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A Systematic Approach to Reducing EHR Inbox Burden

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How Will This Toolkit Help Me?

This toolkit will help you develop and execute tactics to reduce the work burden of the EHR inbox, which disproportionately impacts physicians. By reengineering the inbox to reduce low-value and unnecessary work, and increasing efficiency via team-based care, you will reduce a primary source of physician burnout in your practice or organization.

Introduction

Midway through a busy morning of scheduled patients, a physician feels their heart rate rising. The physician's EHR inbox displays the total volume of messages requiring resolution, and the numbers continue to tick up each time they look up. Patients wait in rooms while they complete notes, orders, and care coordination tasks for previous patients. The physician bounces between taking care of clinic session tasks and addressing as many inbox messages as possible. By lunchtime, the physician feels overwhelmed by the work and tries to prioritize as best they can. But the next patient session starts before they have a chance to eat, and the cycle resumes. Does this scenario sound familiar?

The EHR inbox has become a primary means of communication and information flow in health care, but the design and decisions on how clinical messages are routed disproportionally burden physicians. Physicians have too often become the primary triage point in inbox routing, and this tedious work is a major contributor to physician burnout.[1] Inbox design should reflect an efficient, team-based approach to inbox management, with the aim of reducing low-value, duplicative, and unnecessary tasks while elevating high-value clinical information and decisions.[2] In other words, many messages that are clogging up the EHR inbox do not need to enter it in the first place, and of those messages that should enter the inbox, the majority do not need to be seen by the physician.[3] With coordinated, systematic efforts from practice and organizational leadership, and continuous measurement and auditing of inbox volume and performance, you *can* reduce the burden of the EHR inbox for both physicians and care team members.[4]

Q&A

What is a realistic timeline for this work?

Reducing the EHR inbox burden is an ongoing improvement opportunity that should not be rushed by an organization. Reengineering how information is categorized in the EHR inbox and improving team-based workflows takes time. Preliminary optimization can take up to a year, with refinements that will continue from then on.

Should there be a target reduction amount?

You can set an inspirational and aspirational target for inbox reduction that all stakeholders can support. A measurable goal is helpful because it holds teams accountable for the work, and the organization can celebrate it in year-end reporting; for example, "We will decrease inbox volume by 25% in 2 years." It is also helpful to align your practice around a shared vision for optimal EHR inbox use (eg, which messages require physician management and when teams should talk rather than type messages to each other).

Eight STEPS to Optimize the EHR Inbox

1. Develop an EHR Inbox Task Force
2. Measure Your Current State Using Audit Log Data
3. Adopt a Strategic Framework: Eliminate, Automate, Delegate, Collaborate
4. Begin With a "Great Purge"
5. Eliminate Low-Value and Preventable Messages
6. Automate Protocols and Pathways for Routine Tasks
7. Delegate Message Handling to Upskilled and Empowered Team Members
8. Collaborate to Fully Cover the Inbox During Physician Time Off

1 Develop an EHR Inbox Task Force

A successful initiative requires bringing together the right team members to form an EHR inbox task force.

Task force members may include:

