

Patient Portal Messaging & eVisits: Insights, Challenges, and AI Solutions Webinar

December 16, 2025

Sponsored by the Group on Faculty Practice (GFP)

Speakers

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Managing the Portal Message Surge: To Bill or Not to Bill

Courtney Furrow-White, MPM, RN

Analysis

1

CPT Code Data

Analyzed CPT data to understand organizations' patterns of use of billing codes 98970-98972, 99421-99423, and G2061-G2063

2

Survey

Member survey data to gather qualitative and quantitative information about care delivery models and approaches to address patient-initiated electronic communication

3

Informational Interviews

In-depth interviews with select organizations (clinicians, administrators) to understand their approach, infrastructure, facilitators, barriers, and lessons learned

Total billed eVisit units

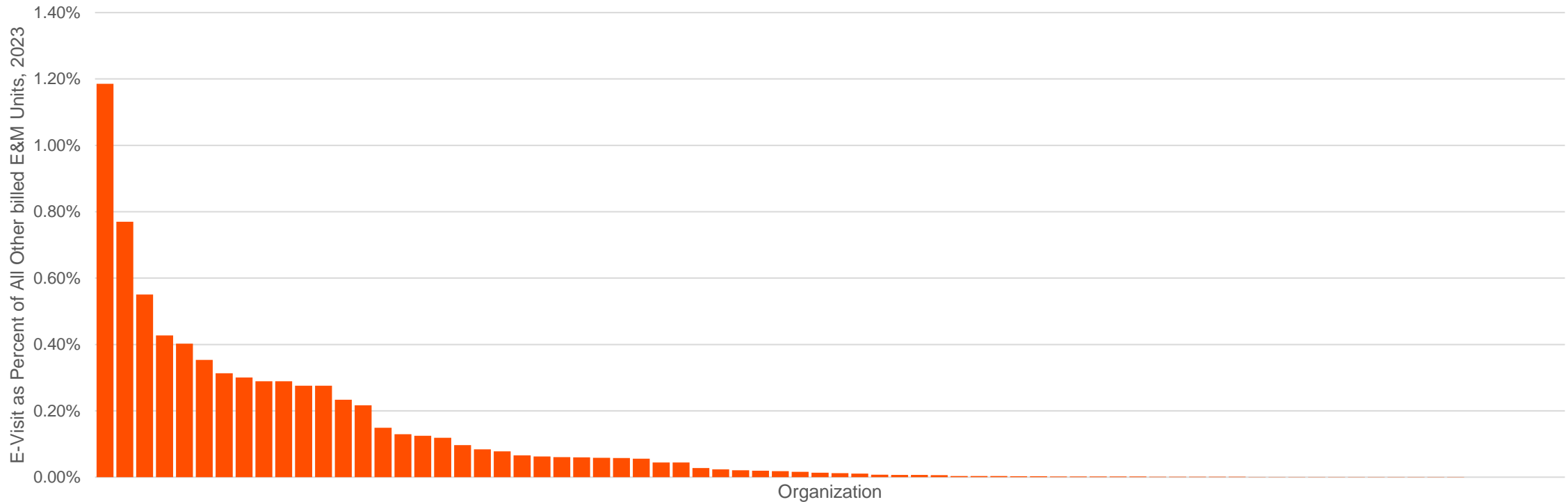
Total billed eVisit units
January 2020 - December 2023
n = 74 organizations



Data Source: AAMC-Vizient Clinical Practice Solutions Center

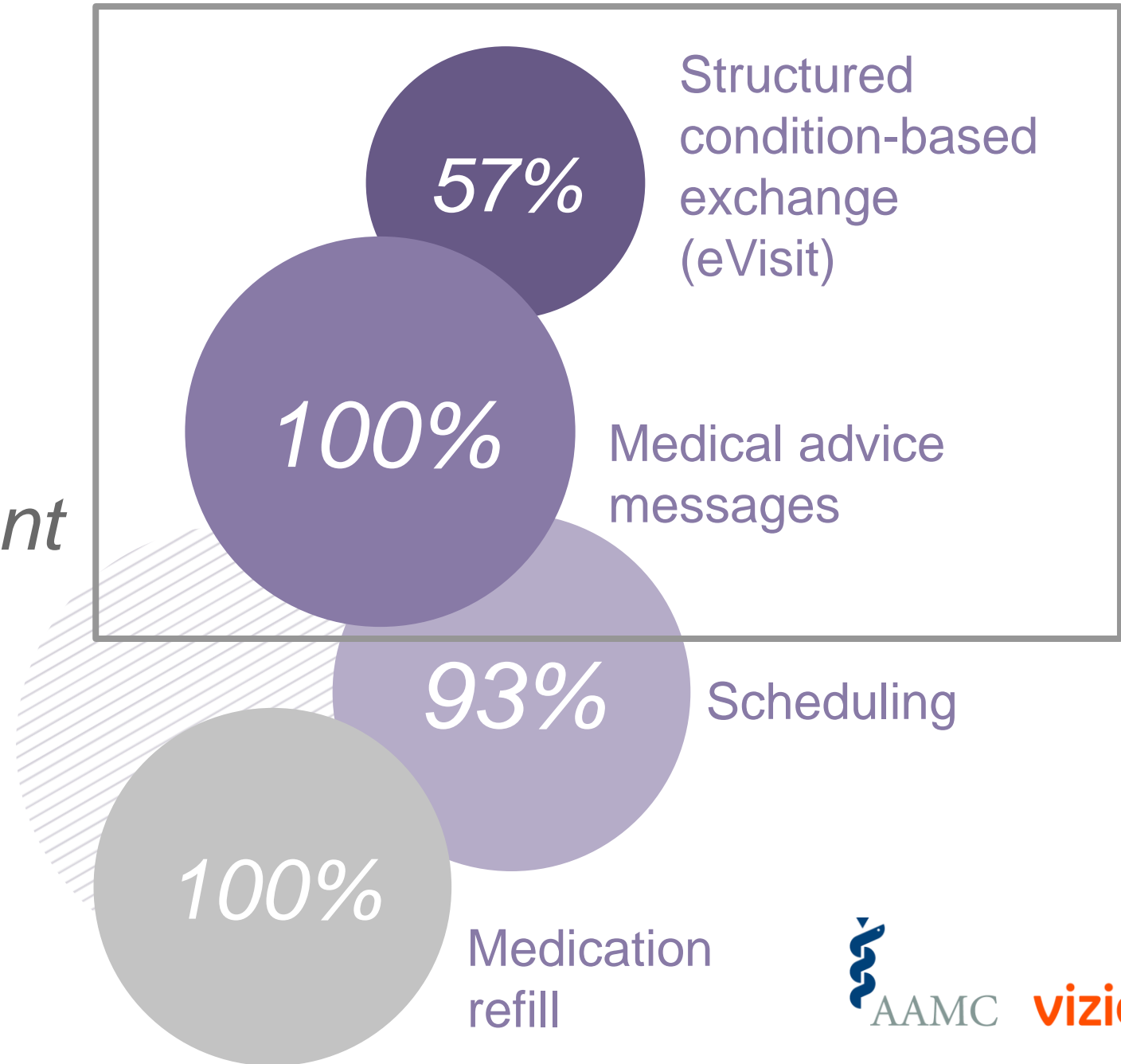
Billed eVisits by organization as a percent of other billed E/M units

Billed eVisits by organization as a percent of other billed E/M units
January - December 2023



Data Source: AAMC-Vizient Clinical Practice Solutions Center

Types of communication available in the patient portal n = 40



Data Source: Carder, D and Furrow-White, C. (2023). Patient-Initiated Communication via the Patient Portal Survey [Unpublished raw data]. AAMC and Vizient Inc.

Motivations for offering structured eVisits and billing

- Source of revenue
- Increased and more timely access
- Work can be equivalent to visit medical decision making, bill like any other service
- Salary coverage for dedicated eVisit FTE / covering physician time

Challenges with billing for structured eVisits

- Incomplete payer coverage
- Managing patient perception
- Developing policies and procedures
- Provider engagement and workflows
- Technical limitations
- Patient uptake
- Dissatisfaction with form structure/time
- Documentation requirements

Top 10 structured eVisit Conditions

1

*Cough/cold/
flu/sinus*

2

Pink eye

3

Rash

4

Allergies

5

Back pain

6

COVID

7

Headache

8

*Insect bite /
sting*

9

Urinary problems

10

Vaginal discharge



AAMC

vizient.

