

What is patient safety in the medical home?

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Patient Safety in the Ambulatory Setting

- Patient safety focuses on the prevention of harm
- Most research on patient safety conducted in the inpatient setting
- BUT primary care is different. Greater importance on:
 - Coordination between clinicians and settings
 - Dependence on individual clinicians to support patient safety efforts
 - Engagement of patients and families

Patient-Centered Medical Homes (PCMH)



- High performance model of primary care provision
- Comprehensive, coordinated, patient-centered, accessible, and safe care
- NCQA is the most widely adopted PCMH evaluation program. Approximately 13,000 practices (with 67,000 clinicians)



Study Objective:

To qualitatively evaluate patient safety in the PCMH setting by identifying perceived safety issues as well as actionable strategies to improve care in the ambulatory setting.

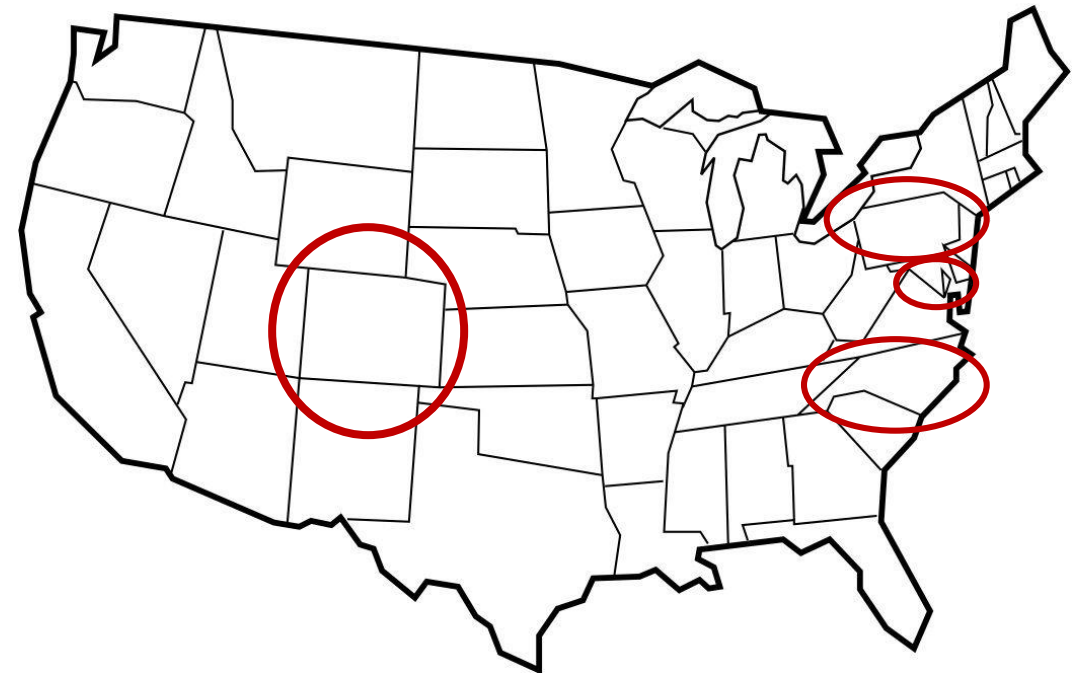
Study Setting and Participants

Sites

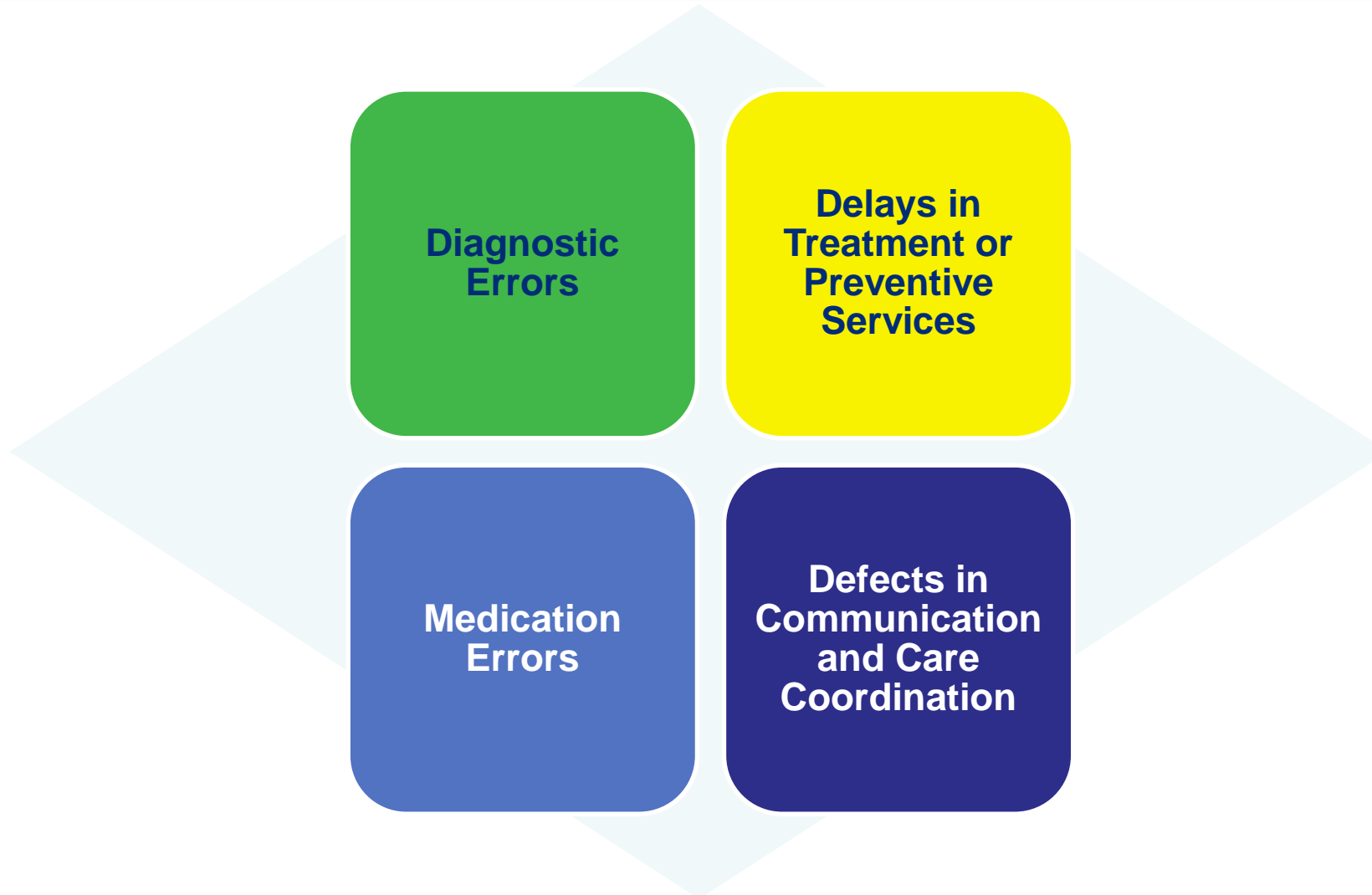
- 10 Level 3 Patient-Centered Medical Homes (PCMHs)

Participants

- **Clinician and staff interviews** (N = 89) with 101 individuals
- **Patient focus groups** (N = 12) with 65 individuals
- **Patient observations** (N = 79)



