the Care Interventions Subcommittee of the Michigan Multistakeholder CPC+ Steering Committee worked collaboratively with CPC+ supporting Payers (BCBSM, Priority Health and CMS), 35 Physician Organizations and 399 practices to identify and interview top-performing practices. In addition, on-site or phone interviews were conducted with national leaders in

[1] **doi: 10.1370/afm.1476**Ann Fam Med **May/June 2013** vol. 11 no. Suppl 1 **S19-S26**

[2] Whittaker, W., Anselmi, L., Kristensen, S. R., Lau, Y. S., Bailey, S., Bower, P., … Hodgson, D. (2016). Associations between Extending Access to Primary Care and Emergency Department Visits: A Difference-In-Differences Analysis. *PLoS medicine*, *13*(9), e1002113. doi:10.1371/journal.pmed.1002113

[3] Morgan, D. J., Brownlee, S., Leppin, A. L., Kressin, N., Dhruva, S. S., Levin, L., … Elshaug, A. G. (2015). Setting a research agenda for medical overuse. *BMJ (Clinical research ed.)*, *351*, h4534. doi:10.1136/bmj.h4534

advanced primary care practice. This provided a balance between assessing high performance within the state as well as nationally.

High-performing Michigan practices were selected on the basis of claims analysis that used 10/1/2017 to 9/30/2018 BCBSM commercial claims data of customized HEDIS 2018 specifications for Emergency Department Utilization (ED) and Inpatient General Hospital/Acute Care Utilization (IPU). Maternity visits were excluded from assessment as recommended by the Steering Committee. The Michigan Data Collaborative (MDC) performed the data runs separately for large (750 to 3000 attributed CPC+ patients) and small (fewer than 450 attributed CPC+ patients) practices. Practices that were the lowest 20% in both ED and IP utilization were selected for site visits or calls. Six (6) large practices and four (4) small practices qualified on this basis as best-performers. Visits or calls were completed with all but one (PrimeCare-Novi). These high-performing practices are listed below, along with their affiliated Physician Organization (PO) for the large and small practice groupings.

Large Practices (750-3000 CPC+ Attributed Patients) -- Top 20% ED and IP Utilization Performance

Practice	Physician Organization	Region	Visit or Call Date
DAVID M. BYRENS, MD 215 E Mansion St Suite 2F, Marshall, MI 49068	Integrated Health Partners	Marshall	Friday October 11th 2019 2- 4 pm (visit)
BAY AREA FAMILY PHYSICIANS 34301 23 Mile Road #100 New Baltimore, MI 48047	The Physician Alliance	New Baltimore	Friday March 20th 2020 10-11am (call)
HALLER, HUG & POPP, PC 23800 Orchard Lake Rd Suite 210, Farmington Hills, MI 48336	United Physicians	Farmington Hills	Friday October 18th 2019 3-4 pm (call)
PRIMECARE OF NOVI, PLLC 39555 W 10 Mile Rd Suite 302, Novi, MI 48375	The Physician Alliance	Novi	Interview could not be completed given COVID-19 emergence and quarantine
LAKESHORE INTERNAL MEDICINE AND PEDIATRIC ASSOCIATES 437 120th Ave, Holland, MI 49424	Holland PHO	Holland	Wednesday January 22nd 2020 3-4pm (call)
SMG OKEMOS 1600 W. Grand River Avenue Suite 4, Okemos, MI 48864	Sparrow Medical Group	Okemos	Monday October 7th 2019 4-5 pm (call)

Small Practices (200-450 CPC+ Attributed Patients) -- Top 20% ED and IP Utilization Performance

Practice	Physician Organization	Region	Visit or Call Date
KOZMIC FAMILY PRACTICE 1003 E Mount Hope Ave, Lansing, MI 48910	McLaren Physician Partners	Lansing	Wednesday January 15th 2020 2:30-3:30 pm (call)
ALIMENTI FAMILY MEDICINE 405 Momany Dr Saint Joseph, MI 49085	Lakeland Care, Inc.	Saint Joseph	Friday October 11th 2019 10am-noon (visit)
PROMED MATTAWAN Kalamazoo, MI 49048	Promed Healthcare	Kalamazoo	Friday October 4th 2019 3:30–4:30 pm (call)
BRIDGEPORT FAMILY PHYSICIANS 6614 Dixie Hwy, Bridgeport, MI 48722	Primary Care Partners	Saginaw County	Friday September 27th 2019 noon-1pm (call)