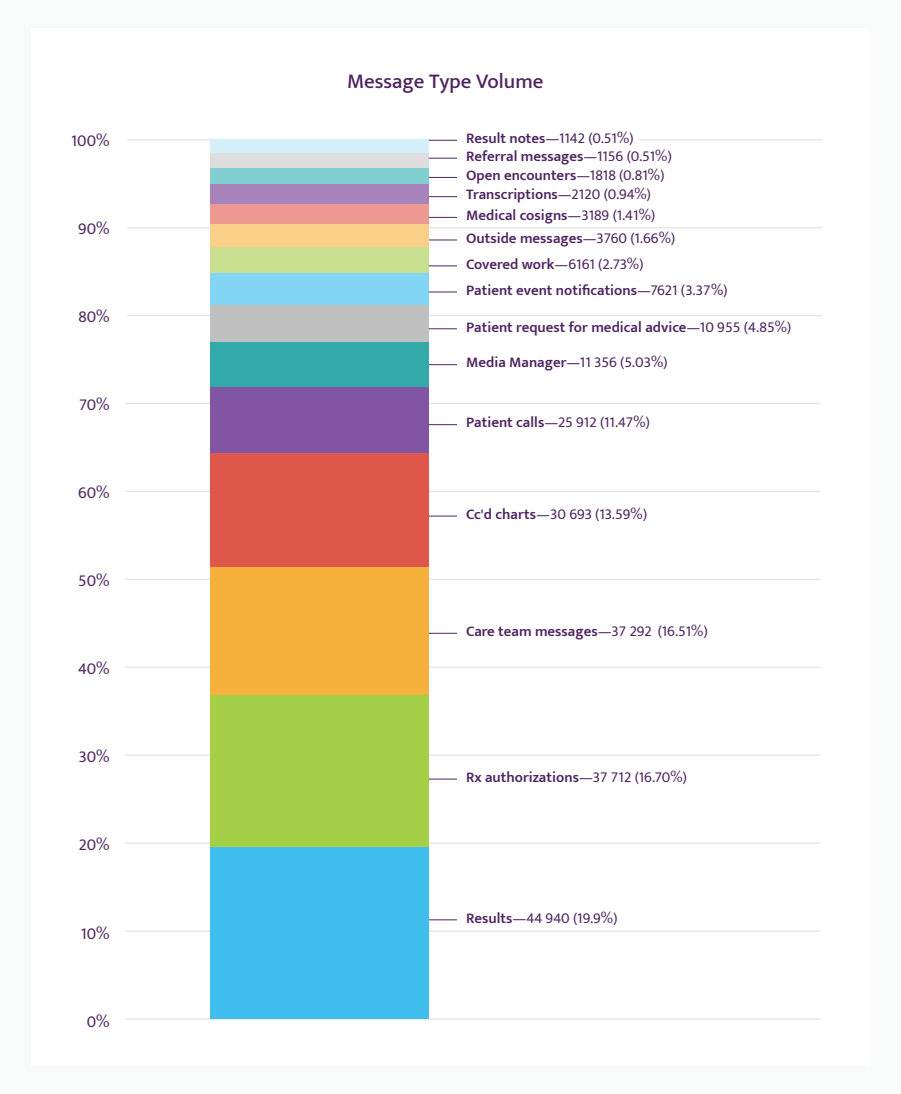
- An organizational champion at the C-suite level
- Physician leader for the department or specialty
- Clinical operational leaders
- IT operational leaders
- Compliance professionals
- Patient experience leaders
- Practicing physicians
- Care team members
- A process improvement specialist (in-house or consultant)
- An EHR vendor representative

Financial investment may be required to ensure the task force has adequate time and resources for this effort.

2 Measure Your Current State Using Audit Log Data

This data will help the task force understand the greatest opportunities for improvement and assess the impact of interventions. For example, Epic's Signal data or Oracle Cerner's Advance program data can help identify variations in the number of messages per 8 hours of patient scheduled time within and across specialties. Information extracted from audit log data can be invaluable to the task force as it analyzes the volume of messages in different subcategories (Figure 1).

Figure 1. Example of EHR Audit Log Data from an Internal Medicine Practice



Courtesy of Jane Fogg, MD, MPH

It is important to note that many EHR systems present this data by volume rather than by time. Assessing time in conjunction with volume is essential to get the most accurate picture of your current EHR inbox state. For example, some categories with a relatively small volume, such as Patient Medical Advice Requests, may contribute disproportionately to the overall work of the inbox because each message requires considerably more time to resolve. These low-volume, high-effort messages should be prioritized during improvement efforts.

Looking more deeply into each message type, you will likely discover that the contents in each folder are highly varied. For example, Atrius Health in Boston, Massachusetts, found that:

- The Results folder typically contained a mix of routine preventative normal lab results and critically abnormal diagnostic results.
- The CC'd Charts folder had a range of critical new diagnoses, prognoses, treatment plans, and routine follow-up visits.
- The Media Manager included scanned documents ranging from outside hospital discharge summaries to insurance-related authorizations.

This variation meant no simple or singular tactics could address all message types. The resolution required a multipronged approach of many smaller interventions combined, as described in the following STEPS.

Adopt a Strategic Framework: Eliminate, Automate, Delegate, Collaborate

Establish a strategic framework to guide your EHR inbox optimization initiative. One effective approach is "eliminate, automate, delegate, collaborate." An overview of these 4 strategies is described below, with more examples and explanations regarding each strategy in the following STEPS (5-8).

Table 1. The *Eliminate, Automate, Delegate, Collaborate* Approach to Reducing EHR Inbox Burden

	Goals	Specific Actions
Eliminate 	Remove low-value and duplicative messages from the inbox via IT redesign Prevent unnecessary messages from entering the inbox by implementing more proactive clinical workflows	• Remove low-value Media Manager messages • Change ADT notifications from "push" to "pull" • Remove automatically cc'd charts • Implement pre-visit labs to prevent follow-up messages about lab results • Implement 90x4 annual prescription renewals to prevent routine refill requests
Automate 	Embed automated protocols and pathways for routine tasks	• Automate normal lab and imaging results to be released directly to the patient portal, bypassing the physician inbox • Provide patients with self-sorting options when they use the patient portal so their messages are routed to the correct team member • Provide self-scheduling options for patients • Automate prescription refills using protocols programmed into the EHR