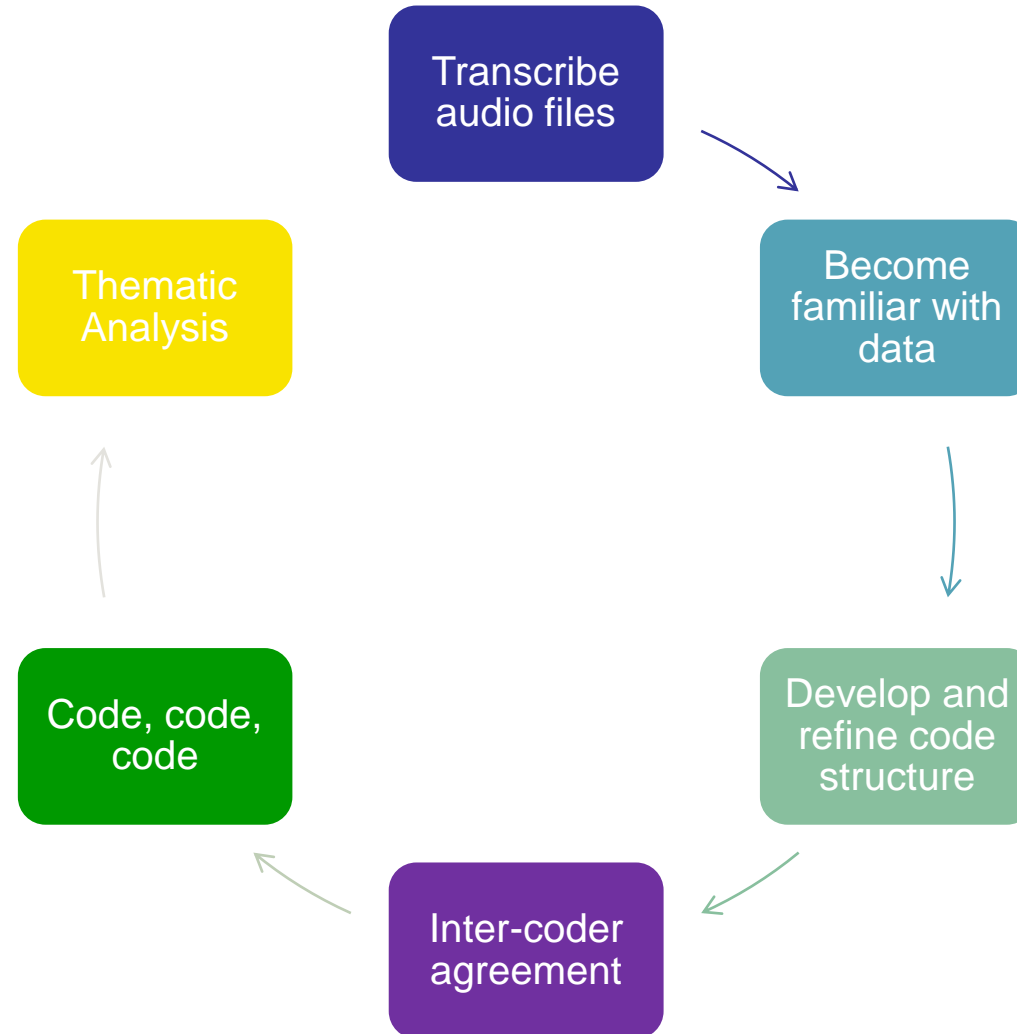
Patient Safety Domains



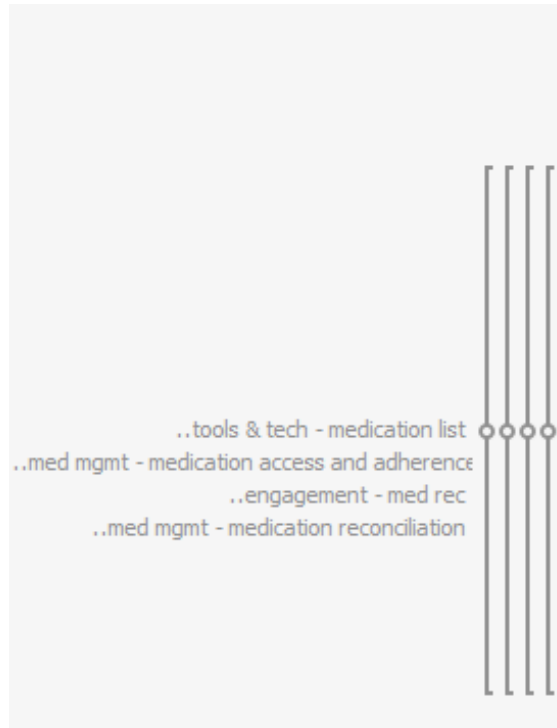
Data Sources: frequency of quotes

Domains	Clinician and Staff Interviews	Patient Focus Groups	Observations
1. Diagnostic Errors	77	51	22
2. Delays in Treatment or Preventive Services	128	123	68
3. Medication Errors	238	66	108
4. Communication and Care Coordination	470	177	122

