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The eProvider Model: A Novel Approach to the Modern Problem of Portal Message Overload



While staff can handle routine messages, practices need a system for converting complex messages into billable, same-day visits.

The electronic health record (EHR) has changed the way clinicians practice — how they provide care and how they manage patient messages. The EHR patient portal has allowed patients unrestricted, secure communication with the primary care team. Over the last decade, the use of patient portals has rapidly expanded, thereby increasing the volume and breadth of patient inquiries directed at the clinician.¹ These messages can range widely in complexity, from straightforward messages requiring little or no clinician input to complex messages requiring clinical action and perhaps an encounter. As message volume for

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physicians and other providers has increased over time, it has resulted in increased indirect clinical work that is not typically reimbursed. This work is often done during “free time” and can contribute to increased dissatisfaction and burnout, which can ultimately degrade quality of care.²

To alleviate the messaging burden on clinicians, Duke Family Medicine Center, an academic family medicine practice with more than 40 physicians and other providers, implemented two major changes:

If the concern in the patient’s message requires a clinical encounter, the nurse considers whether a same-day video visit with an eP would be appropriate.

1. We redesigned our messaging workflows and protocols to get the right message to the right team member. Many messages can now be triaged and managed effectively by nurses, medical assistants (MAs), schedulers, and other staff, which has reduced the burden on our clinicians. See our prior article in *FPM*, which describes these changes.³

2. We introduced the “eProvider” (eP) model, which allows us to easily convert complex messages into same-day virtual visits. This model captures the indirect clinical work associated with patient portal messages and converts it into direct revenue-generating clinical work using a workflow that requires no additional hiring, as

both staff and clinician time are repurposed to create this clinical innovation.

The eP model is the subject of this article.

HOW THE ePROVIDER MODEL WORKS

When patients contact our practice via the portal, a nurse performs triage, forwarding routine messages to the appropriate staff via our routing rules and forwarding complex messages to the patient’s clinician. If the concern in the patient’s message requires a clinical encounter, the nurse considers whether a same-day video visit with an eP would be appropriate, consulting the clinician as needed. If a same-day video visit is needed, the nurse notifies the patient via the portal and routes the message to the scheduler. (Other options may include scheduling the patient for an in-person visit or an e-visit with their personal clinician on a future date, depending on the urgency of the issue, patient preferences, and clinician availability.)

Members of the eP team include the clinician whose time is dedicated to virtual visits during the session, a nurse (ideally someone with nurse triage training) who reviews messages and helps identify those requiring clinician attention, a nursing lead who coordinates with schedulers to provide closed-loop communication to the patient, and a scheduler who facilitates scheduling patients, because nurses cannot perform scheduling duties in our system. (See the workflow on page 17.)

Patient concerns appropriate for a same-day video visit with the designated eP include symptomatic complaints (new and not emergent) such as the following:

- Pain — new or flare-up (gout, back, etc.),
- Referrals (colonoscopy, mammogram, etc.) — new or reorder,
- Medication concerns (prior authorizations, dosage changes, side effects, refills, etc.).

The eP is a rotating, voluntary, virtual role assigned to different clinicians during the week; it is not a full-time position for one clinician. The eP role is similar to the “provider of the day” concept many practices use, where a rotating person takes on certain designated duties and responsibilities for any given session. The eP duties and responsibilities can be performed

KEY POINTS

- To reduce the message burden on clinicians, practices can put systems in place to direct routine messages to appropriate staff, convert complex messages to billable clinical encounters, and forward to clinicians only those messages that require their attention.
- One solution for messages that require a clinical encounter is the eProvider model, in which a rotating clinician’s time is dedicated to providing same-day video visits during the clinical session.
- This model helped reduce clinician time spent on messages, lessened job frustration, and was associated with fewer symptoms of burnout.

anywhere with secure internet access; thus, the eP may work remotely (and most have). Clinicians who participate in the eP pool are expected to staff this service for the same session of the week on a regular basis (weekly or biweekly). Schedules for the eP session are structured as four-hour shifts with same-day video visits. Appointment length is 20 minutes per visit, for a total of 12 slots per session. Practices could use this model to provide after-hours or week-end coverage if they desire. (See a sample schedule below.) Because this is a voluntary activity, not every shift has to be covered, and since there is minimal staffing impact from adding shifts, this is an easy way to increase patient access without increasing the clinical footprint in a physical location. There are generally more than enough messages that need to be converted into eP visits, so adding clinicians to this clinical service line can be done efficiently, resulting in full eP sessions.

