

## The Daily Chief Scrum as a Way to Manage a Residency Program Crisis.

Daniel Relles, MD  
*Lehigh Valley Health Network*

Margaret Hadinger, EdD MS  
*Lehigh Valley Health Network*

Follow this and additional works at: <https://scholarlyworks.lvhn.org/surgery>

Digital part of the [Medical Education Commons](#)  
Commons

---

Network  
**Published In/Presented At**  
Logo

Relles, D., Hadinger, M. (2021, June). The Daily Chief Scrum as a Way to Manage a Residency Program Crisis. *Journal of Graduate Medical Education*, 13(3), 431-432. DOI: <http://dx.doi.org/10.4300/JGME-D-20-01314.1>

This Article is brought to you for free and open access by LVHN Scholarly Works. It has been accepted for inclusion in LVHN Scholarly Works by an authorized administrator. For more information, please contact [LibraryServices@lvhn.org](mailto:LibraryServices@lvhn.org).

Joel T. Katz, MD

Associate Professor of Medicine and Internal  
Medicine Residency Program Director, Department of  
Medicine, Brigham and Women's Hospital

\* Drs Foote, Jain, Wang, and Rotenstein contributed  
equally to the article.

Corresponding author: Michael B. Foote, MD,  
Memorial Sloan Kettering Cancer Center,  
footem@mskcc.org, Twitter @MikeFooteMD

## References

1. Foote MB, DeFilippis EM, Rome BN, Divakaran S, Yialamas MA. Use of "doctor" badges for physician role identification during clinical training. *JAMA Intern Med.* 2019;e192416. doi:10.1001/jamainternmed.2019.2416



# The Daily Chief Scrum as a Way to Manage a Residency Program Crisis

## Setting and Problem

Following the unexpected death of a resident, our general surgery residency program quickly turned to a model of crisis response to address the well-being of our residents, and to manage the logistics, emotions, and challenges related to the tragedy.

The program director's priority was keeping track of a full complement of residents (approximately 30) to identify current issues or potential/avoidable problems. This demanded immediate, transparent, and nearly continuous communication and a reliance on chief residents as key players in disseminating and gathering information from other residents. For the first 5 days following the crisis event, residents expressed that communication could be improved, and many of the residents expressed concerns about the emotional and logistical effects of the loss on themselves and on their work.

To aid in communication, and to ensure the chief residents themselves were well supported through

their own time of crisis, the program implemented a simple and reproducible model to improve communication with residents in a time of crisis.

## Intervention

The intervention consisted of the implementation of daily 10-minute "scrums" led by the program director. The goals of the daily scrums were to understand the current issues, anticipate new concerns, identify "at-risk" residents, and support the chief residents leading the crisis.

The concept of the scrum in software development as part of the agile methodology is relatively recent, gaining traction in the past 10 years.<sup>1</sup> Scrums were designed for small teams during short projects. The meetings are intended to be participatory and brief. They are meant to be a simple, efficient means to discern what has been done and what needs to be done. Every participant is asked to answer the same questions.

Daily scrum meetings were structured as follows:

- Held daily at the same time from 6:30 to 6:40 AM
- Held in a conference room near resident sign out
- All members were asked to stand to ensure brevity
- Each member was asked to answer the same 3 questions
- Responses were recorded by the program director
- The timing and structure were adjusted as needed based on feedback from the chief residents

Regarding daily scrum content, each resident answered the following questions:

- What issues did you encounter yesterday?
- What issues do you anticipate for today?
- Are there any residents about whom you are concerned? How are you doing?

The daily scrums were held for 2 weeks, at which time the chief residents felt they were no longer necessary. These were replaced by weekly meetings for the duration of the year.

## Outcomes to Date

Immediate outcomes include:

- Improved communication with the chief residents
- Increased support of chief residents as they learn to lead during a time of crisis

DOI: <http://dx.doi.org/10.4300/JGME-D-20-01314.1>

- Improved ability of program director to identify residents of concern, and to intervene sooner via:
  - Individual meetings
  - Meetings with mentors
  - Mandated time off
  - Employee Assistance Program appointment
  - Appointment with hospital clergy
- More rapid identification of scheduling or service issues, enabling quicker solutions
- Ongoing ability to monitor the well-being of the chief residents, who absorb a significant burden of the residency stress
- Chief residents expressed appreciation for the quick proactive approach to handling the residency program during the crisis response

The applicability of the scrum model could be nearly universal in training programs experiencing all manner of crises. The expense to the residency and institution was minimal, as the time spent in the scrums amounted to 10 minutes per day and was estimated to save time in individual meetings that would have occurred throughout the day otherwise.

**Daniel Relles, MD**

General Surgery Residency Program Director, Lehigh Valley Health Network

**Margaret A. Hadinger, EdD, MS**

Designated Institutional Official, Lehigh Valley Health Network

Corresponding author: Daniel Relles, MD, Lehigh Valley Health Network, [daniel.relles@lvhn.org](mailto:daniel.relles@lvhn.org)

## References

1. Schwaber K, Beedle M. *Agile Software Development with Scrum*. Upper Saddle River, NJ: Prentice Hall; 2002.



# Development of a Novel Hospital Medicine Team-Based Learning and Simulation

# Conference Through Rapid Cycle Quality Improvement

## Setting and Problem

Inpatient medicine requires strong teamwork, yet there is a paucity of educational interventions to develop these skills. Additionally, residents often encounter high-stakes clinical scenarios involving decompensating patients with pathology they may not have managed previously. These scenarios often involve an interdisciplinary rapid response team and leave little room for error. We took an iterative approach in the development of a novel hospital medicine conference that fosters the application of medical knowledge and improves teamwork skills during acute clinical scenarios utilizing quality improvement methodology.

## Intervention

A 60-minute hospital medicine conference was developed combining pedagogic approaches from team-based learning (TBL) and simulation for managing clinical scenarios in the acute care setting (FIGURE). The pilot occurred over 3 sessions and included medical students and postgraduate year 1–3 internal medicine residents; the topics included transfusion reactions and status epilepticus. Each session utilized the simulation center, a conference room, and 2 faculty members—one moderating the simulation room and one moderating the TBL room.

A week before each session, learners were assigned prereading. At the beginning of each session, learners were split into 2 groups, with half starting in the simulation center and the remainder starting in the TBL room.<sup>1</sup> The TBL room first completed a multiple-choice question test known as the Individual Readiness Assessment Test (IRAT). They were then divided into small groups to discuss the same multiple-choice question known as the Group Readiness Assessment Test (GRAT). While in these groups, the TBL learners completed clinical case exercises requiring them to develop differential diagnoses and discuss medical management as a team. Simultaneously, simulation learners managed an unstable patient and then the learners switched rooms.

Combining TBL and simulation in a conference provided a novel experience that enhanced adult

DOI: <http://dx.doi.org/10.4300/JGME-D-20-01336.1>