Patient engagement

- Simplified patient portal build
- Active patient feedback and engagement throughout the process (e.g., PFAC)
- Active education and communication with patients on best ways to access care
- Clear communication around billing

Provider engagement

- Ensure buy-in from providers for routing messages to pools
- Active feedback and engagement around value of patient portal
- Consider compensation models that acknowledge inBasket work time



*Strategies to
successfully manage
patient portal
communication*

Workflows

- Appropriate usage of pools for routing messages versus direct to provider inBaskets
- Consider leveraging centralized team to review messages
- Ease of documentation for billing for messages and/or eVisits when appropriate
- Separate out refill requests, scheduling, and billing questions
- Utilize care team members to the top of their license when responding to messages
- Build workflows to ease conversion to more appropriate visit types

Technology

- Automated filtering of “thank you” responses and other similar messages
- Consider leveraging of artificial intelligence for routing of messages and/or drafting message responses

Courtney Furrow-White

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Patient Portal Messaging and E-Visits

Julia Chen, Ambulatory Care Clinical Chief, Clinical Assistant Professor of Internal Medicine

Michelle Mounsey, Project Manager



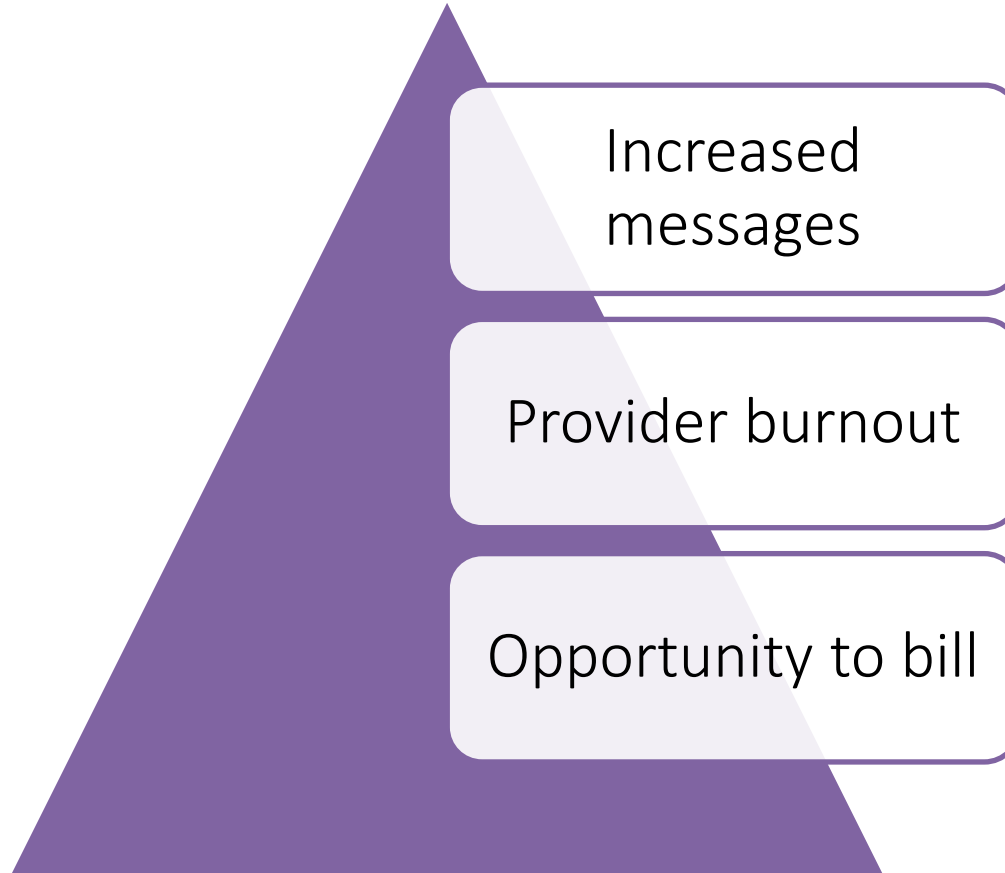
Portal Messages

Michigan Medicine providers and clinic
teams manage over

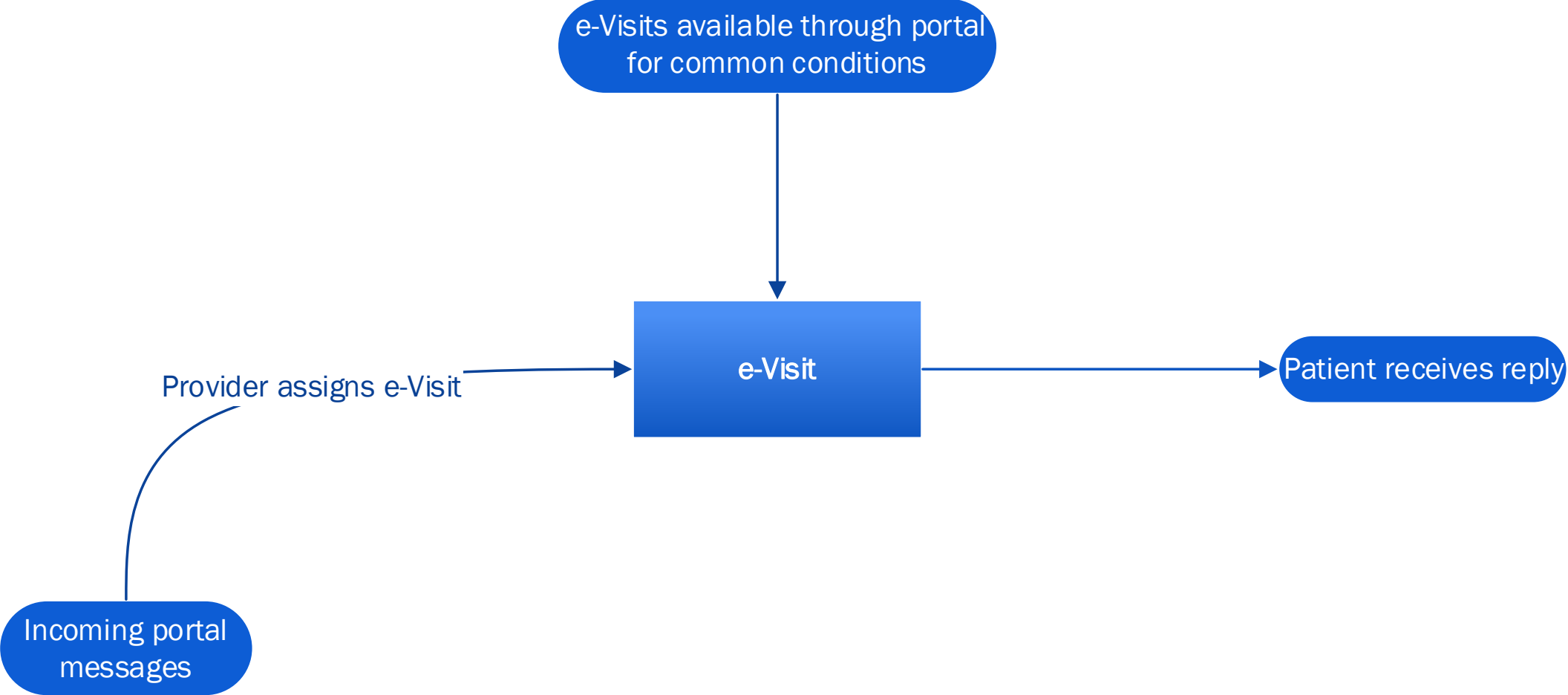
5 million

unique portal messages annually.