Data Analysis

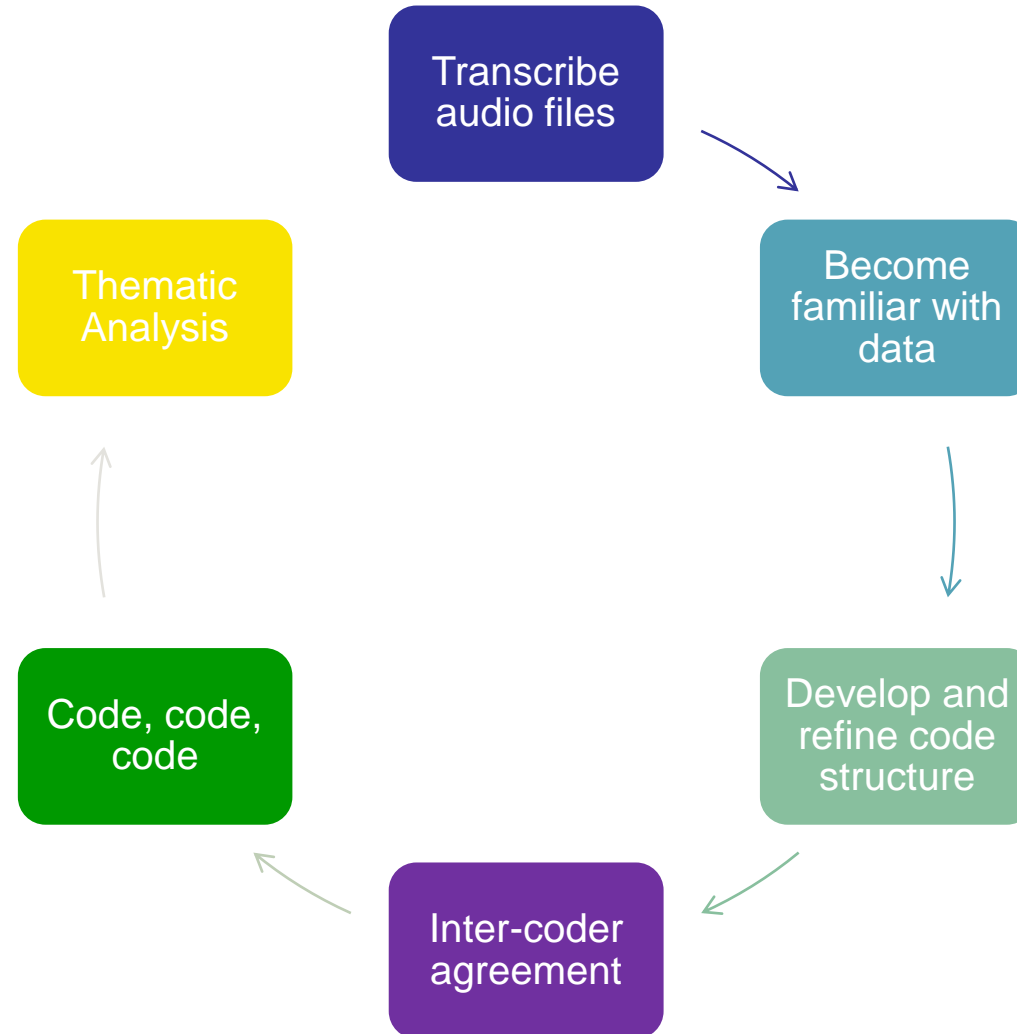


Coding

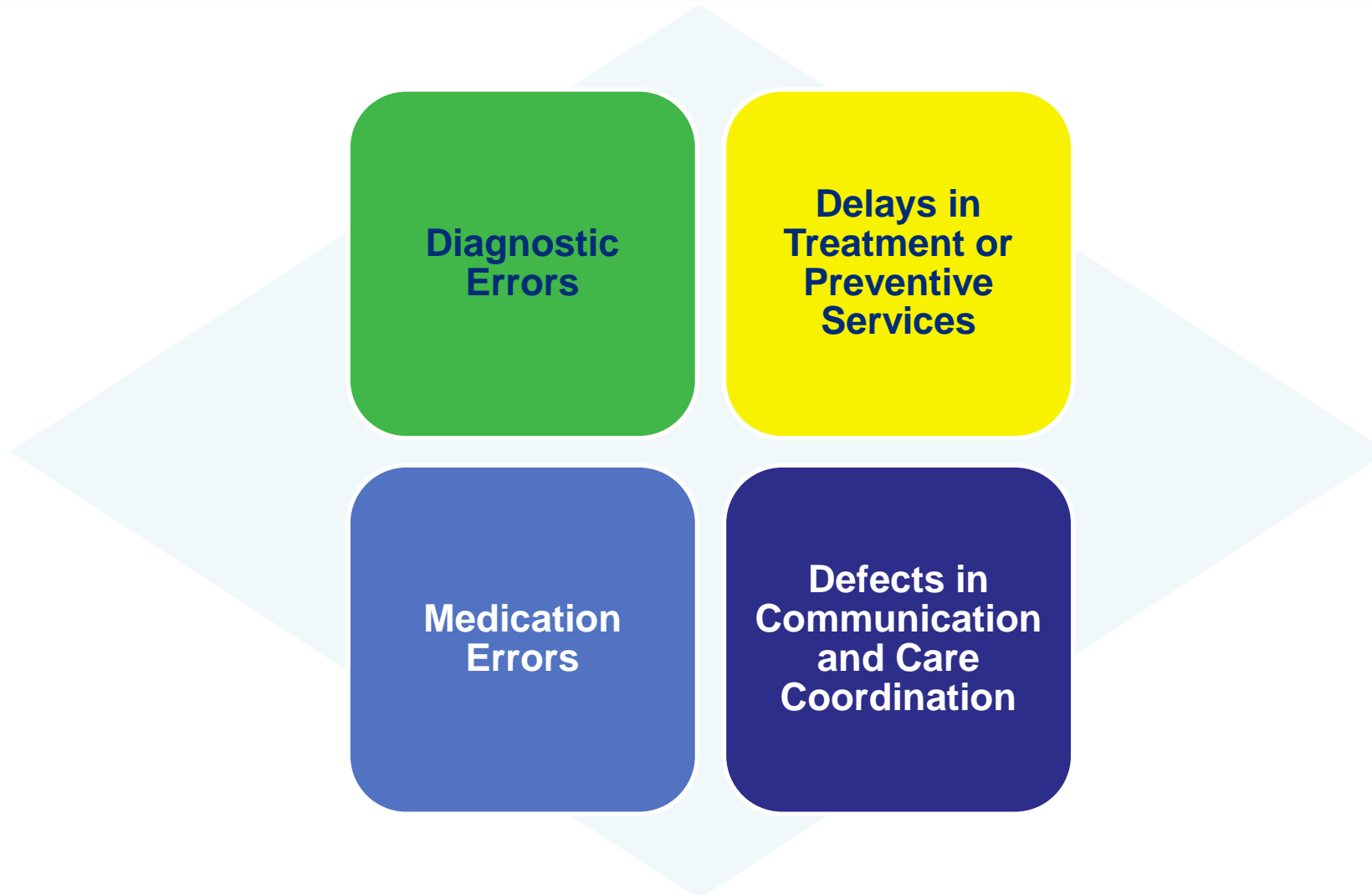


- 25 Interviewer 1: Okay, great. Are there any practices, processes, or tools in the clinic that stand out to you as being particularly effective in addressing some of the issues that we've been talking about? Especially with those four? ^
- 26 Female Participant: Yeah. So, one thing that we put in, I guess over two years now, was the medication list report. So, we worked with our analytics and reporting team to create a handout for patients that prints and kind of takes their... and I'm sure they have it downstairs that I can show you, but when the patient checks in, it takes their current medications, as they exist in the system, and prints them, and then it shows the sig, who prescribed them, and what they're taking it for. And there's instructions at the top of that from that ask to indicate if you're still taking it, don't do anything. If you're not taking it, put an X through it, and if you have questions, circle it or write the questions and then we trained our medical assistants to review that with the patient and again, they will circle with a red pen instead of the black pen what the questions still outstand for the provider, and then the provider will be... but then we've had... now we have multiple lines of defense in minimizing those medication errors. Also, on that from is the patient's allergies, so we're better capturing the medication allergies and then there's some other questions about like, tobacco, weight, and depression.

Data Analysis



Results



Domain 1:

Diagnostic Errors



How is this domain thought about?

Incorrect

Delayed

Missed

“ I don't know that we see any incorrect diagnoses. I imagine there probably are, but I don't hear of that. ”

-- Medical Assistant, Site 3

Perceived Challenges

