

Balancing service and education for the medical trainee: how can we do better?

Trouver un équilibre entre les soins aux patients et la formation pour l'apprenant en médecine. On peut faire mieux!

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Introduction

Health professionals are constantly balancing multiple demands, from delivering safe patient care to educating the next generation. Service, through the provision of patient care within the realm of the CanMEDS roles, is considered a necessary part of practicing medicine. Education consists of activities tailored to current trainee stage and abilities, which progress knowledge and skills through deliberate practice towards mastery.¹ In this regard, education should involve graded autonomy, a connection between effort and accomplishment, and include a degree of complexity.¹

Residents, as employees of an institution and their affiliated hospitals, are thus paid to provide a service. This is balanced in return with their education, through the acquisition of medical knowledge, technical skills, and processes including: communication, administration, and organizational systems. Consequently, service and education within the health professions is a false dichotomy. Rather, the two are integrated processes, co-existing on a continuum.

Definitions and perceptions

As highlighted by social constructivism, which advocates a participatory learning approach, knowledge is constructed by the learner, and acquired by experience-based learning.² It is shaped by the learner's interactions and

engagement within the workplace.³ The provision of service for patient care is an expectation in residency training, and these activities can develop competency of CanMEDS roles through active, experiential learning.³ However, individuals have varying definitions of what constitutes service and education, and often a mismatch exists in the perception of balance between service obligations and education within a training program.³

The perceived definition of service varies amongst those at different stages in training. The negative connotations of service often lie in the notion of fulfilling non-physician obligations that are viewed to detract from learning.⁴ These activities include documentation, administrative paperwork, scheduling appointments or procedures, patient transport, erroneous paging, and phlebotomy.⁴ Additionally, repetitive tasks that do not contribute to the retention or refinement of skills, the lack of adequate supervision, or an excessive patient load that prevents critical thinking, all can deter from education and become perceived as service tasks. Excessive service provision can negatively impact quality of training, well-being and program satisfaction, recruitment, and retention.¹ Consequently, strategies are required to improve perceived trainee education and shift towards more education-integrated service provision, especially in light of a shifting healthcare environment.

The shifting environment

Surgical training was once unregulated, following an apprenticeship model, which varied considerably in quality and duration. This was since transformed in the late 1800's with the introduction of formalized residency training systems, spearheaded by Dr. William Halsted. Over the last few decades there continues to be a cultural shift in medicine, with changes in technology, public awareness, and increasing regulations. This has led to higher patient volumes and expectations, increasing medical knowledge and tools, and consequently increased complexity of medical care. However, these growing expectations and increased productivity demands are also in light of greater emphasis on patient safety and trainee well-being. Recently, the Accreditation Council for Graduate Medical Education (ACGME) has enforced mandatory duty-hour restrictions in trainee work hours to promote safety and well-being.⁵

Increased learning needs and greater emphasis on achieving core competencies before completion of medical training are competing demands in residency training. The educational environment needs to adapt to provide appropriate education, while also respecting work-hour demands and provision of healthcare service. This places pressures on residency programs to innovate and implement structural changes that meet the highest standards of quality education, while also accommodating a diminished workforce. Though difficult, establishing the optimal balance in the integration of service obligations and clinical education is necessary.

Strategies to improve education

Strategies to optimize trainee education while upholding duty-hour restrictions should emphasize efficiency in addressing the negatively-perceived 'service' obligations to reduce their burden on the trainee and allow for more capacity for educational activities.¹ Some of these strategies include the incorporation of technology to improve task efficiency (ex. computerized order entry, electronic medical records), resources that improve patient flow, and increased utilization of physician extenders (i.e. nurse practitioners and physician assistants).^{1,6} The trainee's recognition of the integration of education through participatory learning during service tasks, and the associated relevance of this learning to provision of patient care and achieving CanMEDS exit competencies is important in improving the trainee's perception of the service to education ratio. Additionally, institution-level

structural changes can be implemented to incorporate protected educational time, promote the efficient use of trainee time, and incentivize preceptors to prioritize education achievement of learners. This promotes a system-level shift towards a culture of support for better quality training by encouraging trainee engagement in services that are more education-oriented¹.

Conclusion

The provision of service by residents during training is crucial for patient care. However, the perception of service and associated tasks varies amongst trainees, and is often given a negative connotation. Participatory learning through engagement in service tasks highlights the integration of service and education on a continuum. In an environment of increasing complexity of medical care and relatively limited training time secondary to duty-hour restrictions, greater emphasis is needed to optimize the educational value of residency training. Implementable strategies to improve trainee education and experience includes maximizing efficiency of 'service' tasks, trainee recognition of the service-education integration, and system-level cultural support for promoting engagement in more education-focused services.

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