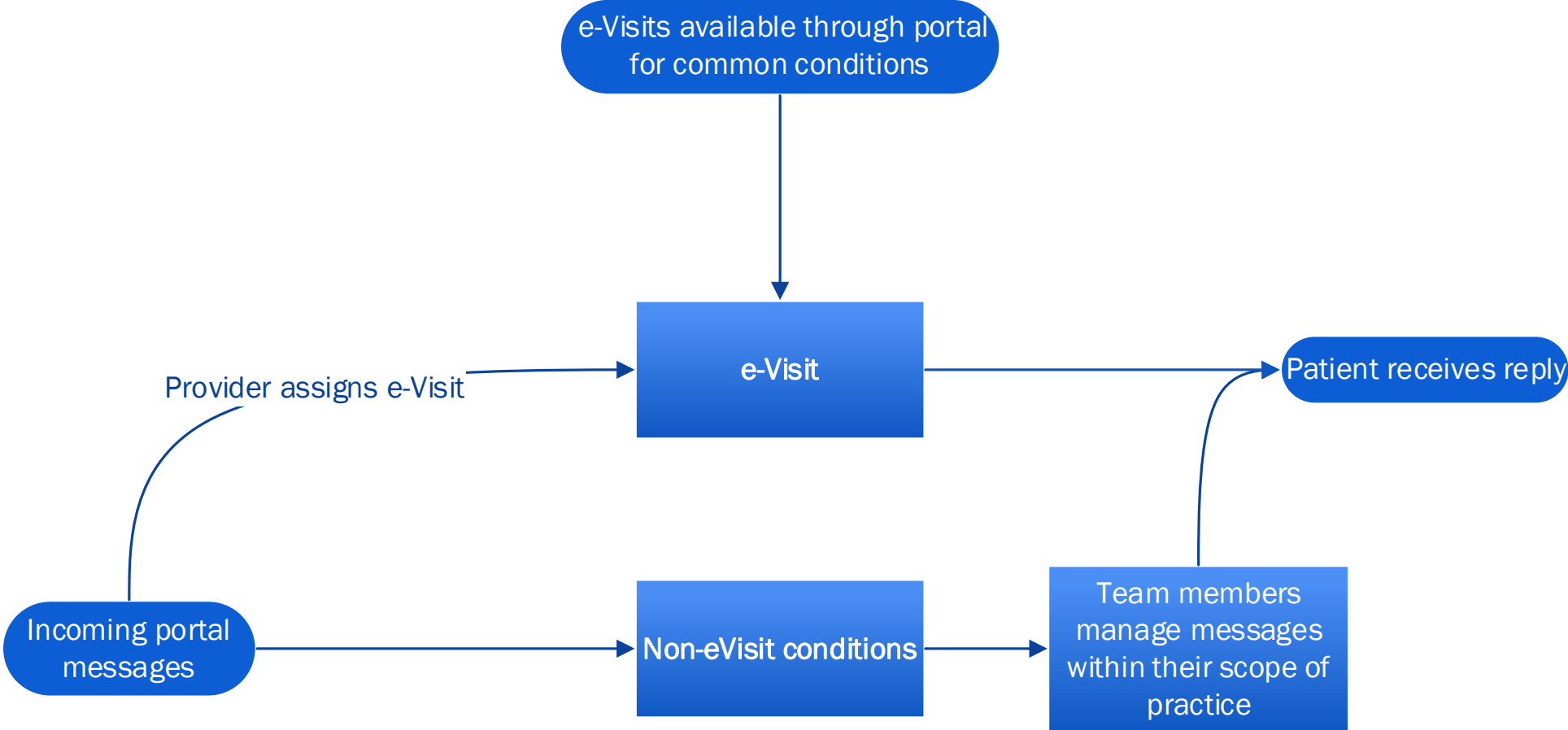
What are we going to do about it?