- Barriers accessing test results from specialists or hospitals who do NOT share a common electronic medical record (EMR)
- Communication failures between the PCMH and patients
- Lack of time for clinicians to collect and synthesize patient information

“ Our providers are always a little bit on the overwhelmed side and just try to keep up on the day to day and try not to get too far behind... I think we struggle to give our providers enough administrative downtime to really synthesize the information that's coming back on their patients and so I think the chance for delayed diagnoses are really the biggest concern. I think our providers are really good. I don't think we're going to miss it and I don't think it's going to be incorrect, but I think it may take us longer than it should. ”

-- CEO, Site 3

Strategies to prevent diagnostic errors

- Using the EMR system to track test results, flag abnormal results, and document changes to the patient's problem list
- Having physicians take the time to explore underlying conditions that may be causing symptoms
- Providing coordinated “next steps” following a visit

Domain 2:

Delays in Treatment or Preventive Services

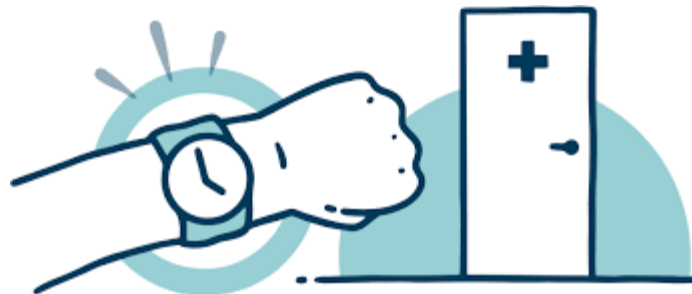


How is this domain thought about?



Perceived Challenges

- Lack of specialists
- Delays in patients seeking treatment / preventive services
- Allocating staff to manage the work queue



“ The patients are seeing the providers. The providers are ordering diagnostics, then what? Does the patient actually follow through and get the lab test or the x-ray or whatever?... We've put a system in place into the EHR to track those things... but there's always a resource issue. You need people to work those queues, to work those folders. So I think we've done a really good job as far as setting up our tools to work for us, but it always comes down to who's working the overdue results folder this week, you know... they're tasked with so many different things, our clinical staff, that I think need to figure out a way to prioritize for them. ”

