# INNOVATIONS IN PRIMARY CARE Utilizing Medical Assistants to Manage Patient Portal Messages

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## THE INNOVATION

Patient medical advice requests (PMARs) have been increasing over the past decade, with a rapid intensification of this trend during the COVID-19 pandemic that persists.<sup>1</sup> Many primary care practices have workflows in which primary care physicians (PCPs) directly receive these messages, despite data showing that this additional work is linked to clinician burnout and requires team-based care. Most published models discuss registered nurse (RN)-level workflow changes for management of PMARs<sup>3</sup>, but nursing staffing shortages frequently limit implementation of this model. To solve this, we taught certified medical assistants (CMAs) how to manage incoming PMARs utilizing existing telephone call routing guidelines.

# WHO & WHERE

Penn Family Care is a large, urban, academic practice with over 60 clinicians, including residents, physicians, and nurse practitioners. Physicians, nurses, CMAs, and administrative support are divided within the practice into 4 suites, and further subdivided into 9 pods to help promote continuity. At the time of this workflow change, the practice received an average of 2,537 messages per week, with each PCP managing an average of 20 messages per week (range 1-112). Penn Medicine utilizes Epic (Epic Systems) as the electronic health record, with MyChart as the patient portal. Patients can select a message type in MyChart but tend to overutilize the general message type sent directly to their PCP, thereby undermining the functionality. Patients are notified that a team supporting the PCP will review their message, with a reminder of the appropriate use of non-urgent messages.

Conflicts of interest: authors report none.

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## HOW

Instead of routing directly to PCPs, PMARs now flow to CMA pools based on the suite and pod structure described above. CMAs then distribute the message to the most appropriate person to manage the work, based on existing protocols built for our health system's centralized access center. The routing change required partnership with an information services analyst and socialization of this change among physicians and CMAs. CMAs primarily manage messages between rooming activities but occasionally have dedicated time for PMAR management.

## LEARNING

With this workflow change, we decreased the number of messages going directly to PCPs by about 40%. While many messages are appropriate to pass to physicians, there is a large volume of scheduling requests and other clinical tasks that are easily managed by care team members. CMAs are able to maintain a higher response level, with over 92% of messages handled in 2 business days, compared with an average response rate of 85% by PCPs. This improves overall office efficiency. Once a message is passed to a physician, the physician is able to maintain the option to directly communicate back through the portal to the patient. CMAs responded to surveys that they enjoyed this work, and most patients accepted the team-based care model; it is utilized in other specialty practices throughout the health system. We have also shown that using a staff-driven model reduces the gender gap between male and female physicians from 17% to 2%, with female PCPs receiving an average of just 2 more messages per month than male PCPs after adjustment for clinical fraction full-time equivalent (cFTE). Next steps include improving protocols to empower CMAs to directly handle more messages, thereby reducing message volumes for PCPs and the number of touches per message. We recommend consideration of a CMA- rather than an RN-driven model in settings where RN staffing limits implementation of a team-based approach to electronic patient messages. We encourage practices in which PCPs manage messages to adopt a team-based care model to support practice and clinician efficiency.

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**Key words:** patient medical advice requests (PMAR); certified medical assistants (CMA); workflow management; team-based care; patient communication; patient portal

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