The analysis was replicated on a second period through 9/30/2019 with three practices in the best performing 20th percentile appearing in both rounds of analyses. Additionally, of the eleven practices with high performance on ED and inpatient utilization in the second round of analysis, six of the eleven were affiliated with the Genesys Physician Organization (PO). Interviews were thus conducted with the PO, and two of the high-performing Genesys practices as follows:

ASCENSION MEDICAL GROUP GENESYS KEVIN YOUNGS MD	Genesys PO	Grand Blanc	Monday July 27, 2020 (call)
ASCENSION MEDICAL GROUP GENESYS THERESA THOMAS DO	Genesys PO	Clarkston	Wednesday, August 12, 2020 (call)

The Subcommittee Chair and Convener notified the Physician Organization (PO) associated with each best-performing practice (or the practice directly, depending on PO response) of their practice's best-performer status. Requests were made to each of the ten practices for site visits or calls to discuss the techniques, structures and processes of care used that might contribute to the exceptional emergency department and inpatient utilization performance. Interviews (calls or site visits) were conducted with each practice guided by a standardized interview guide designed for the study.

Practices were asked to involve a primary care practitioner (physician, nurse practitioner, physician's assistant, etc.) or clinician from the practice, as well as care management, quality/utilization expert, information management expert, and administrative team member in the call or site visit. At a minimum, all practices were asked to involve at least one clinical partner and one administrative partner who were familiar with the practice and its processes. In preparation, the subcommittee researched available information about the practices to familiarize the interview team with each practice's characteristics, patient on-line review feedback, and public comparison profiles. Care was taken to honor practice preferences in the timing of the calls and visits in recognition of patient care schedules. Each was also asked

if there was information (payer mix, PO/practice interaction, etc.) about the practice or organization that they wished to share with the team in advance of the visit or call. In advance of each call or visit, practices were given the interview protocol and asked to complete a short web-based survey (Appendix 1) to inform about EHR system, care team composition, etc. Practices were also sent an interview guide that provided examples of areas for discussion (Appendix 2). The finding summary for each subset (large, small) of practices are contained in Appendix 3, along with overall total findings.

Results found in the initial nine interviews were consistent with the two practice interviews and PO interview conducted in the subsequent round that used updated claims data.

National High-Performers

National high-performers were identified by a combination of expert recommendations and a literature review to highlight practices, groups and systems with strong utilization performance and success in preventing avoidable inpatient and ED visits. Interviews were conducted by the subcommittee with the following groups:

- ChenMed
- Iora Health
- Duke
- Healthcare Partners
- Central Ohio Primary Care Physicians
- Concerto
- Oak Street
- Geisinger
- Stanford
- Ochsner
- Dartmouth
- Agilon
- VillageMD
- Harvard

Five high-performing groups were selected for site visits and in-depth interviews (Agilon, Village MD, Geisinger, Stanford, and Ochsner). All included discussion with care teams and system leadership. Three groups (Geisinger, Stanford and Ochsner) provided in-depth discussions and shared process flows and documentation. These findings for these three national high-performers are contained in Appendix 4.

Results and Key Findings

The Michigan and national high-performer interview and site visit data was tabulated and assessed. When the results of the Michigan high-performer interviews and site visits were combined with those from the National Leader site visits, interviews, and in-depth explorations

(Appendices 3 and 4), the following six themes were consistently present in the highest performing practices:

1. **Physician engagement drives patient and practice team engagement and promotes a practice culture that embraces adapting innovations to improve care regardless of setting (large or small practice; part of a health system or independent).** This was the case in all of the high performers studied. Bay Area Family Physicians, for example, characterized "PCP attitude and team championing" as the pivotal factors behind their success. Similarly, at Stanford, the cofounder of the Stanford Coordinated Care model noted that ensuring staff empowerment were part and parcel of high performance.

2. **Co-located, engaged teams with care management at the core are key. The size of team does not matter but co-location does.** Co-located (rather than centrally-housed) care management and care coordination staff team members greatly improved the ability of members to share information and coordinate team-based care. The only exception was for transition of care (TOC) outreach.