-- Nurse Manager, Site 4

Strategies to prevent delays in treatment

- Increased access to the clinic
 - Same-Day Appointments
 - Clinical advice via the phone, patient portal
 - On-site Services (e.g., labs, clinical social worker, emergency care)
- Health maintenance / Disease registries
- Closing the loop
 - with patients (e.g., test results)
 - with specialists (e.g., referrals)

“ When I started, we weren't PCMH, so when you were rooming, your main focus was obviously their medications and their history. We never looked at vaccines other than flu season. You need your flu shot. That's all we looked at. We didn't look at colonoscopy or mammograms. That was doctor stuff. Now that we run our reports and everything all the time, it's part of our huddle. We pre-visit plan. We make notes in our schedule, we discuss it with the doctor. We're more involved. ”

-- Medical Assistant, Site 4

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“ I went to him with pain in my legs that turned out to be osteoarthritis in hips and knees, but he sent me immediately after examining me and a lot of questions, sent me immediately right around the corner to the x-ray place and before we even had the results of that, he had already signed me up for physical therapy and he took care of all of it. And the communication between him and the physical therapist was very surprising to me. I mean, he knew every time I went and he knew what they were saying and what they were telling me and what I was doing and outstanding communication, I thought. ”

-- Patient, Site 5

Domain 3:

Medication Errors



How is this domain thought about?