Clinicians who choose to function as an eP do so in lieu of an existing clinical session. In other words, if a clinician is in clinic five half-day sessions a week (0.5 clinical full-time equivalent, or cFTE) and chooses to be an eP, their clinical footprint remains at 0.5 cFTE; however, they are scheduled in clinic for four in-person sessions and one eP session. Their productivity and RVUs are not affected because their cFTE has not changed.

The main reason clinicians in our practice have chosen not to participate in the eP model is the concern that they would

lose a clinical continuity session for their patients. To help offset this concern, our practice is actively working toward an appropriate patient panel size and improved active panel management. In addition, when non-urgent patient messages require an eP visit, our nursing staff makes every attempt to schedule those patients with

The eP is a rotating, voluntary, virtual role assigned to different clinicians during the week.

their personal clinician (if they happen to be an eP that week). This provides the continuity patients prefer and helps ensure access to their personal clinician.

STRENGTHS OF THE eP MODEL

Since we implemented the eP model in June 2022, our practice has completed 3,419 eP visits. We surveyed clinical staff (nurses, physicians, and other providers) at regular intervals (zero, six, and 12 months) for symptoms of burnout and perception of effort spent on inbox management. Our practice data revealed overall positive trends. Clinical staff felt less frustrated by their jobs and reported a decline in burnout symptoms. The time clinicians spent managing patient messages decreased from 1.9 to 1.5 hours per day (a gain of 24 minutes per day), and the time clinicians

SAMPLE ePROVIDER SCHEDULE

Session	Mon	Tues	Wed	Thurs	Fri	Sat	Sun
Morning	PA1	PA2	MD3		PA4	MD5/PA6	
Afternoon	MD1	MD2/NP1		MD4	PA5		
Evening			PA3				

Practices can schedule ePs in any way that best serves their needs. In our practice, the goal is to offer at least 10 eP sessions throughout the week to provide consistent access to our patients, and our message volume supports this. For practices that have a higher volume of messages on a given day, having more than one eP during that time would be appropriate.

Italicized cells indicate shifts that take place when the office is physically closed. (The ePs can conduct their shifts remotely if desired.) Blank cells indicate there is no standing eP for the shift, but one could be added if needed. Cells with two initials indicate shared shifts with alternating clinicians.

anticipated they would have to spend to fully complete the work associated with patient messages decreased from 2.7 to 2.1 hours per day (a gain of 36 minutes per day). Prior to implementation of the eP model, our clinicians reported that many of the messages they received could be managed by other team members. After implementation, our clinicians reported

The time clinicians spent managing patient messages decreased from 1.9 to 1.5 hours per day (a gain of 24 minutes).

that the types of messages in their inbox were much more appropriate.

Using the eP model, we were also able to reduce the number of back-and-forth messages with patients while decreasing the indirect, unbillable patient care workload for our clinicians. Additionally, we were able to take away clinicians' time pressure to respond to patient messages because fewer messages now land in their inbox

and the most complex messages are converted to video visits. The eP model allows clear and concise communication with the patient synchronously, with verbal feedback provided and questions answered in real-time. This is preferred over asynchronous methods, where patient interpretations of clinician messages may lead to miscommunication. During our eP visits, clinicians have the opportunity to observe nonverbal clues in the patient's body language and tone of voice to help gauge their understanding. We believe it is a better experience for both the patient and the clinician.