   In some of the practices and systems visited, teams literally bumped into each other during the course of a day given the close quarters. Seeing each other frequently throughout the day seemed to prompt additional opportunities for inter-team dialogue and communication. In high performing practices, longitudinal and episodic care management was always conducted by the practice team (instead of centrally). Additionally, all high-performers incorporated daily huddles. Whether scheduled or impromptu, "huddling" was a central part of how the team delivered care. At SMG Okemos, the Care Managers office space is purposely near the checkout window to maximize interaction with and visibility to patients, and the Care Managers mentioned the importance of building trust with each PCP that they worked with. At Alimenti Family Practice, not only are there PCP/team huddles at 5:30 each day to prepare for patients scheduled the next day, there are also twice a week clinical huddles with the full clinical team and monthly all-team meetings where success is celebrated and where a review of any crises were reviewed for process improvement.

3. **Offloading routine tasks (e.g., medication refills, gap closures) from the PCP workstream frees physicians to focus on patient needs and championing team-based care.** When practice teams "ready" the PCP for a productive visit with a patient, PCP satisfaction increases and so do outcomes. In high-performing practices, for example, patient care gaps were closed prior to or during the visit by care team members. Examples of gap closure included ordering labs such as A1cs, cancer screening and other preventive services, Social Determinants of Health (SDoH) screenings, depression screenings, coding gap opportunities, and medication adherence, refills, reconciliation and management. At Geisinger Health System, an "Anticipatory Management Program (AMP) to close care gaps in advance of the visit. At Village MD, certified coders review patient charts in advance of their visit, with integrated prompts in the EHR to enhance accurate and complete coding.

4. **Availability and responsiveness to patient needs *as well as patient awareness of the availability* mattered more than extended hours. Though hours outside traditional 8am-5pm practice operations can be very helpful for those whose schedules cannot accommodate standard workweek hours, they are not useful to patients if they are consistently filled or cannot accommodate an urgent need. More important is the patient's ability to have clinical expertise that responds to patient questions and needs quickly. Patient calls were returned the same day, and in some high-performers, within the hour.** At Dr. David Byrens' practice, for example, patient calls about clinical matters were returned by a clinician the same day, and when possible within an hour of the patient's call. When patients know that they can get responses in a timely way, their trust in the practice increases and they can "count on the provider and practice having their back". In all of the Michigan high-performing practices, teams went out of their way to "never turn patients away" that presented or called with same-day needs. The practices worked hard to decrease patient anxiety and provide them with helpful information. Patients requesting same day servicing were either fit into an open slot or in many case, the team extended their work day to allow for patients to be seen.

5. **Performance reporting integrated in regular team huddles or communication drives attention to and accountability for performance. Sharing provider-level performance regularly similarly motivated improvement among individual providers.** Several practices interviewed noted that "No one wants to be at the bottom of the ranking." Similarly, at on-site practice visits, without exception, performance reporting charts could be seen in areas where team members congregated whether the lunch room or charting area, underscoring the open sharing of practice performance to all team members. At Ochsner Health, systematic and sophisticated reporting is reviewed by teams and shared regularly with teams to provide line of sight understanding of current metric performance.

6. **High performing practices had a method for identifying patients that would benefit from interventions (e.g., care management, self-management programs; remote patient monitoring; etc.) All high-performers studied readily recited their "triggers" for intervention and care management.** At SMG Okemos, for example, a Care Manager is a part of patient visits for those with A1cs over 9, Chronic Obstructive Pulmonary Disease (COPD) and Congestive Heart Failure (CHF) patients. At Alimenti Family Practice, diabetic patients with out of control limits have a minimum of four visits per year and those within control limits have two visits per year. As well, Alimenti uses a complexity scoring systems including factors such as whether the patient is age 85 or older, has uncontrolled diabetes, CHF, depression, cognitive issues, or a Social Determinants of Health (SDoH) unmet need. Discharges were also a common trigger. At one impressive high-performing practice, Kozmic Family Practice, a "Bridging Clinic" served to coordinate post-discharge experiences for recently discharged patients as part of their transitional care management approach. In the practices and systems studied, ADT outreach calls and gap closure calls were the only two functions that, though often performed within practices, were sometimes performed centrally in the high-performers studied without compromising outcomes. Both models worked as long as they were used systematically and connected the patient to the primary

care practice quickly for follow-up.