	Goals	Specific Actions
Delegate 	Direct tasks to team members who can resolve them within their scope of practice with the help of standardized clinic protocols	• Establish task-focused team pools (eg, refill pool for refill requests, clinical pool for patient medical advice requests, administrative pool for scheduling requests) • Establish protocols for abnormal test results or common disease conditions that can be initiated by nurses or MAs (eg, generating referrals, follow-up testing, follow-up visits)
Collaborate 	Share inbox management across team members to create a coverage system during physician time off	• Create a culture of a shared team inbox where RNs and MAs can work together to maximally resolve inbox items while a physician is away • Enlist APP partners if possible to address more complex inbox questions that arise while physicians are away • Develop a separate physician coverage team for extended leaves (eg, medical leave or parental leave), or for physicians needing temporary inbox support for other reasons

Putting Theory Into Practice: UCHealth

UCHealth in Colorado established a "reinventing the inbox" initiative, with vision and mission statements and a 4-phased action plan for inbox reduction.

Vision statement: The inbox initiative will reduce the burden of messages by 90% by focusing on "today's work today" and "keeping it simple," fostering high-performing teams and outstanding patient care.

Mission statement: We will reduce the inbox burden by eliminating low-value work, simplifying routine tasks, improving teamwork, creating a thoughtful response to patient requests, and constantly seeking further improvement.

The team then used their EHR audit-log data to understand the current state and variation between physicians and to track evidence that their interventions made a difference.

4 Begin With a "Great Purge"

It may be helpful to kick off the inbox optimization journey with a grand gesture such as a "Great Purge" to convince people that change can happen—and get them excited about bigger changes to come.

Putting Theory Into Practice: UCHealth

At UCHealth, older EHR inbox messages never expired, and hundreds of physicians and APPs had inboxes with over 10,000 messages. Some clinicians' inboxes had 15,000 messages, and many of the messages dated back years. Involving their governance teams (including legal, compliance, medical, nursing, operational, and IT leadership), the organization decided to delete *all* inbox messages in all categories that were older than 6 months (the messages remain accessible in the patient chart; they were simply removed from the inbox). To avoid EHR performance slowdown during the clinic day, messages were cleared in the evening. It took nearly 3 weeks to delete 12 million messages. In concert, they also set a new 90-day expiration date on all new incoming messages to prevent this problem from occurring again. If there were individual messages that physicians or APPs wished to keep, they were advised on how to forward the message to themselves in the future, as "future-pended" messages could be easily found. As a result, most physicians and APPs saw a dramatic drop in message volume in their inboxes and were more optimistic about future changes.

5 Eliminate Low-Value and Preventable Messages

Many EHR messages or notifications do not need to enter the inbox in the first place, and should be eliminated at a system level (Table 2). These can be broadly separated into two categories: low-value or duplicative messages that can be eliminated via IT fixes, and messages that can be prevented by more proactive clinical workflows that preempt the clinical need for a message.

Table 2. Things That Should Not Enter the EHR Inbox

Information Technology (IT) Solutions	
Inbox Item	**Solution to Remove**
• Results of tests not ordered by the physician • Notifications of canceled orders or overdue (expiring) orders • Notifications of scheduled appointments • Patient event notifications that are not federally required (eg, admissions to hospital outpatient departments, colonoscopies, pharmacy visits, other ambulatory visits)	Turn off automatic notifications for physicians. Can also consider batched notifications.

Information Technology (IT) Solutions	
Inbox Item	**Solution to Remove**
• Hospital Admission, Discharge, and Transfer (ADT) notifications	Instead of "pushing" information to physician inboxes, implement a central dashboard where a physician can "pull" ADT information.
• Notifications of canceled appointments or no-shows for specialist appointments	Turn off automatic notifications for physicians. Instead, institute a system-wide patient outreach protocol for canceled/missed appointments originating from the department where the appointment was scheduled to take place (rather than the referring physician's office).
• Automated (non-personalized) cc'd visit notes for specialist visits • CC'd progress notes on hospitalized patients	Turn off automatic cc function **("d/c the cc").**
• Scanned documents (eg, faxes from outside facilities)	Redesign the Media Manager so that nonessential documents bypass the physician inbox and are filed directly into the patient chart.
Clinical Workflow Solutions	
Inbox Item	**Solution to Remove**
• Refill requests for medications that treat chronic conditions	Refill long-term medications for 12-15 months at a time (as allowed by state regulation) ("90x4, call me no more!").
• Normal lab results	Implement pre-visit planning with pre-visit labs so results can be discussed during the visit. Consider automated release of "normal, normal" results to the patient directly via the patient portal, bypassing the physician inbox entirely.
• Clarifying questions regarding a recent visit without first being directed to review their visit note	Optimize communication with patients via after-visit summaries and shared visit notes with patients. Make the note easily accessible to patients on the patient portal.

