

Educational tool for hospital-based training in family medicine

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Hospitalists are educators in many teaching institutions throughout North America, and they are a vital part of the medical training system. In Canada, this role is not yet clearly defined, as 90% of practising hospitalists are trained as family medicine specialists.¹ Once they begin working as hospitalists, it becomes unclear whether they are teaching internal medicine or family medicine in a hospital setting when they are assigned students. In addition, most universities have not set up full medical teaching units for hospitalist services in the same way they have with general or specialty internal medicine. Now that the College of Family Physicians of Canada's Triple C curriculum includes a call for training by family medicine doctors,² there is a new opportunity for innovative teaching for inpatient care, both by family medicine hospitalists and family medicine physicians who maintain acute care practices.

Education of students and residents is a time-consuming but necessary and rewarding part of employment in a teaching hospital. In Calgary, Alta, all hospitalists were asked to be part of a new mandate in the Department of Family Medicine incorporating the Triple C curriculum; the goal was to have most of the residency teaching done by practising family medicine physicians. In this regard, hospitalist practitioners presented a unique opportunity to have many "care of the adult" learning objectives taught within hospitalist services. Thus, a 1-month rotation was rolled out in 3 sites to allow for more teaching to be representative of the model of practice that family medicine residents might seek after graduation.

This led to a number of hospitalist physicians being called on to provide family medicine residents with more one-on-one teaching. The goal is for these trainees to become self-directed, mature learners as part of their CanMEDS-Family Medicine (CanMEDS-FM) competencies.³

In 2008, my development of a teaching tool coincided with the move to direct more residents into core block rotations on the hospitalist service. This tool was designed and pilot-tested even before formal rotations at the Peter Lougheed Centre of the Calgary General Hospital. The goal of its use was to enhance the ability of teachers to guide resident learning for clinical case-based teaching, and to encourage students to develop self-directed learning skills. Since its development, this tool has been modified to

embody the Triple C concept of comprehensive care that is centred in family medicine and built around CanMEDS-FM roles.

Teaching tool

Hospitalists throughout North America are being called upon to increase their teaching, given the proportion of hospitalized inpatients they see and their generalist approach to care.⁴ The development of a novel curriculum in family medicine using Triple C has brought an opportunity for hospitalists to become very involved in core teaching.³ The Association of Faculties of Medicine of Canada supports better collaboration. Communication between subspecialists should be taught early and often, and generalist practitioners within each discipline should be important teachers.⁵

As an assignment for my master's degree in medical education through the University of Dundee in Scotland, I designed a teaching tool with the goal of improving the functioning of the teacher and assisting the student with developing desired competencies or skills. This tool presents an option for guiding self-directed learning around patient encounters that would promote the Triple C approach under the domain of "care of the adult patient." Teaching that is case-based is inherently contextualized to the setting where the knowledge would be used and is easily tailored to the learning objectives. By selecting cases that the resident has acknowledged will fulfil his or her learning goals, and by modeling comprehensiveness and continuity, the Triple C approach⁶ is reinforced in a realm once devoted to the specialist mentality.

Many family medicine residents are already familiar with multiple templates for teaching, including field notes and multisource feedback forms. This teaching tool adds another element to the armamentarium of physicians who teach in the hospital setting.

The teaching tool (**Table 1**)⁷ contains a list of questions that direct resident learning around a patient encounter. This tool was designed to mimic the thought process of a practising hospitalist physician with regard to a clinical case. The questions guide residents from the initial presentation through to discharge

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Table 1. Hospitalist teaching tool and the associated CanMEDS–Family Medicine roles: Questions are designed to direct resident learning around a patient encounter.