In addition to the common key areas that drove high performance cited above, we also identified common challenges among the Michigan and national high performers, including:

Patient engagement – Even though provider engagement was a precursor of patient engagement, patient engagement was seen as a growth area where additional depth was critical, particularly for "invisible patients" who are on a practice's roster or attribution list, but who do not come in to the practice of their own volition.

Access to timely, actionable data – For many, data was not "real-time" and in some cases, lagged several months to a year. Few practices and systems could point to a "single source of truth" that generated comprehensive user-friendly reports.

Alignment of physician compensation with value-based design – Physician compensation tended to be driven by volume-based, RVU-driven activities, rather than aligned with value-based design (e.g., capitation, high levels of two-sided risk, etc.)

Behavioral health – Incorporating behavioral health solutions into the care delivery model remained a challenge to systems and practices. Access to behavioral health resources, integration of behavioralists and effective self-management programs were all mentioned as continuing aspirations.

Other challenges mentioned included: 1) scaling programs after successful pilots; 2) specialist engagement; and 3) public health and social determinant of health-related challenges.

Limitations

The analysis provides insight into the factors that underlie effective team performance in improving ED and inpatient utilization. Due to fortunate timing, almost all of our work was completed in advance of the COVID-19 pandemic outbreak. However, our study has several limitations:

- The claims data available at the time of analysis was limited to BCBSM commercial and CMS patients.
- The subcommittee recommended identifying small practices as those with 450 or fewer CPC+ attributed patients, and large practices as those with 750 or more. Thus, practices with between 450 and 750 patients was excluded from analysis due to operational definition of "large" and "small" practice sizes.
- Risk adjustment was not available from the data used for the study. However, proxies for differences in underlying patient risk burdens were used including comparison of mean patient age and Medicare HCC score.

Discussion

Accessible, effective primary care can be a key contributor to stemming avoidable ED and Inpatient utilization. To better understand the best practices and techniques used by Michigan CPC+ practices,

BCBSM commercial claims were analyzed to identify the practices with the lowest emergency department and inpatient utilization. Several highly-respected national systems with reputations for high performance in tertiary utilization and value-based design were also selected for analysis. Interviews and/or site visits were conducted with nine Michigan practices and three national systems. A standardized interview survey questionnaire guided the discussions with high-performers. Results were compiled, highlighting the following six key themes:

- Physician engagement drives patient and practice team engagement and nimbleness within practice in adopting innovations to improve care regardless of setting (large or small practice; part of a health system or independent).
- Co-located, engaged teams with care management at the core are key. The size of team does not matter but co-location does. In some of the practices and systems visited, teams literally bumped into each other during the course of a day given the close quarters. Seeing each other frequently throughout the day seemed to prompt additional opportunities for inter-team dialogue and communication. Team huddles were an important part of that communication and preparation to meet patient needs.
- Offloading routine tasks (e.g., medication refills, gap closures) from the PCP workstream frees physicians to focus on patient needs and championing team-based care. When practices teams "ready" the PCP for a productive visit with a patient, PCP satisfaction increases and so do outcomes.
- Availability for and Responsiveness to patient needs mattered more than extended hours. Though hours outside traditional 8am-5pm practice operations can be very helpful for those whose schedules cannot accommodate standard workweek hours, they are not useful to patients if they are consistently filled or cannot accommodate an urgent need. More important is the patient's ability to have clinical expertise that responds to patient questions and needs promptly, usually within 2 hours, but always in the same day (via phone, etc.).
- Performance reporting integrated in regular team huddles or communication drives attention to and accountability for performance. Also helpful for group practices is sharing provider-level performance regularly to motivate improvement among individual providers. "No one wants to be at the bottom of the ranking.".
- High performing practices had a method for identifying patients that would benefit from interventions (e.g., care management, self-management programs; remote patient monitoring; etc.) and used that to select patients for care management services.

Better understanding how high-performing practices achieve their utilization success provides an opportunity to share best practices and learnings with others. It is only by learning and sharing can we as a nation grow in our capacity to achieve team-based care and provide improved experiences and outcomes for patients.