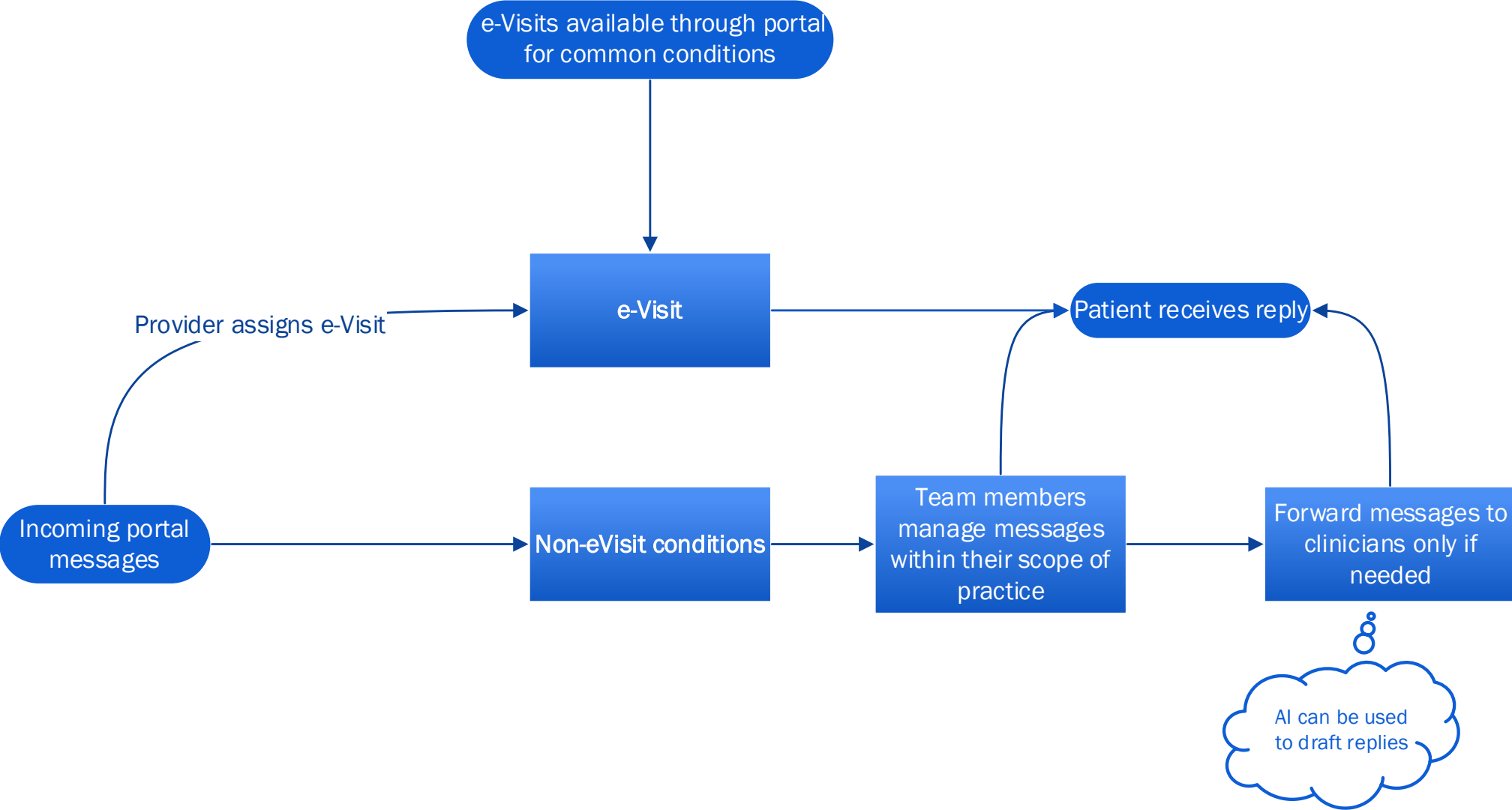
Managing Portal Messages



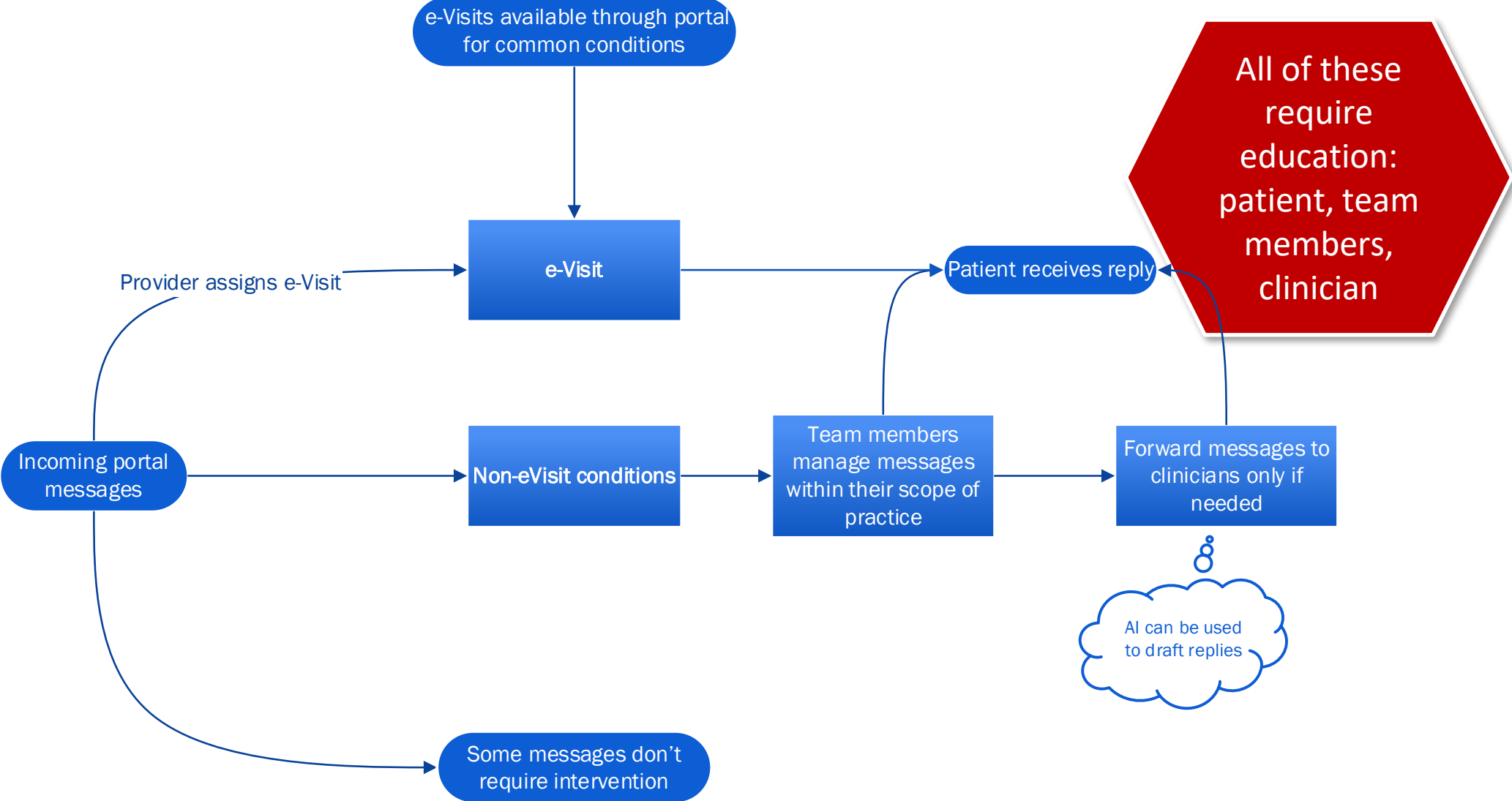
Managing Portal Messages



Managing Portal Messages



Managing Portal Messages



E-Visits

- **Two Types of E-Visit:**

Patient Initiated / On Demand

- Example: STI Screening
- Patient experiencing common, non-urgent medical condition.

Provider Assigned / Follow Up

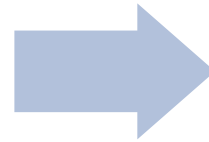
- Example: Accutane Follow Up
- Provider identifies patient as a candidate for E-Visit follow up.

- Patient fills out a short questionnaire their MyUofMHealth patient portal.
- Provider reviews and sends a response within 72 business hours.
- Charge billed to insurance if appropriate

E-Visit Workflow Entirely in MiChart and MyUofMHealth



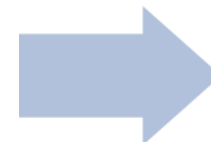
Patient Identifies Healthcare Need



E-Visits are appropriate for routine conditions that can be:

- **Urgent** (e.g.; UTI, infections, rash, flu, cough)
- **Chronic** (e.g.; sexual health, acne, diabetes)

Patient Submits E-Visit Questionnaire



E-Visit

Reason Personal Info Medications Allergies Questionnaires Confirm

* Indicates a required field.

* Have you been in close contact with someone who has the flu?

Yes No I do not know

Have you been in close contact with someone who has been diagnosed with whooping cough or pertussis?

Yes No I do not know

* Do you have a fever?

Yes, I have a low fever (100.3 to 101 degrees) Yes, I have a fever (101 degrees or more)

No, I do not have a fever (less than 100.3) I do not know

Clinic Staff Reviews & Responds



Clinics, staffed by mid-levels, review the E-Visits and suggest actions including:

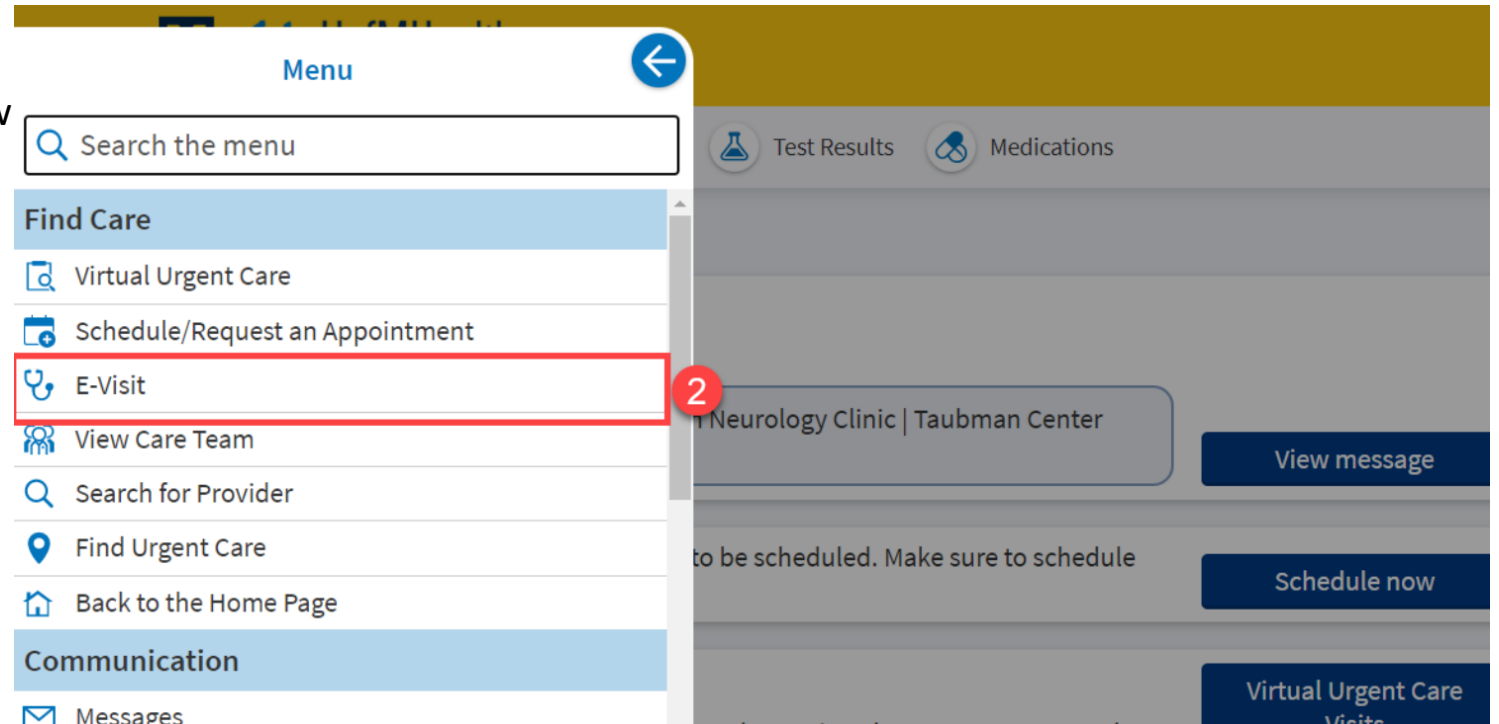
- **Changes to treatment**
- **New treatment** (including medication)
- **Follow-up in-person visit**



How to access an E-Visit through the patient portal – Patient Initiated

Patients can access E-Visits through their patient portal. Below is an overview of the patient workflow

- Presented with an overview of what an E-Visit is.
- Select their “reason for visit” from the list of conditions available.
- Consent to the Terms and Conditions and billing.
- Fill out a symptom-based questionnaire
- Review Medication and Allergies, Pharmacy.
- Submit the E-Visit.



E-Visit Management

- Most e-Visits are managed centrally by a pool of clinicians specific to the specialty
- Clinician can opt to convert to a video visit if they feel they need additional information or conversation back and forth with the patient.


All of these
require
education:
patient, team
members,
clinician


Necessary Steps: Team Member

Created In Basket Standards of Practice (SOP)

- We convened a multi-disciplinary group in 3/2020
 - Nursing, MAs, providers, admin, IT, informatics
 - Engaged others as needed (Compliance, HIM, Rev Cycle)
- 1-4 meetings per month for >1 yr.
- Outlined all the problems from every area, figured out areas that needed guard rails
- Looked to Epic workflows, well-functioning areas for best practices
- Creative organization of the policy with as much plain language as possible
- Approved through the necessary committees, placed in Policy Stat

Intervention Tool: Best Practice Standards

Recommended Best Practice Standards	PSA	MA	LPN	RN	MD/APP
 START					
1. Direct all replies to a pool rather than an individual person. For example: a. All CPAP issues or patient requests for orders should be routed to the MA pool only. b. All patient queries about medication authorizations should be routed to the MA pool only	○	○	○	○	○
2. All new symptom complaints should be routed to RN pool for further triage	○	○	○		
3. New symptom complaints should prompt a phone call for further triage. a. If two call attempts are made with failure to connect with patient, route to provider.				○	
4. Judgment can be applied to recommend a visit for triaged new symptom complaints and forwarded to admin pool without involving the provider					
5. When replying directly to portal messages with specific queries to the patient, check "Reply to me" whenever possible and appropriate					○

