

survey, 100% felt the evening was a good use of their time, highlighting the face time with leadership and trainees and the opportunity to meet many programs in one setting as positives. Importantly, 92% (45 of 49) of applicants visited programs outside their current geographic location, 51% (25 of 49) visited programs they were not originally planning to apply to, and 42% (18 of 43) applied to new programs as a result of participating in the session. Challenges identified included: some programs having no applicants visit their breakout rooms, the late timing of sessions in this recruitment season, and some logistical issues during the sessions.

The inaugural national pediatric subspecialty recruitment sessions were successful, resulting in increased visibility for programs and in applicants applying to programs they had not considered prior to the session. Applicants thought the accessibility of all programs on one platform simultaneously was helpful, and many visited programs they otherwise would not have had the opportunity to explore. In response to feedback, several logistical changes will be applied to subsequent sessions for the 2023 appointment year, including a shift to earlier in the year, prior to the submission of applications. This will allow for increased time for advertising the sessions and improved promotion of individual program information in advance. This model of training program informational sessions is applicable across graduate medical education programs and may serve to not only provide enhanced individual program visibility but also increase awareness about careers in subspecialties in general and potentially expand the applicant pool.

References

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NEW IDEAS

Designing a User-Friendly Context-Specific Assessment Tool for Community-Based Teachers

Setting and Problem

Graduate medical education (GME) programs must ensure that they are able to collect accurate information about resident competence through assessment tools that are fit for purpose. An assessment form or process is called “fit for purpose” when there is good alignment between the tool (how something is assessed) and the intent (the specific knowledge, skill, or attitude/belief that is being assessed).

In our family medicine GME program, we identified that the generic workplace-based summative assessment tool provided to community-based family medicine obstetrics (FMOB) clinical teachers was not fit for purpose. As a result, these teachers were uncertain about program expectations regarding competence, the assessment form was challenging and frustrating to complete, and our program struggled to extract useful assessment data from completed assessment forms. To address this issue, we took a systematic approach to develop a workplace-based assessment tool that was specific to the clinical context of FMOB and user-friendly for clinical teachers.

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TABLE

Validity Evidence Collection Plan for Development of the FMOB-CR Tool²

Facet of Messick's Unified Validity Model	Evidence Supporting the Facet	Stage of Completion
Content (Is content relevant and representative?)	Items were developed by area experts	Completed
	Items were developed using evidence-guided resources (assessment objectives, key features)	Completed
	Items were refined by a consensus panel of educational and assessment experts	Completed
	Form was created in response to expressed need from community-based teachers (FMOB teachers)	Completed
	Survey of residents—at implementation	Completed
	Survey of residents—post full implementation	In progress
	Survey of teachers—at implementation	Completed
	Survey of teachers—post full implementation	In progress
Substantive (Does the construct theory account for the content of the tool?)	Assessment theory guided both content and structure of the tool	Completed
	Assessments differentiate between residents (ie, not all residents get the same score)	In progress
	Preceptors “flag” residents where there are concerns	Preliminary results
Generalizability (Interpretation of the score generalizes across populations and settings)	There was consistency in how teachers used and understood the tool	Preliminary results
	There was consistency in how teachers intended scores and how residents understood scores	Preliminary results
	Tool used in a consistent way by teachers at all teaching sites	In progress
Consequential (Score interpretations may potentially influence actions, including washback, where score interpretation may influence later performance)	Increase in return of assessments	In progress
	Increase in completeness and utility of assessments	In progress
	Residents show improvement from midpoint to final assessment	In progress

Abbreviation: FMOB-CR, family medicine obstetrics competence rubric.

Note: This table includes validity evidence collected to date as well as evidence that is in the process of being collected.

Intervention

Our goals were to develop: (1) a fit-for-purpose workplace-based assessment tool for community-based FMOB teachers that could be used for accurate assessment without the need for faculty development, and (2) an evidence-guided process for designing similar context-specific tools in the future. We met our first goal through designing the FMOB competence rubric (FMOB-CR) tool. The FMOB-CR is comprised of 2 elements. The first is a rubric containing specific statements and examples of resident performance. The rubric clearly outlines the expected level of competence on a 3-point rating scale (“cause for concern,” “acceptable competence,” “exemplary competence”), organized by the 6 Skill Dimensions of Family Medicine (similar to CanMEDS roles).¹ The second element is a simple online assessment form in which FMOB teachers specify their resident's level of competence in each Skill Dimension, guided by the statements and examples in the rubric.

The FMOB-CR uses plain language and context-specific clinical examples along with a simple online assessment form to clearly communicate expectations of competence to teachers (and residents) without additional faculty development. This user-friendly tool should make it easier for FMOB clinical teachers to better identify residents who are underperforming, which will allow the program to be more effective in intervening and supporting residents in difficulty.

To meet our second goal, we developed an evidence-guided process for designing workplace-based assessment tools that are fit for purpose for specific clinical contexts. Our design process included: assembling a tool development team with relevant expertise, including a resident; consultations with FMOB teachers and residents; environmental scan and review of local assessment forms and assessments used by other FMOB GME programs; a modified Delphi process with local GME program faculty to develop and refine the TABLE of competence statements; a consensus-building process within the research team to revise the statements for the rating

scale; and implementation of the assessment rubric with concurrent collection of validity evidence. For both the FMOB-CR and the development process, we collected validity evidence according to Messick's unified concept of validity.²

Outcomes to Date

The TABLE details the validity evidence collected to date. Fifteen FMOB teachers surveyed showed strong agreement across 5 items about the utility of the rubric in allowing them to accurately assess residents (overall $M=3.25/4$, Likert scale 1=strongly disagree to 4=strongly agree), and across 3 items about the usefulness of the rubrics in helping them to understand program expectations of resident competence (overall $M=3.36/4$); 14 of 15 teachers preferred the new form to the old one.

We hope that the worked example of the FMOB-CR and its development process may serve as a blueprint for other institutions to develop context-specific assessment tools.

References

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NEW IDEAS

Using Lean Six Sigma Methodology to Improve Resident Engagement

Setting and Problem

An engagement survey was administered in 2018 to all physicians at our institution, including residents and fellows. The results showed very low engagement scores among trainees, which focused the attention of hospital administration. In response, the Process Improvement Office (PIO) was tasked by administration to collect information about residents' concerns. A Lean Six Sigma performance improvement technique, the "waste walk," was chosen. Lean Six Sigma is a management technique originally developed in the manufacturing sector, but now frequently used in health care settings. Lean methodology identifies specified wastes that lead to inefficiency in production, and Six Sigma methodology aims to decrease error.^{1,2} A waste walk is a structured visit to the workplace (the hospital, in this case) to identify 8 Lean waste types (defects, overproduction, waiting, non-utilized talent, transportation, inventory, motion, and extra processing), in order to prioritize improvement opportunities.

Intervention

The PIO conducted a series of waste walks to cover areas of the hospital where inefficiencies were expected or where it was suspected that waste would impact patient care. Specific programs with large hospital-based services were included, with residents selected to be included in the observations by their program directors and chief residents. Evening and overnight shifts were included in the sampling. Observations were conducted by staff from the PIO and included Lean Six Sigma Green Belts (intermediate) and Black Belts (management). Observers shadowed the resident for all clinical activities during their

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