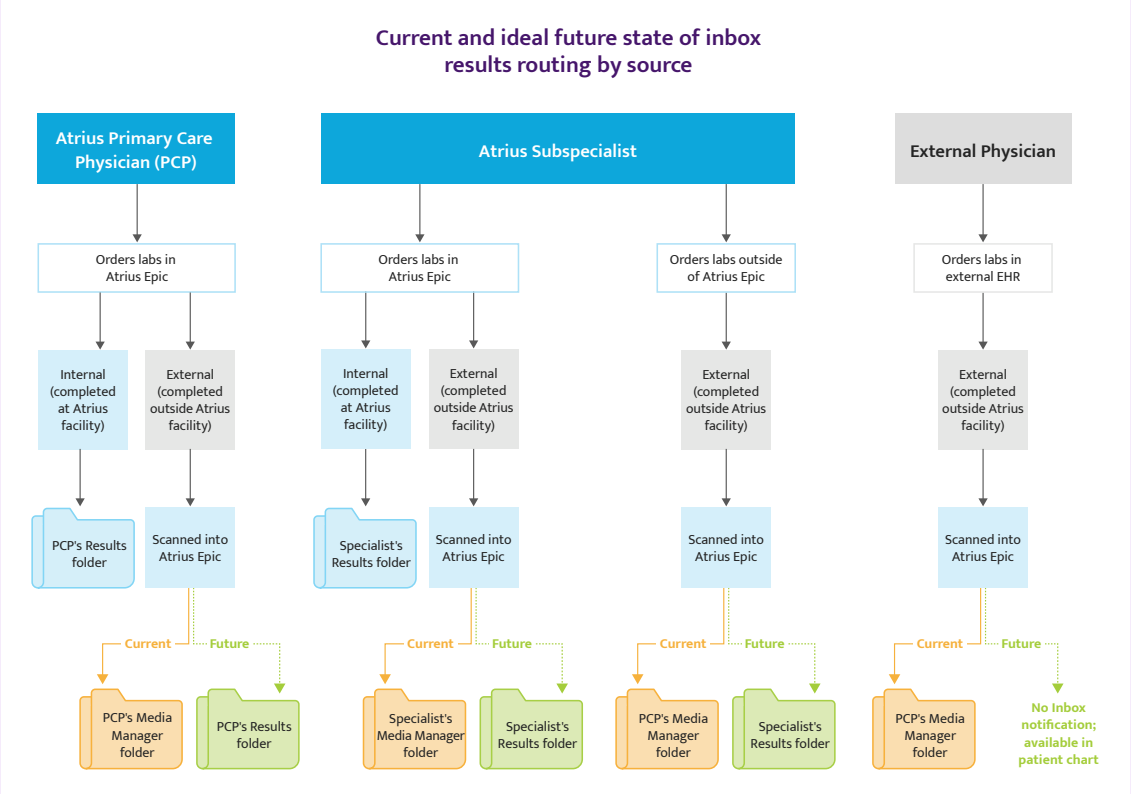
Putting Theory Into Practice: Atrius Health

Cleaning Up the Media Manager

The Media Manager folder for scanned documents accounted for 5% of the Atrius EHR's total inbox volume. It included any information received by fax or paper and not available electronically. The team scrutinized the contents of the Media Manager messages to look for waste, duplication, and opportunities to reduce the size of this folder. Primary care physicians (PCPs) struggled to find relevant clinical information among the large volumes of extraneous information. Additionally, some Media Manager items were mislabeled or misfiled, causing physicians to miss important information.

At Atrius, a governance committee of practicing PCPs reviewed the contents of the Media Manager folder with the Director of Health Information Management. Items were categorized and assessed for clinical value. The governance committee discovered that when Atrius physicians ordered lab tests at outside hospitals, the results went to the Media Manager (Figure 2). This made it likely that the ordering physician would not see the result—and cluttered the Media Manager folder. **The committee re-routed these external results to the Results folder, the same place that tests performed within the organization would go. They further determined most other items in the Media Manager could be safely filed directly into the chart *without being routinely routed to the PCP's inbox.*** With this change, Atrius reduced the volume of messages in Media Manager by a remarkable 98%.