For information about the study or findings, please contact Diane Marriott at dbechel@umich.edu or 734-740-0511

Appendix 1: Questions on Pre-Interview Web-Based Survey

1. Which EMR does the practice use?
    - Epic
    - NextGen
    - Athena
    - Allscripts
    - eClinicalWorks
2. Do you use any other systems (registries, population health management modules, etc.) that reside outside of your EHR?
3. Does the practice receive and use Admission, Discharge, Transfer (ADT) alerts across your patient panel? Is the information integrated within your EHR?
4. Has your practice participated in any special projects or focused programs on ED and inpatient utilization since 2017?
5. Is your practice involved in shared savings programs or ACOs programs?
6. Does your PO support your participation in CPC+?
7. What does the leadership structure in your practice look like?
8. Has your practice had any special issues (e.g., period of rapid staff turnover, marked change in patient panel characteristics, change to a new EHR, etc.) that have impacted the practice since 2017?
9. What is the composition of the care team in your practice located within the practice (e.g., PCPs (MD, DO, NP, PA), RNs, LPNs, Medical Assistants, Front Office Staff, Social Workers, Care Managers, Pharmacists, Community Health Workers, Embedded Coders, Scribes, etc.)?
10. Does the practice provide visits outside the clinic (e.g., home visits, extended care facility visits, telehealth visits, etc.)?

Appendix 2: High-Performing Practice Interview Guide*

The following questions relate to the domains of interest as well as specific interview questions under each domain. Questions were adjusted as time permitted in the visit or call, and those that could be addressed in advance of the call or visit were be excluded from discussion.

Interviews proceeded as follows:

Each question was asked about the factors most influential to their superior utilization performance, particularly:

1. If you had to identify the single most helpful thing that your practice does to achieve the gains you have made in appropriate ED and inpatient utilization, what would it be?
2. What are your biggest learnings from a care team perspective that have helped you to be successful?
3. What are the biggest barriers that you have overcome to date?
4. What are the biggest barriers that you have yet to overcome?

For site visits, the practice teams received tours of the practice site that focused on how a patient might progress through the space. For calls, this was described verbally. For the remainder of the call or visit, each practice was asked to select up to four of the areas listed below. If there were items that were not listed, practices were free to substitute topics that they felt were important.

1. **ED and Inpatient Utilization Reporting and Awareness**
    a. Does the practice have a person identified at the EDs with the largest admissions in your population who can be reached when there are issues, etc. that require outreach?
    b. Does the team receive information about ED and inpatient performance over time? Is this at the practice level? Physician level? Etc.?
    c. Do you have relationships with community resources that can help with unmet social determinant of health needs that may impact a patient's use of EDs and hospital inpatient usage?
    d. What does point-of-care reporting (e.g., easy-to-see patient risk levels; patient "face sheet" with only the key information pre-visit) look like in your practice?

2. **Care Team Composition and Integration**
    a. How many staff are involved in care delivery and what is their licensure mix?
    b. How long have they been part of the office or in this kind of role?
    c. How does the team work together to provide team-based care?
    d. Approximately what percent of patients in an average month receive episodic care management? Longitudinal care management?
    e. What kind of administrative resources and staff are available to the team and how do administrative (non-clinical) and clinical staff interact?
    f. What motivates the care team?

g. Is there reach-outs to rising risk members who don't come in to the office otherwise?
h. Do PCPs provide "warm hand-offs" to invite patients to work with Care Managers, etc.?

3. **Huddles and Using Data for Awareness and Improvement**
    a. How often does the care team huddle? Who does the huddle involve? Are non-clinical staff involved as well?
    b. What kinds of data are shared at huddles and team meetings? Is there any ED or inpatient usage information included? What is the frequency and method of report sharing?
    c. Does the practice use huddle boards to exchange information?
    d. What does the practice perceive to be most impactful in high performance in utilization outcomes measures?
    e. What tactics does the care team use to work together/keep each other informed of patient progress?
    f. Is comparative reporting (i.e., your PO, practice, and PCP performance on measures like ED and inpatient use as contrasted with the performance of others) shown to PCPs and/or care teams?