 STOP					
6. Avoid routing to more than one pool at a time, or to individual + pool	○	○	○	○	○
7. Avoid "FYI" messages or forwarding threads that do not require any action from pool or provider	○	○	○	○	○
8. Avoid "Please advise" or "Next steps" replies and instead suggest a possible plan of care where appropriate		○	○	○	

Outcomes and Lessons Learned

- **Reduced portal message volume**
- **Staff desire specificity - high value in role clarification**
 - Protocols are useful
 - Transparency in avoidance of “please advise” or “FYI”
 - Tailor specific “asks” by role
 - Scrubbing vs pre-work of messages
- **Lack of consensus on ideal role for message triage**
 - Clerical task of scrubbing versus clinical task of pre-work
- **Staffing shortage increases stress and bad habits**
 - Staff doing less pre-work
- **Reinforcing and maintaining change is difficult**
 - Use clinic task force meeting and huddles
 - Submitting examples is helpful but high effort
 - Training module in development

All of these
require
education:
patient, team
members,
clinician

Necessary Steps: Provider Experience

Enhancements to Epic: Added Billing Navigator

The screenshot displays the Epic Patient Email interface. At the top, a navigation bar includes tabs for Chart Review, CareWeb Chart, Results Review, Synopsis, Appt Desk, Patient Email (highlighted with a red box), Take Action, and Symptom Screening. Below this, the patient's name and visit date are shown: "9/9/2021 visit with Clark, Stephanie Michele, MD for Patient Message". A secondary navigation bar contains various tools like Triage Call, Images, References, SmartSets, Media Manager, Preview AVS, Print AVS, and Request Outside Records. The main content area shows a "MyUofMHealth Message" with a subject line "Test Results Question" and a body text asking for an X-ray translation. A red arrow points from a text box "LOS is located on the Patient Email Tab" to the "Level of Service" pop-up window. This window is highlighted with a red border and contains a search field, modifiers (25, 59, 50, 76), an "Additional E/M codes" section with a plus sign, and a grid of codes including 99212, 99213, 99214, 99215, 99202, 99203, 99204, and 99205. A "LEVEL OF SERVICE" button is visible at the bottom right of the pop-up. The bottom of the interface features "ADD ORDER" and "ADD DX (0)" buttons.

Enhancements to Epic: Time Tracker

Time tracker added to portal messages, similar to other encounter:

- Does not include time if you reply directly from the In Basket
- Counts any time the encounter is open even if you navigate to another patient chart

The screenshot displays the 'Calculate LOS based on time' section in Epic. It includes fields for 'Patient type' (New/Established), 'Total time (min):' (10), and 'Estimated time: + 8 Minutes'. A pop-up window shows a detailed activity log:

Activity	Duration
Exam room	< 1 minute
Chart accessed	3 minutes
Exam room	3 minutes
Chart accessed	< 1 minute
Total time:	8 minutes

Enhancements to Epic: Developed Smartphrase for documentation:

*The patient initiated a request {Telephone/Portal:60778} for care to evaluate ***, which is not related to an E/M service provided in the previous seven days, and did not result in scheduling a visit.*

Details of the care provided can be found in the encounter.

Cumulative time spent by the treating physician over the past seven days in the evaluation and management of this condition {time 5to30:2100030053}.

All of these
require
education:
patient, team
members,
clinician

Necessary Steps: Patient Experience

Setting Patient Expectations



← New message — ↗ ×

What Do You Want To Do?

Do not use the portal for urgent medical matters, including

- Trouble breathing
- Chest pain, headache and stiff neck
- Feeling too weak to stand
- Fainting or passing out
- High fever
- Thoughts of harming yourself or others

Call 911 immediately for life threatening emergencies. Click here to see test results, review notes from a previous visit, or cancel a visit.

- Refill a Medication
You have an existing prescription that needs a refill →
- Ask a Medical Question
You have a simple medical question that doesn't require an immediate response →
- Ask a Billing Question
You have a question about billing, estimates, or payments →

← New message — ↗ ×

Message Your Care Team

Use messages for questions such as:

- A current medication
- Test results
- Follow up from a recent visit
- Submitting photos to your care team

Please allow 3 business days for your care team to respond to your messages. Non-English Message (Spanish Only) will take 5 business days. If you can't wait for a response, call without sending a portal message.

Insurance may be billed for messages that meet specific criteria based on time and medical expertise. Most insurance plans cover portal messaging. Copays and deductibles may apply.

Need Help With Something Else?
Call your clinic for:

- New problems or concerns
- Multiple or complex issues
- Requesting a new medication
- Requesting a referral to a specialist for a new problem

Next

← Ask a Medical Question — ↗ ×

Message Your Care Team

Messaging Guidelines

- Do not send a message about urgent medical matters. Call 911 immediately for life threatening emergencies.
- Do not use language that is disrespectful, threatening or intimidating. Misuse may lead to limitation or termination of patient portal access.
- Do not send frequent or lengthy messages. For multiple or complex issues, please schedule an appointment.
- Message only about your own care or use the correct proxy account for others.
- All messages will be added to the medical record.

- Non-Urgent Medical Question →
- Non-English Message (Spanish Only) →

Note: Previously had custom build with an “accept” button; removed with new Epic functionality in Fall 2023 to reduce maintenance and ensure experience is the same across all MyChart versions.

Scripting for Support Teams

When did U-M Health start billing for this kind of care?

- These codes became effective in January 2020 (unrelated/prior to the COVID-19 pandemic) and we have been billing online services that meet the code requirements since that time.

Why are these services now being billed?

- As technology has evolved, more patient care is now available using digital and other online applications. As these services have expanded, both providers and payers/insurance companies agree that when the provider spends time evaluating the patient's concerns and providing specific management, these services constitute a billable service because they provide an alternative to an in office visit.
- Examples include new prescriptions, prescription changes, referrals, education and/or reassurance.

Will I receive a bill?

- Not all communications through the patient portal represent billable services.
- For example, when patients are asking for prescription refills or results of lab tests, these do not represent billable services.
- Providers are only billing for services that require evaluation and management of a problem or condition AND if the service requires more than 5 minutes of their time.

Was this care provided “for free” in the past?

- Prior to 2020 similar services may have been provided without a separate charge. This changed nationally in 2020 when medical societies in conjunction with health care plans created charge codes for “e-visit” services allowing providers to now be paid for time and expertise spent providing these services.

Patient Experience

Benefits:

- Simple asynchronous communication
- No need to coordinate or travel to an office visit
- Improved access to synchronous care for more complex issues

Concerns:

- Potential cost-sharing
- May discourage patient communication with their health care providers

Portal Message Billing Strategy and Socialization in General Medicine

Encouraging Behavior Change in General Medicine



The Why?