Figure 2. Current and ideal future state of inbox results routing by source



Courtesy of Jane Fogg, MD, MPH

D/C-ing the CC

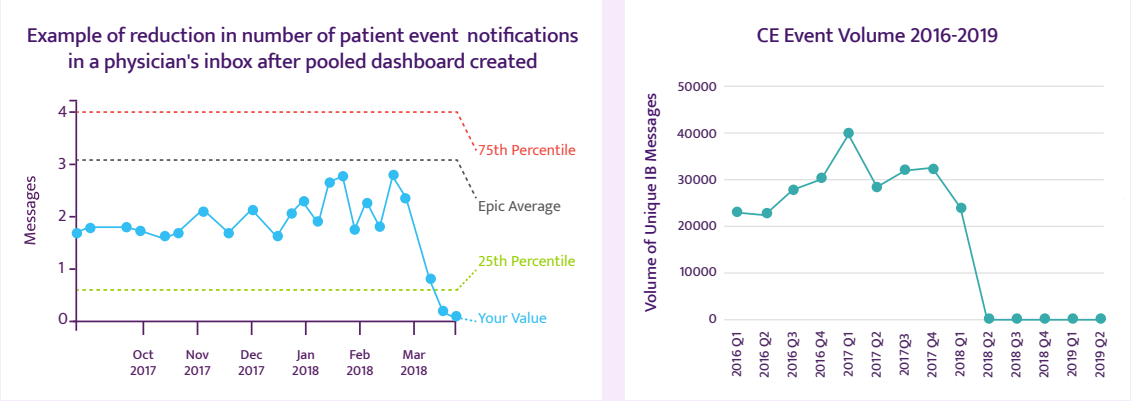
The folder CC'd Charts, which is for consults, urgent care, and cross-coverage notes from colleagues, accounted for 13% of the total inbox volume at Atrius. With this volume of daily messages, it was difficult to identify those of clinical importance for follow-up, such as a care plan change or outreach.

Clinical leaders at Atrius approached the work with several tactics. First, they looked at the logic embedded in Epic that determined if a cc'd chart was automatically sent to a PCP. The governance committee uncovered wide variations by department and site. The governance committee engaged all stakeholders, including primary care, subspecialty, and urgent care physicians, to understand the intention of sending their notes and the clinical value to the primary care physician. **The committee turned off the automatic routing, forcing all cc'd charts to be pushed rather than automated.** They created practice agreements on what to send and what not to send. The agreement spelled out that subspecialists and urgent care physicians should send new consults, significant changes in treatment, prognosis, or condition, or recommended action for another physician to make. **The committee asked that all sent notes have an attached customized comment to indicate the reason for sending.** Finally, after discovering that a large volume of cc'd charts remained active in the inbox, Atrius purged all cc'd charts older than 60 days. Early results showed a 40% drop in monthly cc'd charts in the PCP's inboxes.

Changing ADT Notifications From Push to Pull

PCPs receive automated alerts, notifications, and discharge summaries in their inbox through admission, discharge, and transfer (ADT) feeds from an array of local and national health systems. One hospital admission could generate 6 or more unique inbox messages. Many of these messages had duplication of documentation and incomplete information. The timing of notification was not synchronous with clinical care, and drilling down on pertinent information was onerous. **The committee removed the automatic ADT routing to inboxes and instead pooled the notifications into a dashboard. Primary care physicians thus "pulled" their dashboard on the main page of Epic at their discretion rather than having this information "pushed" to their inboxes.** The dashboard organized emergency department and hospital discharges by patient and provided the relevant information. Physicians could use a link to access discharge summaries whenever they were available, the physician could access them via a link. Post-discharge calls and appointments are visible to the PCP as well. After implementing this dashboard, Atrius had 100% elimination of emergency department and hospital event notifications in the inbox.

Figure 3. Reduction of Patient Event Notifications



Courtesy of Jane Fogg, MD, MPH

6 Automate Protocols and Pathways for Routine Tasks

In this era of advancing technology in conjunction with staffing shortages, it is important to automate to remove the need for human involvement whenever possible. Examples include:

- Automatic release of normal lab and imaging results directly to the patient portal, ***bypassing the physician inbox.*** While the automatic release of results is now federally mandated, having normal results bypass the physician's inbox and directly released to patients is a novel approach that can safely reduce the inbox burden for physicians. ***Abnormal results, or results with high dependency on clinical context, should still be routed to the ordering care team in addition to the patient.*** See the "Redirecting Normal Test Results" example below for further details.
- Self-sorting options for patient communication via the patient portal (eg, "I want to … ask for medical advice, ask a question about a test result, refill a prescription, make or cancel an appointment, request a referral, or other").
- Self-scheduling options for patients.
- Automation of prescription medication refills based on a standardized protocol that is programmed into the EHR. This level of automation is separate from implementing 90x4 refills and delegating refill requests to a refill nurse and goes even further to reduce the inbox burden.