We designed the eP model not to undermine the portal but to leverage it. Portals can strengthen ongoing relationships with patients and foster mutual trust and responsibility of patients' health care by enhancing communication between the patient and the care team.^{4,5} However, the lack of clarity on how best to use the EHR portal has blurred the lines of what should or needs to be communicated to the clinician in real-time. We found during the eP deployment that encouraging patient ownership of their messages and needs was paramount. We want our patients to be engaged in their health care and to report their issues and concerns, while also understanding that their clinicians are human beings with duties and responsibilities other than answering messages at all hours of the day and night.

Through our eP program, we found a way to set parameters that allow for healthy, open access to the primary care team without placing the entire burden on the clinician. As we shift into value-based care, having communication and discussion with patients between office visits becomes more important, and the patient portal is where these interactions often originate. Patient portal messaging likely will continue to grow. The eP is one way to help keep these messages manageable and capture billable work.

CHALLENGES WITH THE eP MODEL

We experienced several challenges as we implemented the eP model. Our biggest struggle was inconsistency in message triage. Ideally, one nurse would perform triage for all messages to ensure that the most appropriate messages land on the

CODING FOR VIRTUAL VISITS

A complete list of approved telehealth services is available on the Medicare website: <https://www.cms.gov/medicare/coverage/telehealth/list-services>.

Coding for video visits generally requires the following:

- CPT or HCPCS code for the service — e.g., 99202-99205, 99211-99215, 99417, or G2212,
- Place of service (POS) code — starting in 2024, Medicare requires either POS 10 (patient's home) or POS 02 (other than the patient's home). It previously required the POS you would have used if you had provided the service in person, such as POS 11 (office); commercial payers may have other requirements,
- Modifier — for Medicare, no modifier is required; other payers may require a modifier such as GT or 95.

For more information, see the AAFP telehealth coding web page: <https://www.aafp.org/family-physician/practice-and-career/getting-paid/coding/coding-telehealth-audio-virtual-digital-visits.html>.

Asynchronous e-visits via the portal are also an option. For advice on getting paid for online digital E/M services (CPT codes 99421-99423), see this *FPM* Getting Paid blog post: <https://www.aafp.org/pubs/fpm/blogs/gettingpaid/entry/online-digital-em-services.html>.

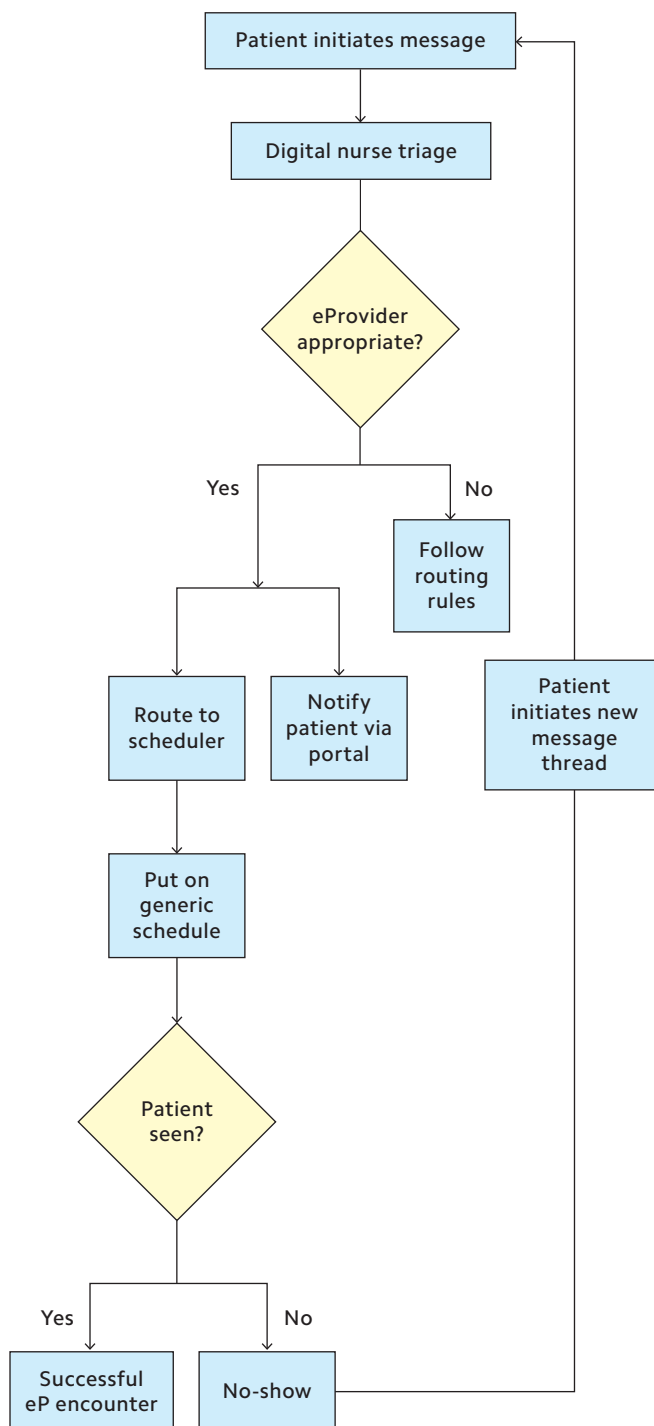
eP's schedule. We could not always have the same nurse assigned to this task, so we trained a small cohort of nurses for this work.