Provider Education



Patient Education



Incentive Plan

Percentage of Portal Messages Billed 1/1/2020-4/30/24

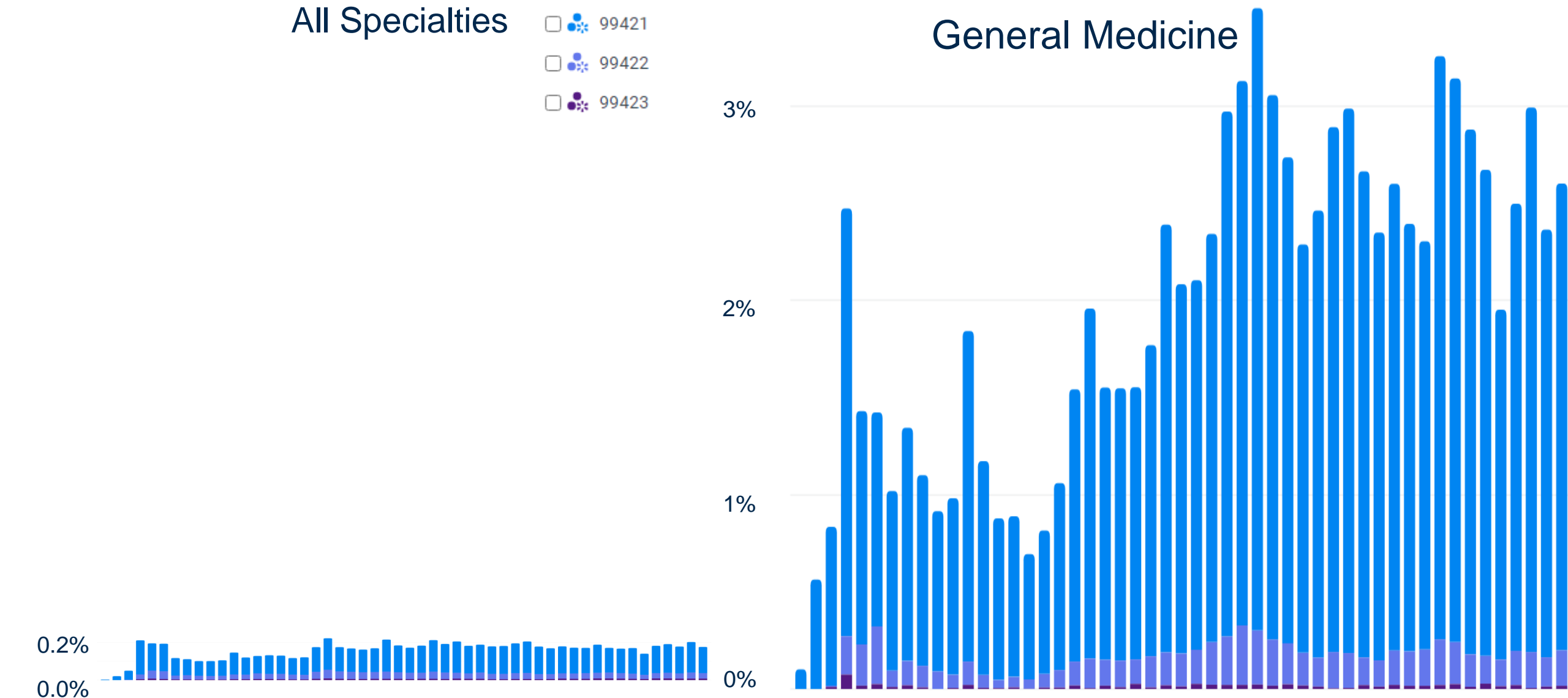
All Specialties

- 99421
- 99422
- 99423

General Medicine

0.2%
0.0%

3%
2%
1%
0%



Incentives

- Implemented 20 minute “**portal practice slots**” (PPS) per 4 hours of scheduled clinic time in our schedule templates
 - Intended to allow physicians structured time during the workday to address asynchronous patient care
 - Intentionally integrated into clinic flow (i.e., not the first or last slot of the day)
- Portal message billing included in incentive plan

Conclusions



E-Visits for straightforward conditions



Team members critical to helping manage increased volume of portal messages



Patient and provider education

THANK YOU



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ECU Health InBasket AI Draft Response Lessons Learned

Exploring AI's role in enhancing patient interactions

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Dec 16, 2025

Agenda Items

- Introduction to Epic Augmented Response Technology (ART)
- Preparing for a Pilot
- ART 1.0 Pilot
- ART 2.0 Pilot
- Recommendations and Future Directions

ART Overview

Overview of Epic's Augmented Response Technology (ART)



AI-Driven Response Drafting

ART employs AI to draft responses to “Patient Medical Advice Request” messages, making communication more efficient between healthcare providers and patients.

Enhanced Patient Engagement

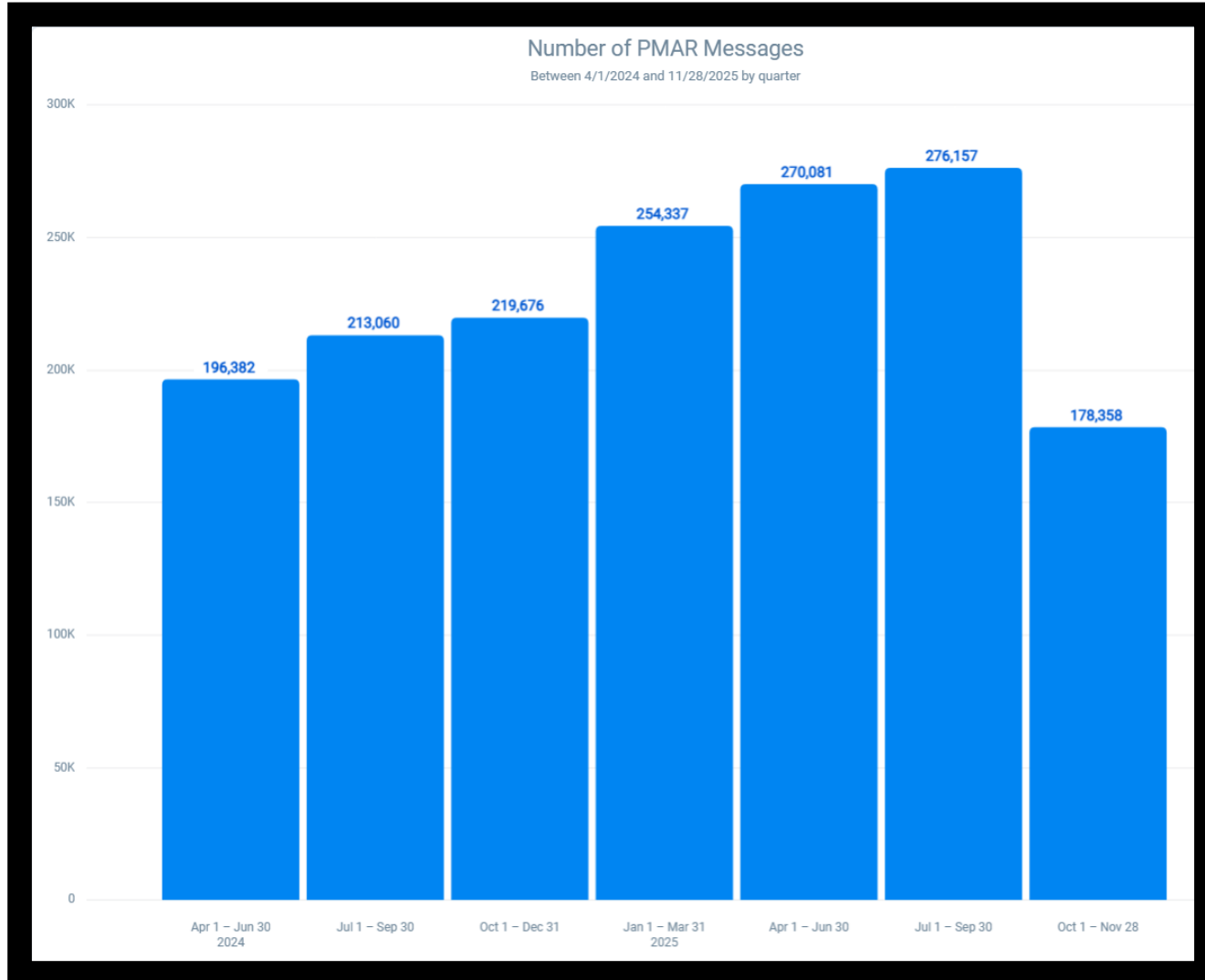
The technology aims to improve patient engagement by providing timely and relevant communication through the patient portal for non-urgent issues.

Streamlined Messaging Process

ART simplifies the messaging process, ensuring that clinicians can communicate effectively and efficiently with their patients.

Preparing for an ART Pilot

Patient Portal messaging is increasing. Is this the Burning Platform?



Patient-generated messages to clinics are categorized as Patient Medical Advice Request (PMAR).

Providers report increasing InBasket work burden.

Reporting shows that patient-generated PMARs are increasing with now over 250,000 per quarter across the system.

ECU Health ART Pilot Preparation

Clinic #1

Family Med

- Live: 5/12
- High Volume
- Central Response
- Robust response standard

Clinic #2

Med/Peds

- Live: 6/16
- High Volume
- Distributed responsibility
- No standard response system

Clinic #3

Neurology

- Live: 6/18
- High volume
- Distributed responsibility
- No standard response system

We did an analysis on who had a high rate of MyChart utilization and a high number of PMARs.

Was this the best choice to start the ART pilot?

We conducted patient responses to current PMAR satisfaction with the current patient portal responses to PMARs prior to the pilot.

Here's how a clinician's workflow may look ...

1. Open Patient Advice Folder
2. Review message sent from patient and the draft response
3. Related Info sections helps review the clinical context for accuracy
Meds/Probs/Vitals/Labs may be provided
4. Start with Draft – can use as is or edit
5. Start Blank Reply – start with clean slate for reply including use of quick actions

The screenshot displays a patient message interface with the following components:

- Message Header:** Includes tabs for Message, Patient Info, Meds/Problems, Vitals/Labs, My Last Note, and Help. A toolbar contains icons for Done, Chart, MyCht Enc, and Message Patient.
- Patient Profile:** Shows a profile for Hallie Wisam, a 26-year-old female (MRN: <516104>), with a "Confidential encounter" label.
- Message Content:** A "Refill" message from Hallie Wisam to Dr. Sally Raleigh asking for an inhaler refill. A red circle with the number "2" is placed over the patient's name.
- Generated Draft Reply:** A draft response from Dr. Sally Raleigh explaining that no refills are currently available and providing pharmacy information. A red circle with the number "2" is placed over the start of the reply text. At the bottom of this section are two buttons: "Start with Draft" (marked with a red circle "4") and "Start Blank Reply" (marked with a red circle "5").
- Related Info:** A section titled "Related Info" based on conversation content, showing "Albuterol Sulfate" with a "Learn more" link. A red circle with the number "3" is placed over the "Related Info" header. Keywords "Accuneb", "Albuterol" are listed.
- Annotations:** A diagonal watermark "*Fictitious Chart" is overlaid on the message content.