4. **Patient Engagement and Care Team Delivery/Operations**
    a. What workflows or other process documentation do you use that contributes to prevention of unnecessary ED or inpatient visits?
    b. What kind of outreach is done for patients who experience ED visits? Unplanned inpatient stays?
    c. How are patients made aware of alternatives to EDs and when to visit EDs?
    d. What does reach-out look like for patients with ED visits? With unplanned inpatient visits?
    e. How does the practice prioritize patient engagement with the extended care team?
    f. How are pre-visit planning and referrals addressed?
    g. What is most successful about how your care team operates and engages with patients?
    h. Are there particular workflows around disease state, communication, transitions of care that really work well?
    i. Who is the most effective listener in your practice to discern patient concerns?
    j. How does the practice incorporate motivational interviewing or similar techniques?
    k. Are patient and family advisory councils used to gain insight about patient engagement and communication?

**Interview questions were informed by the work of Ed Wager and colleagues in "Effective Team-Based Primary Care: Observations from Innovative Practices" (Wagner et al. BMC Family Practice (2017) 18:13, DOI 10.1186/s12875-017-0590-8), as well as Christine Sinsky and colleagues "(Sinsky CA. Improving office practice: working smarter, not harder. In: Family practice management. Leawood, KS: American Academy of Family Physicians, November/December 2006:28-34).*

They were also informed by the CPC+ Multistakeholder Care Interventions Subcommittee and supporting teams (Multistakeholder Primary Care Initiatives Team, Michigan Care Management Resource Center, etc.) at the University of Michigan made possible by CPC+ commercial payers.

Appendix 3: Michigan High-Performing Practice Findings: Round One (10/1/2017 to 9/30/2018 BCBSM commercial claims data analysis)

Practice Group	Small Practices (N= Four Practices)	Large Practices (N= Five Practices)
PO Support of Practice	Three have support from their PO	Three have good support from their PO; Two function independently
ACO Participation	None are ACOs	One is in an ACO
CM and Patient Load/Day	Care manager roles range significantly in scope and focus; All have some alerting or reporting for gaps in care and high risk	Models vary (some focus on highest risk patients; others on those outside control thresholds; etc.) Mean number of CM patient interactions per day was six
Hours Beyond 8am to 5pm	Instead of extended hours, PCPs accommodate patient needs by lengthening workdays as needed to accommodate those requesting same day servicing ("we never turn a patient away")	All have extended weekday hours with three having Saturday hours as well
Same Day Access Provisions	All emphasize the importance of same-day access and extend their workday to accommodate same-day patient requests	All save at least 30% of their slots for same-day visits; Practices tend to see ED visits as "failures"; One has nurse next-day calls to patients that present at the ED
Staffing	Varies; Most use RN, MA Care Manager and front office staff; Some also have pharmacists, billers, etc.	Various staffing models; All use <As, RNs, RNs, with some also using LPNs, embedded coders and scribes
Huddle and Patient Prep/Review	Most have some same-day huddle between CM and PCP at a minimum to review pts on schedule, identify good CM candidates, identify gaps in care and SDoH needs, etc.	All use some form of huddle with a focus on colocation of care team; Most used morning huddles supplemented by impromptu huddles during the day as time allows
Handoff to CM Policy	All use warm hand-offs with PCP introduces CM and invites patients to partner with them; Many have protocol for CM touchpoints (e.g.,4 visits/yr for uncontrolled diabetics; 2 for controlled; CM focus on high complexity patients (variables include age over 85, uncontrolled diabetes, CHF, depression, cognitive issues, self-pay patients, patients with unmet SDoH needs	Mixed approaches to CM warm hand-offs; In some practices, PCP introduces CM to patient and asks patient to partner; in others, CM calls or talks to patient and lets them know that the PCP requested that they work together
Orientation for New Patients	One of the four has a formal orientation for new patients; All have PCPs outline what patients can expect from the practice and what the practice expects of patients at the first visit	None have formal processes but most establish some expectations in first visit with PCP (what the practice will expect from them, what they should expect from the practice)
ADT Receipt	All receive and monitor/act on ADTs	All receive ADTs and outreach to patients (most on complete panel); One practice has very good relationships with discharge planners at local hospitals who reach out to them
EMR	Most use Epic	Various EHRs (only one uses Epic)
Transition of Care Patient Outreach	Most (three out of four) do TOC from the office with one using centralized outreach; Some PCPs follow up with patients in ED via phone	Four do TOC calls from the office; One uses centralized system TOC outreach
SNF, Home Health Communication	Three of the four practices coordinate with SNFs	Two coordinate with home health agencies
Home or Virtual Visits Offered	Three of four round on the hospitalized patients; Some coordinate with local hospices as well	Two practices do home visits, when needed

The Round Two interviews (using claims through 9/30/2019) affirmed the Round One findings above.