Another issue was lack of patient awareness of the scheduled eP encounter. Because portal messages are continuously coming in, the triage nurse has to consider how long the message has been sitting in the main inbox (often outside of practice hours). After identifying the message as eP worthy, the nurse instructs the scheduler to book the next available eP appointment and notifies the patient. We wanted to keep this interval under 48 hours to honor a near same-day approach. But the shorter the interval, the less time the patient has to be notified of a scheduled appointment and plan accordingly. We did offer explicit details on how to cancel or reschedule if needed. However, we found that patients would often send the initial message and then not check the portal (or their email for portal notifications) for several days. This was the main reason eP visit slots were no-shows. Our system does not currently have the capacity to send SMS text notifications to patients for these types of appointments scheduled under 72 business hours, nor do we have staffing levels to provide direct patient outreach.

Another issue we experienced occasionally was an incongruence with patient expectations, where the patient did not agree with the need for a synchronous eP visit. The majority of patients respected the boundary that we were placing and understood that they should not expect to get an urgent need managed via the portal asynchronously, but some patients pushed back and said their clinician has always addressed their concern without needing a visit. Over time, we have worked to reset expectations and have found most patients understand that our clinicians can do a better job of accurately diagnosing and managing their concerns if we see and speak with them face-to-face, whether via video or in person. In addition, knowing that the practice takes a team approach reassures patients that their urgent needs can be managed by another clinician in the practice if needed, which may help reduce unnecessary visits to urgent care or the emergency department. ➤

ePROVIDER WORKFLOW FOR PATIENT-INITIATED MESSAGES

While this is the typical workflow, any patient message can be converted into an eP visit at the request of the physician or other provider.



LESS BURNOUT, FRUSTRATION, AND TIME SPENT ON MESSAGES

In response to the growing volume of complex patient portal messages in our practice, which often resulted in unbillable work for clinicians, we developed the eP model to create same-day virtual encounters with a clinician in the practice to address the

value of the care we provide to our patients and allows us to capture and bill for the magnitude of indirect clinical work associated with messages. Additionally, our team members report fewer symptoms of burnout, less job frustration, and less time spent on inbasket management. **FPM**

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This innovation allows us to capture and bill for the magnitude of indirect clinical work associated with messages.

patient's specific clinical question or concern. This allows us to address our patients' needs in a timely manner, in between scheduled in-person office visits, helping them feel more secure and connected to the primary care team. This innovation has increased the

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