

The Fellow as Clinical Teacher Curriculum: Enhancing Teaching in the Setting of Consultation

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Setting and Problem

The subspecialty consultation represents a unique opportunity for resident learning. Centered on a patient care question, residents bring a “need to know” to the interaction. Fellows have important insights into residents’ learning needs, having themselves recently completed training. This learning opportunity may be particularly salient for internal medicine training programs, in which internal medicine residents on inpatient rotations frequently ask subspecialty fellows for consultative assistance with diagnosis and management of patients.

Teaching in the consultation setting can be challenging due to lack of a longitudinal relationship between the resident and fellow, time constraints, and different work incentives. We developed the Fellow As Clinical Teacher (FACT) curriculum to improve fellows’ teaching skills and enhance their ability to overcome barriers to teaching during consultation. In contrast to previously described “resident or fellow as teacher” programs, we focused exclusively on teaching skills necessary to engage residents in the time-constrained setting of the consult interaction.

Intervention

The FACT curriculum was composed of 2 interactive 1-hour training workshops that focused on overcoming barriers to resident-fellow teaching interactions on the wards, using adult learning theory and a structured approach to teaching within the consultation developed by the investigators. Our structured teaching approach focused on skills needed to conduct time-efficient interactions with residents whose learning needs, knowledge base, and interests are unknown to the fellow. Skills taught included rapidly assessing learners, determining teaching objectives that balance learners’ needs and facilitation of patient care, giving feedback, and effectively communicating consult recommendations.

An objective structured teaching exercise (OSTE) and a self-assessment survey were administered prior to the start of the curriculum and 2 to 6 weeks following

completion of the curriculum. The OSTE is a simulated encounter in which the fellow interacts with a standardized learner acting in a scripted role. It consisted of 3 teaching interactions that used an identical clinical scenario with 3 types of standardized learners: (1) a resident with a good knowledge base but a poor knowledge of the patient (to simulate a “cross-covering” resident), (2) a resident with a good knowledge base and a good knowledge of the patient, and (3) a resident with a poor knowledge base and a good knowledge of the patient. The fellow had no information about the type of learner with whom he or she would be interacting. Two investigators independently rated fellow performance using an 11-item behaviorally anchored scale. The OSTE were video recorded to determine interrater reliability.

The study was approved by the Partners and Beth Israel Deaconess Medical Center Institutional Review Boards.

Outcomes to Date

The FACT curriculum has been piloted in the rheumatology fellowship programs at Massachusetts General Hospital and Brigham and Women’s Hospital, as well as in the combined pulmonary/critical care fellowship program at Massachusetts General Hospital and Beth Israel Deaconess Medical Center. Twelve fellows have completed the curriculum and both preintervention and postintervention surveys, and 9 have completed preintervention and postintervention OSTE.

Matched pairs analysis of survey responses revealed that perceived teaching skills improved after participating in the FACT curriculum (2.9 versus 3.8 on a 5-point scale, $P < .01$). Gains were seen in fellows’ ability to assess the learner (3.8 versus 4.3, $P = .03$); to determine teaching objectives (3.8 versus 4.4, $P < .01$); to give feedback (3.3 versus 4.0, $P = .01$); and to teach in the setting of time constraints (3.8 versus 4.3, $P = .03$). Matched pairs analysis of precurriculum and postcurriculum OSTE demonstrated that fellows’ teaching skills improved across all aspects of the consult interaction (TABLE). Fellows reported that they would teach residents more frequently during consultations after participating in the curriculum (4.0 on a 5-point Likert scale).

TABLE	SCORES ON THE OBJECTIVE STRUCTURED TEACHING EXERCISE BEFORE AND AFTER THE FELLOW AS CLINICAL TEACHER CURRICULUM		
	Precurriculum	Postcurriculum	P Value
Element	(9 fellows, 27 precurriculum and 27 postcurriculum cases)		
Oriented learners to expectations for the interaction	3.0	3.7	< .01
Expressed respect for learner	4.4	4.9	< .01
Evaluated learner's factual knowledge	3.2	4.2	< .01
Evaluated learner's ability to analyze or synthesize information	3.1	4.1	< .01
Determined effective objectives for discussion	3.4	4.1	< .01
Presented well-organized material	3.7	4.7	< .01
Effectively managed time during the session	3.5	4.6	< .01
Provided positive feedback	3.5	4.8	< .01
Provided corrective feedback	3.2	4.8	< .01
Relayed clear recommendations and offered opportunity to "close the loop"	3.6	4.5	< .01
Overall teaching effectiveness	3.3	4.5	< .01

The consult interface represents an important educational opportunity for residents. Improving fellows' teaching skills may enhance the resident-fellow teaching dyad and improve resident learning on the wards. Our preliminary data suggest that the FACT curriculum is a time-efficient and replicable intervention that improves internal medicine subspecialty fellows' teaching skills and may enhance their teaching interactions with residents.

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