I know that medication safety issues is probably the biggest for ambulatory care. So, if you look at the list of things that cause the greatest harm, that's it.

Director of Quality, Site 5

I think medication reconciliation is a huge safety concern, especially when patients are transitioning from one setting or the next, whether that be a hospital or rehab or they're starting care at a new physician or specialist office

Practice Manager, Site 6

Perceived Challenges

- Shortcuts with medication reconciliation
 - Clinicians/staff not going through each medication
 - Patients “automatically saying yes”
- Issues with patient compliance
 - Affordability
 - Side Effects
 - Health Literacy / Patient Education

“What is supposed to happen, in an ideal world, is that you walk through every medication and say are you still taking this and taking it this way?... What I think frequently happens is if it's busy or if their medication list is twenty long, or the person seems like they were just there or whatever, a shortcut might be instead of going through each medication and the dosage and instructions... have any of your medications changed? Or are you still taking Metformin even though you might be taking Metformin, but our chart says you're taking 750, but what you're really doing is 500, then that gets lost.”

-- Physician, Site 9

Perceived Challenges

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 - Clinicians/staff not going through each medication
 - Patients “automatically saying yes”
- Issues with patient compliance
 - Affordability
 - Side Effects
 - Health Literacy / Patient Education

Strategies to prevent medication errors

- Having a clinical pharmacist on staff
- Medication Reconciliation
 - Ask patients to physically bring in pill bottles
 - Print out medication lists for patients
 - During transition of care
- Leveraging the EMR
 - Checking for interactions
 - Medical refills
- Increasing patient compliance
 - Provide description of medications (e.g., blue pill)
 - Use of patient portal



“ She just went over all of my medications to see what could I maybe do without, what could we change if something needed to be changed, which she did change one of them. And basically, just looking at everything that I take as a whole and she helped me to just know when to take what because I have some in the mornings, some... that you can't take together. And normally, I would talk to the pharmacist at the drug store, but now that she's here, she's looking at everything that you're taking whether it's prescribed by somewhere that you're referred to or your doctor here, like they have everything. They go over all your medications. ”

-- Patient, Site 1

Strategies to prevent medication errors

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Key Findings Across Domains

- Delayed diagnoses: important but not discussed
- Perceived challenges:
 - Clinicians and Staff: lack of interoperability among EHRs; limited time to collect and synthesize information; and communication failures
 - Patients: communication failures, lapses in trust in the provider
- Strategies to improve ambulatory safety:
 - Providing access to pharmacists / licensed social workers
 - Conducting daily huddles
 - Using care navigators and front desk staff to coordinate transitions of care and follow-up appointments

Strengths and Limitations

Strengths

- Rich data from multiple sources (including the patient)
- Multidisciplinary team

Limitations

- Conducted at Level 3 PCMHs
- Selection of patients

Next Steps



Questions?



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Clinician and Staff Interviews

Role	Number
Administration or Management	37
Care Coordinator, Navigator, or Manager	9
Dentist and dental staff	2
Medical Assistant	11
Nurses	8
Pharmacist	1
Physician	25
Physician Assistant	4
Social Worker	4
Total	101

Site Information

Site No.	Clinic type	Patient population type	No. of interviewees
1	Network	Suburban	14
2	Academic Medical Center	Suburban	10
3	Standalone	Frontier	11
4	Health system	Suburban	17
5	Standalone	Suburban	4
6	Health system	Rural	8
7	Academic Medical Center	Suburban	10
8	Network	Suburban	2
9	Standalone	Rural	10
10	Academic Medical Center	Urban	15