Supporting the transition to senior pediatric resident: an interactive online resource

Une ressource interactive en ligne pour faciliter la transition comme résident senior en pédiatrie

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Implication Statement

Transitions to roles with increasing clinical responsibility and independence can be anxiety provoking for many trainees. To support our pediatric residents preparing to transition from the role of junior to senior resident, we developed a novel asynchronous online interactive case-based resource. Our experience suggests that this resource was voluntarily utilized and can effectively increase trainee confidence and reduce anxiety about this key transitional stage. We suggest that interactive case-based resources can be utilized as supplemental support for residents preparing for residency transitions in other programs and settings.

Introduction

As residents progress through training, they transition to roles with increasing responsibility and independence. A needs assessment of our pediatric residents suggested that transitioning from junior to senior resident is a source of anxiety for many. These residents have typically prepared for the transition through informal means, including buddy shifts, peer-to-peer discussions and a peer-prepared manual outlining processes and expectations. There are few well-established methods for supporting learners through this intra-residency transition, ^{1,2,3} and limited formal educational resources to help residents develop skills and foster confidence as they prepare for senior responsibilities.

Énoncé des implications de la recherche

La transition vers des rôles comportant des responsabilités cliniques et une autonomie plus importante peut provoquer de l'anxiété pour de nombreux stagiaires. Pour soutenir nos résidents en pédiatrie qui se préparent à passer du rôle de résident junior à celui de résident senior, nous avons créé une nouvelle ressource interactive en ligne, asynchrone, qui est basée sur une étude de cas. Notre expérience suggère que cette ressource a été utilisée sur une base volontaire et qu'elle peut effectivement accroître la confiance des stagiaires et réduire l'anxiété liée à cette étape clé de leur parcours. Nous estimons que les ressources interactives basées sur des cas peuvent être utilisées à titre complémentaire pour aider les résidents à préparer leurs transitions dans d'autres programmes et contextes de résidence.

Innovation

We developed an asynchronous online interactive casebased resource to support pediatric residents transitioning to the senior role. Junior pediatric residents could complete the resource voluntarily, beginning weeks to months prior to assuming the role of daytime senior.

Six modules were developed, each focusing on a transitionrelated skill identified from thematic analysis of qualitative data from prior needs assessment (13/23 pre-transition pediatric residents, 11/19 post-transition). A free/pilot online digital simulation platform with audio, visual and prompting question features (BranchTrack), presentation program (Microsoft PowerPoint) and electronic learning platform supported by our faculty's learning technology team (eClass) were utilized. Rather than focusing on medical expert content, topics included triaging and prioritization, time management and efficiency, handling acute situations, working with learners, acting autonomously, and managing personal stress.

Piloted and peer-reviewed modules presented realistic, non-prescriptive scenarios where trainees imagined themselves as senior residents leading a team of junior trainees on an in-hospital overnight call shift. Simulated virtual scenarios prompted residents to use critical thinking and introspection to approach common demands and challenges faced by senior residents. Ethical approval was obtained from the local Human Research Ethics Board for needs assessment, implementation, and evaluation of this resource. Consent for participation in the study was implied by completion of the anonymous study survey.

Outcomes

Review of user logs found that seventy-seven percent of pre-transition junior pediatric residents (10/13) accessed at least part of the voluntary resource; of those who accessed content, 70% (7/10) residents accessed all six modules. Most accessed the resource once; two trainees reported multiple instances of use. Residents reported spending from 20-40 minutes to more than two hours.

The resource was evaluated by a retrospective pre-post survey assessing self-perceived transition-related confidence and anxiety using a 5-point Likert scale. Local ethical approval was obtained (HREB Pro00084374). Seven residents completed the survey (70% response rate). Pre-transition residents reported overall reduction in transition-related anxiety after resource use. Residents also reported increased confidence in the six transition-related skills addressed.

Reported key learnings included prioritizing simultaneous demands, time management, and orienting junior learners for clinical work. Residents commented that they liked the realistic interactive virtual format.

Next steps

We believe the resource provided an opportunity to 'face' common scenarios in a simulated constructivist setting without external judgment, time pressure or clinical risk. Residents deliberately reflected on how they will address these issues as they face increased clinical responsibility, thus reducing anxiety and increasing confidence. Even short resource usage time was beneficial for learners. Similar interactive case-based resources may be developed and utilized by other programs with intra-residency transitions.

Limitations included small sample size and use of selfreporting. Next steps may include exploration of trainee perceptions and analysis of in-training assessments once they become senior residents.

Conflicts of Interest: None

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