Putting Theory Into Practice: Atrius Health

Redirecting Normal Test Results

The Test Results folders comprised 19% of the total inbox volume and constituted the largest bucket of inbox work for PCPs at Atrius. These physicians felt overwhelmed both by the volume of results to manage and by the angst that they may miss significant findings buried by the sheer number of messages. The governance committee used automation to reduce the burden of the Test Results folder while also helping clinicians avoid missing critical results.

A multidisciplinary team of physicians, APPs, nurses, IT, data scientists, and practice operations analyzed the contents of all internal medicine and family medicine lab results messages over 3 months and found that more than two-thirds were normal. This translated to 20 normal labs per primary care physician per workday. The team leveraged the EHR capability to share some of these results with patients automatically via the portal, bypassing the physician inbox. The team analyzed the most frequently ordered labs at the pilot sites to understand the potential impact of automated select labs. Examples of lab tests deemed suitable for automation included basic metabolic panel (BMP), complete metabolic panel (CMP), HbA_{1c}, vitamin B_{12}, and vitamin D. Some lab tests were not automated because the clinical context would impact interpretation and action, such as a lipid panel. The physician leader of the project also added an option to "cc" a lab test to yourself if you wanted to see the results regardless of whether they were normal.

The initial pilot of 4 clinical sites showed a 25% reduction in the Results folder of the inbox. In 2021, Atrius rolled the program out to the remaining sites, and in 2022 Atrius added more lab results to the menu of those that could bypass the physician inbox. Atrius has reached a sustained average of 30% result notification reduction across the service line.

The project leader encountered some professional reluctance to adopt this approach. The idea of ordering a test and having the results go directly and only to the patient was indeed new. The committee engaged in open discussions about the role of a primary care physician in managing lower acuity care needs and the expectations of patients. The committee also wanted to reduce the volume overload in results messaging that can lead to errors.

A key learning is that the engagement of physician leaders is critical. The steering committee met regularly to discuss and give feedback on metrics, workflows, and pilot design. The committee's physician leader addressed all individual PCP feedback.

Decreasing Prescription Refill Volume via Automation of Refills

Prescription renewal requests made up 16% of the total inbox message volume, resulting in an average of 16 or more requests per day per PCP. Patients and pharmacies requested renewals by phone or fax, creating duplication and waste. Examining the volume at one of Atrius Health's smaller sites, the governance committee learned that it required 7.65 hours of administrative work per day to complete a fax and phone review, chart review, and enter a refill encounter for all prescriptions. This single site with 5.6 FTE PCPs needed a full-time administrative assistant to enter renewal requests into the inbox. The committee also reviewed safety events related to renewals from pharmacy faxes at that site and found 36 incidents in 1 year.

The committee worked with the IT team to develop protocols for automated prescription renewal based on EHR evidence of appropriate monitoring tests and appointments. They created a clinical governance team of primary care and subspecialty care physicians, pharmacists, and nurses to determine what medication categories would be eligible for automated renewal by these protocols. Antibiotics, scheduled medications, and medications requiring close clinical oversight were deemed ineligible for automated renewal.

Atrius piloted the renewal automation at 2 of its primary care sites. The governance committee gathered physician and APP input and identified further adjustments to improve workflows and ensure that the care gaps identified were clinically appropriate. Next, the committee worked with the legal, nursing, and senior leadership teams to align the policy on automated prescription renewal. **Importantly, the workflow did not require a PCP to sign each approved medication reauthorization.** The renewal teams can facilitate a medication renewal request through a protocol and do not need to exercise clinical judgment or work outside of their defined scope of practice. Atrius invested in broad and robust communication across the organization and the participating service line.

One key learning was that the combination of ongoing clinical governance, sharing early results from the pilot, gathering physician input, and thorough iterative piloting supported broad adoption of the renewal automation process. Investing in pilot learnings enabled rapid spread across the remaining 19 sites. Automating prescription renewals reduced the inbox volume of renewals by 50% for PCPs at Atrius.

7 Delegate Message Handling to Upskilled and Empowered Team Members

The key principle of EHR inbox delegation is that physicians should not be the main triage point for incoming messages and should not be the primary "manager" of the EHR inbox. A team-based EHR inbox management protocol should be implemented so that the messages that do not need "physician eyes" (which are the majority) are completely handled by nonphysician team members.

How can this be accomplished? To begin, certain EHR message types (including phone calls, patient portal messages, faxes, and refill requests) should be grouped into common buckets to determine how they should be addressed and by whom. Team "pools" that correspond to each category should be created; this pool will be where all messages falling into that category will be routed (Figure 4).