Initial Pilot 1.0

Anticipated Impact on Overall System Efficiency



Reduction in Response Times

AI technologies can reduce response times, enabling faster decision-making and improved patient outcomes.

Streamlining Workflows

AI tools streamline healthcare workflows, enhancing efficiency by automating routine tasks and reducing administrative burdens. Phone calls consume valuable resources and time.

Focus on Patient Care

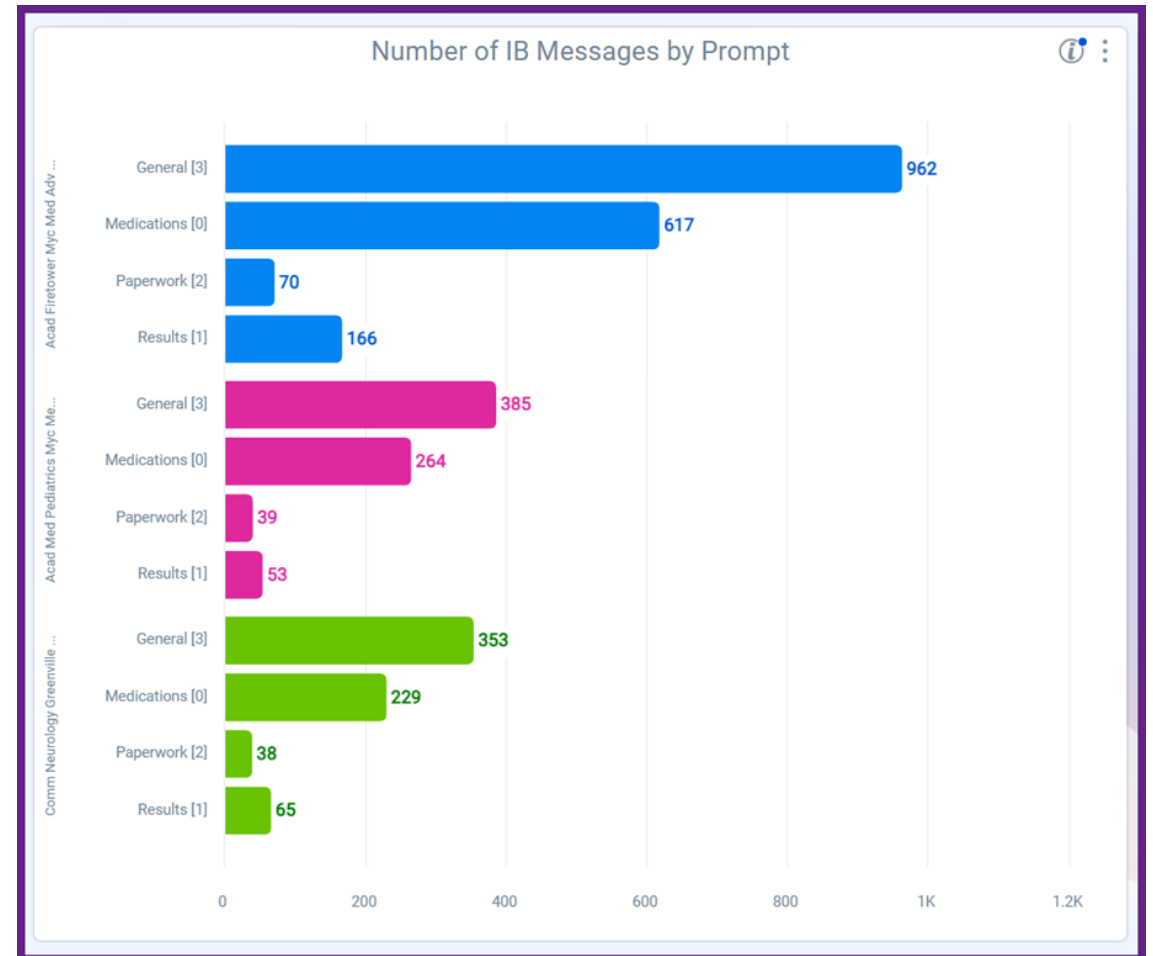
By automating repetitive tasks, AI allows clinicians to devote more time to direct patient care, improving overall healthcare quality.

Office \rightleftarrows Patient Relationships

If patients don't have the ability to ask questions, they often resort to inconsistent sources online or show up at the Emergency Dept.

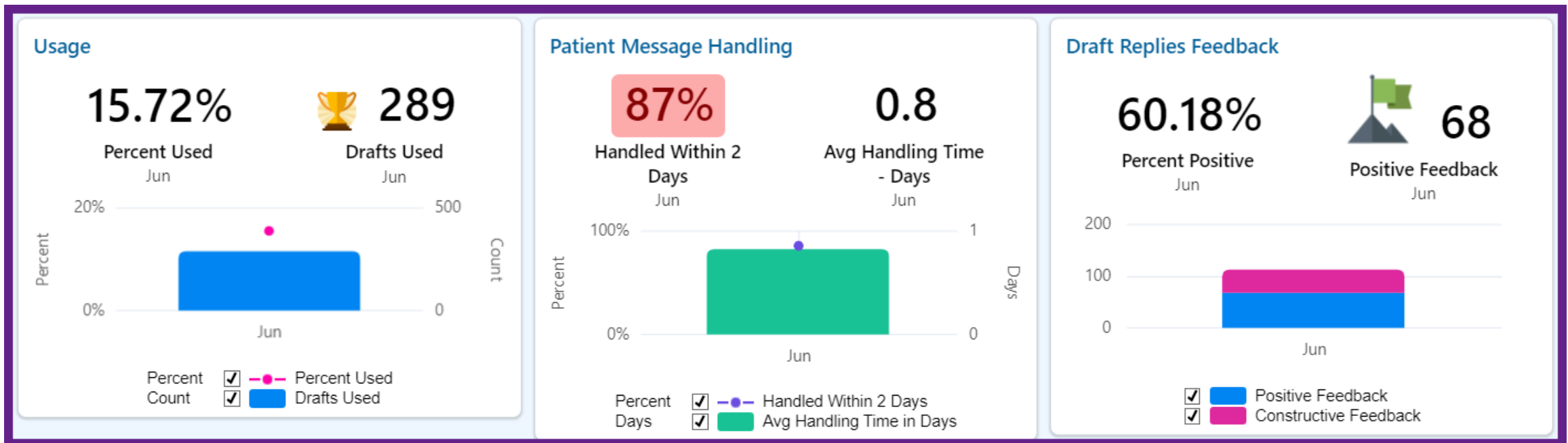
ART 1.0

- Initial ART design required a lot of customization
- We did patient experience surveys regarding InBasket communication on the initial clinic
- Each incoming PMAR was placed into one of 4 categories: General, Results, Paperwork, Medications
- Each category had a prompt, which required customization. This customization was based on frequent feedback from the clinical staff at the pilot sites, not just from the feedback mechanism built into the system.
- Only one prompt was used per PMAR. This caused an issue when a PMAR contained more than one question.
- Differences in question types were seen from one clinic to another.



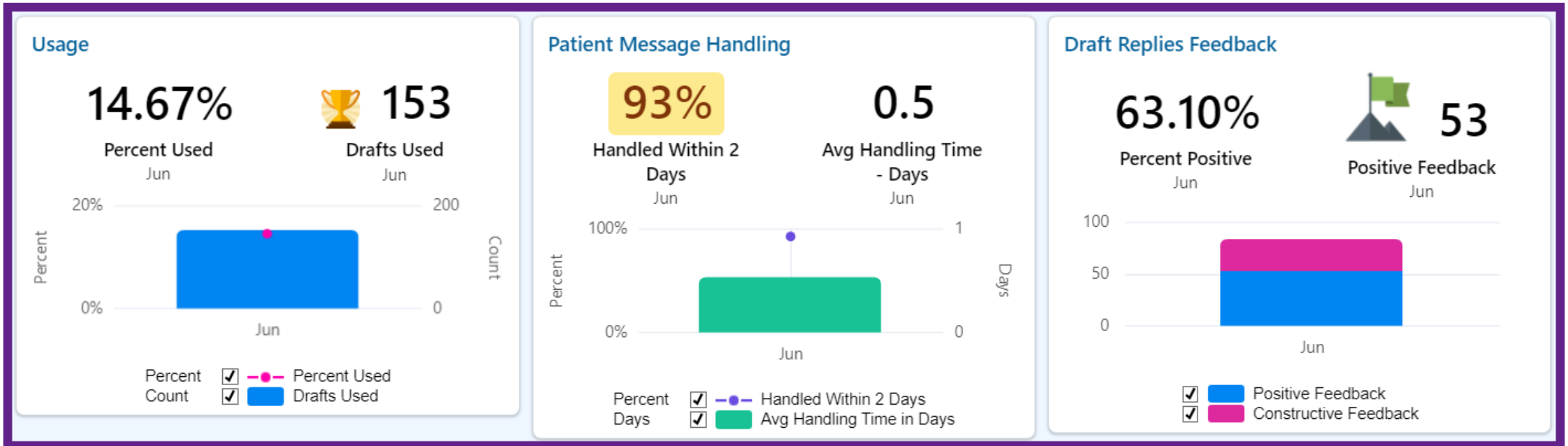
Augmented Response Technology (ART) - June - All 3 Clinics

The "percent used" are consistent with what other health care systems are reporting. Utilization is not as high as one would think.