Appendix 4: National High-Performing Systems Findings

Group/System	Geisinger	Stanford	National Leaders
At Risk Contracting	Heavy MA exposure; Geisinger Health Plan	Significant MA and self-insured group exposure; Decreased ED use by 60% and inpatient volume by 30%; Moved away from RVUs entirely (compensation has quality, PEC and TCOC bonus opportunities)	All have significant exposure to two-sided risk via MA plan and/or System Health Plan
CM and Patient Load/Day	Physician panels are 2100 risk-adjusted patients/physician; 1800 for PA, NP; If patient is over 65, routine appointments are 40 minutes; Care managers handle twelve telephone and in-person encounters per day on average	Stanford Coordinated Care model; Also have Stanford High Use clinics with patient panels of 300; MAs handle 500 patients at most practices	Varying Care Manager and physician ratios to patients; All use some kind of special clinic for high need patients with small panels and intensive outreach
Hours Beyond 8am to 5pm	8-8 M-F with Saturday and Sunday hours	8-5 M-F with visits outside those hours primarily via video visit or via Stanford Express Clinic	All accommodate extended hours
Same Day Access Provisions	Attempts to accommodate patient requests same-day, but Geisinger Convenient Care urgent care and video visits are alternatives for patients	If cannot be accommodated same-day, will offer video visit or refer to Stanford Express Clinic (9-9 hours)	All have video visits and urgent care center access for same-day spillover
Staffing	Anticipatory Management Program (AMP) is focused on closing gaps in via remote employees RNs do wellness visits; Also staff Acute Care Treatment Areas where RNs handle IV therapy, foley catheters, etc.; Physicians have four day workweeks; Some co-located coders; medication specialists embedded in practices; clinical transformation specialists ("workflow ninjas")	Colocation really matters; MA-focus to support physicians; Scribes in most clinics; Bonuses to front line staff for closing gaps, etc.; Emphasizes staff empowerment and autonomy; Standardizes what needs to be done rather than how to do it	On-site care team colocation was consistent among all national leaders; Mixed use of remote and onsite gap closure specialists

Group/System	Geisinger	Stanford	National Leaders
Huddle and Patient Prep/Review	If patient has an A1c greater than 8, they are featured in huddles (morning and midday); Whole team huddle approach including non-clinical staff; advance care planning emphasis	Patient Activation Measure (PAM) utilization results reviewed in huddle along with proactive review of patients to be seen; Frequent formal and informal huddles throughout the day	All have regular huddles
Advanced Analytics	Extensive and regular reporting with AI and natural language processing integrated; Platform for ensuring HCC burden is captured;	Regular metrics reporting with sophisticated data analytics (very user-friendly red/green/yellow reporting)	All believe strongly in real-time (as much as possible) performance reporting that compares to benchmarks and is seen by team
Primary Care Management	Monthly medical home meetings with health plan staff where ED usage is reviewed; Weekly all-staff huddle on metric performance; Focuses on real-time data ;Quarterly all-physician breakfast meetings (includes review of cases with three or more ED visits, chronic kidney disease, diabetic, depression); System believes that primary care is the face and footprint of Geisinger; Belief in "listening to the docs first.	Teams and team led model; Focus on all-staff communication	Mix of top-down and bottom-up management approaches
Digital Platforms	Video visits; Extensive portal usage	Some telemetry; video visits	All have video visits; Portal usage featured throughout
EMR	Epic	Epic	All use Epic
Transition of Care Patient Outreach	Centralized	Within office	Mix of remote and on-site TOC outreach

For information about the study or findings, please contact Diane Marriott at dbechel@umich.edu or 734-740-0511