QUESTIONS	CANMEDS–FAMILY MEDICINE ROLES ⁷
What are the criteria for admitting this patient, as opposed to managing him or her as an outpatient? Why would this patient come to the hospitalist service (compared with a subspecialist or a transition bed)?	Collaborator, communicator, family medicine expert, manager, professional
What is your differential diagnosis? How will you communicate this to the patient? Include at least 3 most likely, as well as at least 1 sinister, hypotheses.	Communicator, family medicine expert, scholar
What investigations will you order? What ongoing follow-up should be done during the admission?	Collaborator, family medicine expert, manager, scholar
What will be the management principles for the most likely condition? Include both pharmacologic and nonpharmacologic management. What contraindications could exist for these choices?	Family medicine expert, health advocate, manager, scholar
What complications could arise during this patient's stay? How could you attempt to prevent these?	Family medicine expert, health advocate, manager, scholar
What other resources can you enlist to assist you in the management of this patient?	Collaborator, health advocate, manager
How will you know that this patient is ready for discharge (ie, what parameters will be your guide), and what needs to be in place at his or her residence? How will you enable a safe transition into the community?	Collaborator, communicator, family medicine expert, health advocate, manager, professional

planning to ensure that they approach each patient with the principles of holistic, preventive, and continuing care. Certainly, residents need to discuss each question and potentially assess it formally with their preceptors; however, the tool itself serves to guide and promote residents' individual learning. Students could research each item at their own pace and at the pace of the patient's progress. The tool emphasizes that evidence-based research is required at several steps of the process (eg, determining a differential diagnosis and potential complications). Effective communication with patients and consultants is encouraged throughout patients' stays, as is appropriate transfer of care back to the community on discharge.

The template can aid an educator in either formative or summative assessment. Formative assessment is an ongoing process that creates opportunities for feedback and might result in suggestions of resources for further learning. Summative assessment would be accomplished by using this tool as an examination of learning about a specific topic or presentation.

Family medicine connection

In terms of the strong tie to the CanMEDS-FM framework, there exists an intuitive connection with the family medicine expert role because of the strong clinical skills required to manage a complex adult inpatient. The other roles are well represented within the tool, and all the roles should be addressed during an educational experience in the hospital. Comprehensive, patient-centred care is the backbone of family practice in this environment. An understanding of the health system and management of finite resources imparts a greater comprehension of the context of care in a given community. Determining the approach to inpatient management requires thoughtful and effective communication with patients and families, collaboration with ancillary health care workers and, sometimes, specialist colleagues, and good documentation of problem lists and the care plan. Examining the determinants of health in the catchment area of the hospital allows students to focus on potential health promotion activities during an individual visit (eg, smoking cessation, respite services, advocating ongoing rehabilitation). Ensuring their clinical behaviour includes best practices and critical appraisal of relevant evidence, and imparting important knowledge for their patients to sustain their own health is a holistic family practice approach to acute inpatient medical care.

These roles fit very well with the components of assessment in family medicine.⁸ The skill dimensions include a patient-centred approach, clinical reasoning, and selectivity (which is a primary focus in many of the questions in this tool). Many of the primary topics⁹ for family medicine training (eg, advanced cardiac life support, deep vein thrombosis prevention, gastrointestinal bleeds) will be encountered exclusively during inpatient visits, and still others will also be taught in ambulatory settings to give students a range of approaches based on acuity and complexity.

Conclusion

A team-based approach to care that is centred in family medicine encompasses the competencies that must be taught to family medicine residents in their adult inpatient rotations. As hospitalists and other attending physicians are called to do more teaching in this context, it is important to connect your own teaching to the CanMEDS-FM framework. The teaching tool

presented here (Table 1)⁷ provides a method for developing self-directed learning, as well as an overt connection to the CanMEDS-FM roles. The tool also inherently fosters development of reflective practice. 

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Competing interests

None declared

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TEACHING TIPS

- The College of Family Physicians of Canada's Triple C curriculum has created an opportunity for hospitalist physicians to become very involved in core teaching.
- The teaching tool presented in this article contains a list of questions that direct resident learning around a patient encounter. It was designed to mimic the thought process of a practising hospitalist physician with regard to a clinical case. The questions guide residents from the initial presentation through to discharge planning to ensure that they approach each patient with the principles of holistic, preventive, and continuing care.
- This teaching tool provides a method for developing self-directed learning, as well as an overt connection to the CanMEDS-Family Medicine roles.

Teaching Moment is a quarterly series in *Canadian Family Physician*, coordinated by the Section of Teachers of the College of Family Physicians of Canada. The focus is on practical topics for all teachers in family medicine, with an emphasis on evidence and best practice. Please send any ideas, requests, or submissions to Dr Miriam Lacasse, Teaching Moment Coordinator, at Miriam.Lacasse@fmed.ulaval.ca.

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