Augmented Response Technology (ART) - June ACAD FM Clinic

June 1 to June 30, 2025
20 clinic days



ACAD Family Medicine Clinic went live on May 12th. Working with this first clinic, with weekly feedback from end-users, we made significant changes to the Prompt. All clinicians agreed the changes made a significant improvement. Compared to the first four months of 2025, the % handled within 2 days went from 90-93% and handling time dropped from 0.7 to 0.5 days.

ART 1.0



- We leveraged prompt engineering from health systems that were earlier adopters.
- Common complaints: every response seemed to be “call the office” or “schedule an appointment”.
- Even though we saved time by leveraging what others had developed, there was still customization needed.
- Clinical Informatics team observed workflows and utilization with at the elbow.
- Met with key users at pilot sites weekly to get feedback for new prompt engineering.
- Getting good feedback was difficult.

ART Pilot 2.0

Concerns About AI Handling Complex Messages



With upcoming enhancements, we kept our Pilot 1.0 limited to the 3 initial pilot clinics.

With the upgrade, we expanded Pilot 2.0 to add a total of 21 new departments.

The new format still required feedback and customization but not as much as 1.0

There are now 12 categories (snippets) of prompts vs 4. PMARs are no longer placed into one category. Rather, multiple snippets can be used for a single PMAR in order to create a more comprehensive draft.

Multiple questions within a PMAR can now be addressed.

ART 2.0



- Net new work? Is the increasing PMARs add on tasks or are they replacing phone calls?
- When leveraging an ART draft, how much of the draft is actually being used? How much is re-written?
- The workflow starts with where the incoming message lands, usually an InBasket Pool. Most have clinical staff and not providers manage this pool and triage based on the questions. This is the first opportunity to leverage the draft. If it's forwarded to a clinician, the clinician can leverage the draft to send directly to the patient.
- How do you divert when appropriate to billable services (telehealth, eVisits, work-ins)?

Overall Satisfaction and User Feedback



General Satisfaction

Clinicians report a general satisfaction with ART, highlighting their positive impact on workflow efficiency, even though they tend to use a minority of the drafts. The progress made with the most recent upgrades have made the quality of the drafts more targeted and complete.

Efficiency Gains/ Cognitive Burden Reduction

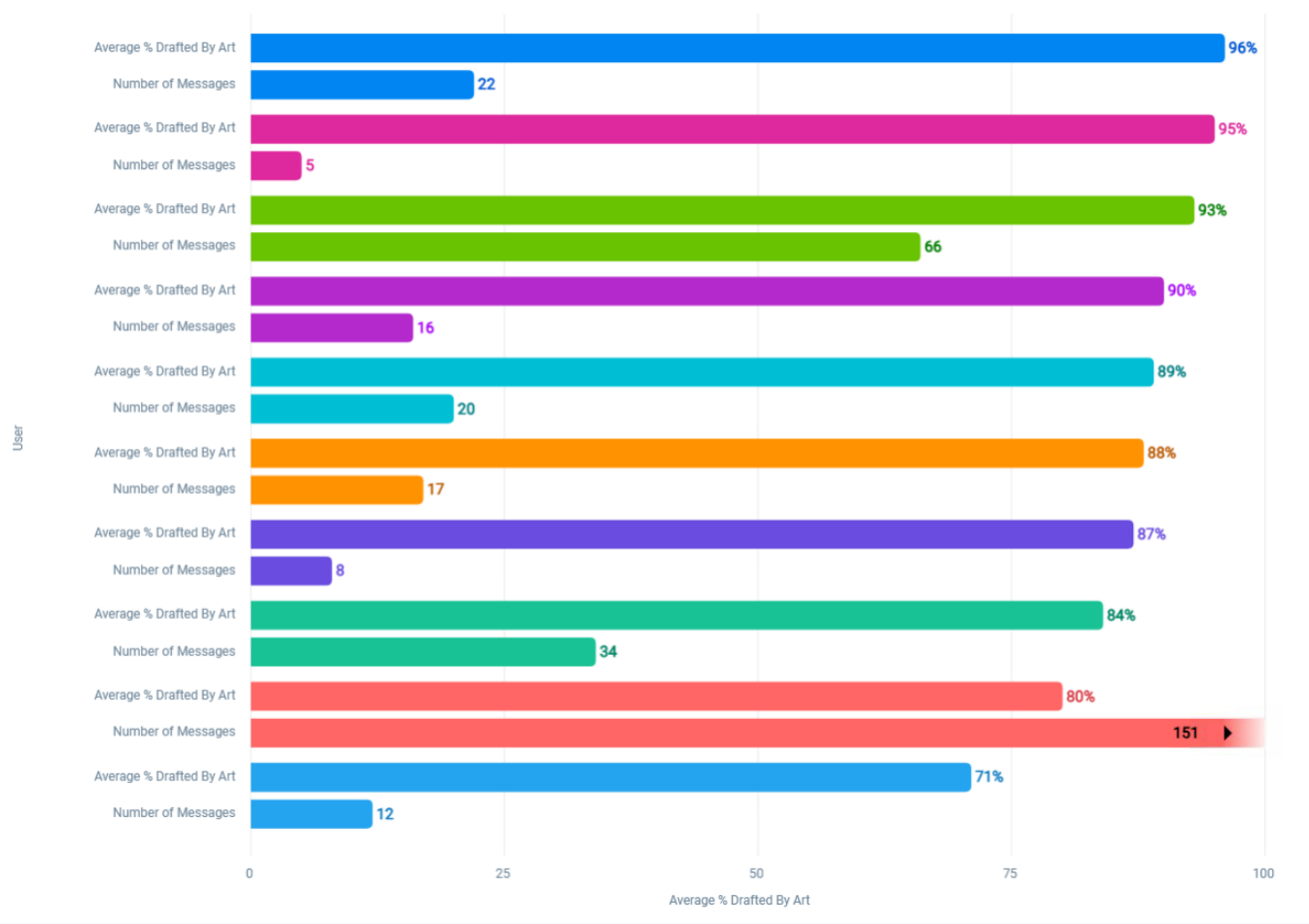
Most clinicians appreciate the efficiency gains provided by AI, which help reduce repetitive tasks and save time. Learning how to fit this new technology into your existing workflow is key.

Concerns About AI

Despite the satisfaction, some clinicians express reservations about the tool. The main concern is “it doesn’t sound like me”.

Average % Drafted By Art and Number of Messages by User Sender

Between 8/23/2025 and 11/30/2025



Population

Base: All Messages
 All of:
 - Art Used?
 - MyChart Department: ACAD FAMILY MEDICINE

Slices

1) Top 10 Slices by User Sender
 Slice Criteria
 - Number of Messages

Measures

Average % Drafted By Art
 Number of Messages

Dates

Start Date: Aug 23, 2025
 End Date: Nov 30, 2025
 Based On: Message Received
 Slice By: None
 Compare By: None

Visual Options

Graph Type: [Bar Chart Icon]
 Bar Color: Top 10 Slices by User ...
 Trailing Zeros: Keep
 X-Axis Range: 0 to 100

SideKick

Ask questions about your data

Art Used? & ACAD FAMILY MEDICINE ...

Base: All Messages

Search for criteria + Browse

Art Used?

Last Stored Data

MyChart Department

ACAD FAMILY MEDICINE -

Last Stored Data

Advanced Logic

Take Home Message

- This is not an IS Project
- Deciding on pilot clinics is important. MyChart utilization and volumes are not the only metric to determine best sites. Determine the problem to solve.
- Understand current state of incoming PMAR message workflows, mapping ahead of time in each clinic is a good idea.
- Utilization will be lower than you think.
- Rolling out to all clinics. Standardize first? Or roll out and optimize/standardize over time?



Questions?