Using Direct Observation, Formal Evaluation, and an Interactive Curriculum to Improve the Sign-Out Practices of Internal Medicine Interns

Reference:
Gakhar B,1,2 Spencer AL1,3 Using Direct Observation, Formal Evaluation, and an Interactive Curriculum to Improve the Sign-Out Practices of Internal Medicine Interns. Acad Med. 2010;85(7):1182-8

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Tags

Clinical domain
Medical Expert
CanMEDS Collaborator
CanMEDS Manager

Educational domain
Curriculum
Teaching Method
Program Evaluation

Background

This is a relevant and timely paper given the recent emphasis on patient safety, work hours restrictions and the current stress on effective inter-professional communication.

Purpose

The authors explore a clinical need that led to an educational need. In this case it was the clinical need of having more appropriate hand-offs/sign-out from one team to another with concerns over patient safety.
Type of paper

- Research: with an associated program evaluation
- Report of an innovation  (with an associated program evaluation)

Key Points on the Methods

The authors describe their initial chaotic, incomplete and inaccurate process for sign-out between on-call teams. They chose a multi-faceted approach to address the situation. They started with a formal evaluation of baseline by having residents complete a brief questionnaire. Using checklists they then evaluated the verbal sign-out processes as well as the completeness and accuracy of the paper-based sign-over processes.

The authors then provided a three part intervention following which they repeated the initial measures to evaluate change. The intervention consisted of (a) a formal mini-course with lectures, (b) opportunity for residents to practice sign-out with feedback, and (c) development of a web-based sign-out form, based on the mnemonic “SIGN OUT“:
- Sick or do not resuscitate
- Identification data
- General hospital course
- New events of the day
- Overall health
- Upcoming possibilities (i.e “what can you expect tonight“)
- Tasks to do

Key Outcomes

Initially most of the residents felt they gave accurate sign-out, but, they felt they did not receive accurate sign-out. The residents also felt that they were not taught how to do accurate sign-out or how to get feedback related to providing accurate sign-out. Following the intervention, the authors noted the overall quality, accuracy and completeness of both written and verbal sign-outs improved.

Key Conclusions

The authors conclude...
This is a great example of transferring a clinical challenge into an education opportunity. In particular, in providing the residents an opportunity to question each other and provide more information during the sign-overs the intervention improved education and likely clinical care.
The paper is an excellent example of a program evaluation. It starts with examining the needs, then progresses to the design of the evaluation.

There are limitations; the change in behavior is noted only two months following the intervention: there is no information on sustainability.

**Spare Keys – other take home points for clinician educators**

This is a well written paper but the abstract really captures everything you need to know.

The actual web-based tool could be limited in usefulness depending on the specialty/discipline.