It may be helpful to assign a nurse or medical assistant as the primary manager of each pool corresponding to a physician or group of physicians. This consistency allows the pool manager to be familiar with the physician's patients and their care plans. It also decreases the chance that multiple team members are checking the same pools and doing duplicative work or, on the flip side, messages fall through the cracks because no one knows they haven't been addressed or completed.

The pool manager addresses all pool messages and resolves as many messages as they can. For messages beyond their scope, encourage them to research the question and think about possible next steps. Avoid light "touch and pass" transfers with comments such as "please advise." After additional research, the nurse or medical assistant may consult the physician or forward the message. Encourage information coupling (presenting information necessary for clinical action on a result, such as previous hemoglobin levels with a newly abnormal level).

For a more detailed discussion on the optimal handling of patient portal messages specifically, see the Patient Portal Optimization toolkit.

Figure 4. Suggested Team-Based EHR Inbox Management Workflow

BUCKET 1	What	Routes to	First pass by
	Information or questions about clinical care from patients or clinicians outside the practice	Clinical pool	MA, escalate to triage RN or physician as needed
BUCKET 2	**What**	**Routes to**	**First pass by**
	Nonclinical questions from patients or others (eg, scheduling questions, billing questions)	Administrative pool	Patient liaison or PSR, escalate to MA or billing staff as needed
BUCKET 3	**What**	**Routes to**	**First pass by**
	Medication refill requests from patients or phramacies	Refill pool	Refill nurse (RN or LPN)
BUCKET 4	**What**	**Routes to**	**First pass by**
	Requests for forms or letters	Administrative pool	Patient liaison or PSR, escalate to MA or RN for any clinical information, route to physician for signature if needed

Messages that ultimately require physician attention (should be less than 5-10% of all messages) can be rerouted directly to the physician's inbox, or for more complex issues, the pool manager can verbally discuss the message with the physician for more efficient resolution.

Here are some additional team-based care principles that can contribute to success:

- **Colocate team members.** Colocation is a principle of team-based care that promotes verbal communication between all team members, resulting in less need for electronic communication that clutters the inbox. It may seem counterintuitive, but in-person communication is crucial for effective inbox management. Consider colocating team members such as triage nurses, rooming team members, and schedulers to facilitate prompt resolution of questions or issues that arise during triage, rooming, and scheduling.

- **Incorporate a daily huddle.** Daily huddles can help reduce unnecessary electronic communication. For example, you may use the huddle to identify personal needs for certain patients that day, look at potential add-on slots, etc.
- **Standardize prior authorizations.** Consider establishing a centralized prior authorization team composed of nurses. Engaging pharmacists could also help your team maximize the use of generic or substitute medications to minimize the need for prior authorizations in the first place, as well as ensure the patient is adhering to their current medications before adding or escalating therapy.
- **Standardize FMLA and short-term disability form requests.** Consider establishing a centralized forms team to fill out FMLA and short-term disability requests based on physicians' notes, which are then sent to physicians for review and signature.
- **Anticipate the needs of patients requiring complex care.** A robust transitional care program for patients with complex care needs leaving a hospital or skilled nursing facility could avert complications. Anticipating and meeting their needs before a crisis may, in turn, decrease inbox work and phone calls to the office.

Q&A

Workforce and staffing shortages make it hard to implement this team-based approach to inbox management. How can we overcome this?

Whenever possible, prioritize elimination and automation over delegation. This is the most important strategy to help mitigate staffing challenges and promote effective team-based care. In terms of the delegation work itself, constant communication between physicians and the rest of the team is key. Team members must feel comfortable asking physicians questions (especially when they are covering for a physician they do not typically work with) and feel comfortable letting their leadership know when they are overwhelmed or overworked. Feedback and communication, both formal and informal, help everyone feel like they are on the same team.

8 Collaborate to Fully Cover the Inbox During Physician Time Off

Many physicians are reluctant to take a vacation because they don't want to burden colleagues with their EHR inbox coverage.[5] Or, when they do take vacation, they spend an hour every day logging in and working on their inboxes so that they aren't overwhelmed by their inbox volume when they return. This is a contributor to physician burnout and costly to organizations.[5]

It is important to develop a systematic approach to EHR inbox coverage during physician time off, whether for vacation, illness, or other personal reasons. The goal is that physicians should leave with an empty inbox and return to a mostly empty inbox, without having to log in during their time off and without having their colleagues take on that extra burden.

Different coverage models may work best for different practices. A couple of examples are described below. The AMA STEPS Forward® "Real PTO" for Physicians Toolkit provides more detailed guidelines and examples.

