Procedures Group Chat: A Resident-Driven Approach to Increase Procedural Competency

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Introduction: In 2007, the American Board of Internal Medicine (ABIM) shifted away from requiring completion of procedures during residency training and towards emphasizing common procedural indications, contraindications, and complications. As a result, many procedures are now referred to consulting services such as critical care and interventional radiology (IR). Our aim was to address this training gap through a resident-driven initiative that provided daily opportunities to collaborate on procedures in a supervised clinical setting.

Methodology: In January 2023, we created a secure group chat and invited Internal Medicine (IM) residents to voluntarily join if they were interested in learning or teaching bedside procedures such as thoracenteses, paracenteses, lumbar punctures, and line placement. Residents who identified a need for a non-emergent bedside procedure would reach out in the group chat to see if a resident certified to perform and supervise that procedure would be available and could subsequently coordinate availability.
A two-question survey was sent to the entire residency program asking residents whether they were a part of the group chat and whether they found the chat helpful in advancing their medical knowledge. The impact of the initiative was measured through procedures logged in to New Innovations, a website used by graduate medical education to log completed procedures. We chose five procedures (paracenteses, thoracenteses, central lines, arterial lines, and lumbar punctures) to compare changes in procedure volume performed by IM residents one year before and after the group chat was set up.

Results: 64 out of 108 residents responded to the survey (59% response rate). 90% of respondents stated that they were part of the group chat and 76.6% responded they “agree/strongly agree” that the procedures group chat has been helpful. Objective measures of the group chat’s impact revealed a 93% increase in the number of procedures performed by residents. IM Residents logged 122 procedures in 2022, the year prior to the initiation of the group chat, compared to 235 procedures logged in 2023, the year after. There was a 96% increase in paracentesis and 387% change in thoracenteses completed after the group chat was established.

Conclusions: The procedures group chat nearly doubled the number of procedures completed and logged by residents. This group chat has fostered enthusiasm for patient care by helping us overcome some of the barriers and delays in health care due to factors out of our control, such as limited resources or staffing. Due to the inexpensive nature of this initiative, it can be easily replicated at other IM programs across the country, especially those without resources such as simulation centers. Future goals include creating formal teaching sessions including cadaver lab simulations and a proceduralist elective for procedures to be taught and supervised by certified residents, attendings, and subspeciality services for a multidisciplinary education.