Putting Theory Into Practice: Medical Associates Clinic (Dubuque, IA)

Covering with nurse-physician teams

The general internal medicine department assigns 1 or 2 nurses to each of their 12 physicians. These nurse-physician teams are stable each day, allowing efficient workflows and communication to develop. The nurse manages the inbox and refers messages to the physician, either verbally or by forwarding the inbox message. If the physician is out and their nurse(s) are working with another physician that day, the nurses continue to cover the inbox of their primary assigned physician. If both the physician and the nurse(s) are out at the same time, the on-call nurse for the entire department manages urgent messages, addressing clinical concerns verbally with the physician on call for the day. The non-urgent messages remain for the practice nurse to review on return. It is common to schedule a half day for the nurse to address the non-urgent messages accumulated during their absence.

Putting Theory Into Practice: Atrius Health

Covering with APP-physician teams

Many primary care physicians are paired with an APP (nurse practitioner or physician assistant). Together they care for panels of 2,500 patients as a dedicated team. This model's expectations include shared accountability for managing the panel and the inbox. This requires teamwork and trust, with the PCP and APP determining the optimal way to share an inbox.

There is also a clinical coverage department staffed by PCPs and APPs employed specifically to cover during extended physician absences, such as medical or maternity leaves or departures before a replacement hire. This coverage includes inbox coverage and in-person and telehealth appointments as needed. This department also gives episodic help to physicians struggling with their inbox volumes and needing relief to catch up. Several PCPs successfully emerged from this inbox assistance with additional skills and support.

EHR Inbox Reduction Checklist (PDF)

Conclusion

The volume of EHR inbox work has become unsustainable for both physicians and care team members. Performing a detailed analysis of inbox message categories followed by a multi-stakeholder approach to eliminate, delegate, automate, and collaborate on inbox work enables practices and organizations to reduce message volume while preserving the clinical team's ability to provide exceptional patient care.

AMA Pearls

The gatekeeper model—where the physician serves as quality control for care delivery, so all messages route through their inbox—results in increased burnout, ambiguous responsibility, and potential safety hazards.[6,7]

Empower team members, leadership, and patients to understand that the EHR inbox is not the same as a physician's personal email. Rather, it is a collection of clinical responsibilities that should be addressed by the entire clinical team for the sake of efficiency as well as good patient care.

In this era of workforce shortages, prioritize elimination and automation over delegation.

Further Reading

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Related AMA STEPS Forward® Content

Education (Playbooks, Toolkits, MOC/CME)

Taming the EHR Playbook

Saving Time Playbook

Patient Portal Optimization toolkit

Pre-visit Laboratory Testing toolkit

Annual Prescription Renewal toolkit

Medication Management toolkit

Getting Rid of Stupid Stuff toolkit

Removing Unnecessary EHR Inbox Messages (MOC Part IV Activity)

Sharing Clinical Notes with Patients toolkit

Simplified Outpatient Documentation and Coding Toolkit

Team-Based Care toolkit

Patient Pre-Registration toolkit

Optimizing Space toolkit

Advanced Rooming and Discharge toolkit

Daily Team Huddles toolkit

Medication Adherence toolkit

Medication Management toolkit

Transitions of Care toolkit

Pre-Visit Laboratory Testing toolkit

Podcasts

Electronic Health Record Optimization podcast

Improve Practice Efficiency with EHR "Quick Wins" podcast

Reduce Pajama Time and Work Outside of Work (WOW) podcast

Treating Attention as an Asset podcast

A Personalized EHR Coaching Approach to Using Audit Log Data

How to Create a Unified Communications Initiative using Epic Secure Chat

What EHR Metadata Tells Us About Team-Based Interventions for Inbox Reduction

Write Shorter Notes: Implementing a Standardized Progress Note Template

A System-Level Approach to EHR Inbox Reduction

Electronic Health Record Optimization

Taming the EHR

Success Stories

The Inboxologist

Leveraging Standing Orders and Protocols to Ease In-Basket Burdens

Teamwork Tames the Inbox

Webinars and Videos

Cognitive workload: A modifiable contributor to physician burnout?

A System-Level Approach to EHR Inbox Reduction

Team-Based Care

Taming the Electronic Health Record

Leveraging EHR-Integrated Telehealth Tools

Building Trust: Addressing Inefficiencies

Article Information

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About the AMA Professional Satisfaction and Practice Sustainability Group

The AMA Professional Satisfaction and Practice Sustainability group is committed to making the patient–physician relationship more valued than paperwork, technology an asset and not a burden, and physician burnout a thing of the past. We are focused on improving—and setting a positive future path for—the operational, financial, and technological aspects of a physician's practice. To learn more, visit stepsforward.org.

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