

Incorporating Needs Assessments to enhance Teaching Initiatives in Singhealth Internal Medicine Junior Residency

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Introduction

Targeted Needs assessment is an integral part of the Kern's 6 step approach for curriculum development. It serves to identify the gap in a learner's knowledge which then empowers educators to plan clear goals and objectives, decide on the optimal educational strategy and mode of assessment to address the gaps highlighted. The benefits of needs assessment have been vastly studied with literature showing its effectiveness particularly in enhancing Continued Medical Education (CME).

The Singhealth Internal Medicine residency organises a peer led teaching program (CADENCE) that aims to prepare residents for the MRCP Practical Assessment of Clinical Examination Skills (PACES) exam.

In 2018, the CADENCE program was restructured to meet the needs of the residents. Bedside tutorials were conducted by peers and faculty during protected teaching time to meet the schedules of the residents and the faculty. To ensure effective teaching, we needed to analyse and understand the needs of the residents.

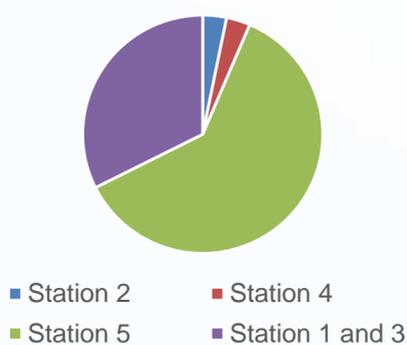
The Intervention

The needs analysis was done via a 2 prong approach :

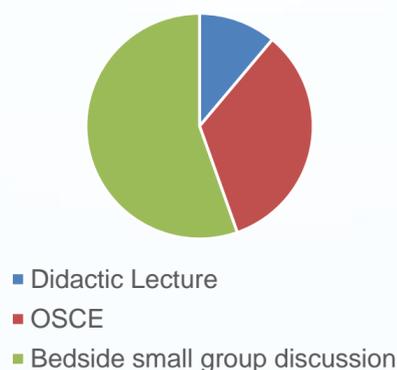
- 1) A qualitative on the ground feedback and;
- 2) An administration of a questionnaire.

The questionnaire was taken by residents who were scheduled to participate in the October 2018 PACES diet.

Which Station in PACES do you need help the most?

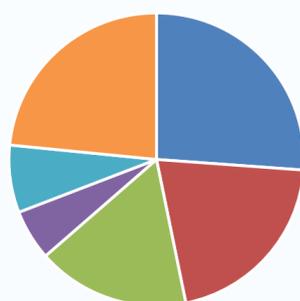


What type of teaching method would you participate in?



What topics would you want to be covered?

- Rheumatology
- Endocrinology
- Dermatology
- Respiratory and Abdominal
- Cardiovascular and Neurology
- Ophthalmology



Results

Firstly we identified that residents needed assistance with i) station 5 and ii) station 1 and 3 of the PACES examination. Secondly we identified that residents preferred modality of learning was via OSCE style tutorials with bedside small group discussions.

Thirdly we identified that the areas that residents wanted to focus on were i) Rheumatology, ii) Endocrinology, iii) ophthalmology and iv) dermatology

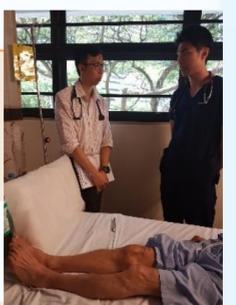
We used the results of this to conduct 5 sessions between September 18 – October 18. The curriculum was planned by residents and taught by faculty members from the speciality.

The feedback derived post implementation was positive with candidates indicating that cases chosen had good clinical value, there was timely feedback by faculty and utilising the lunch time teaching hour for PACES preparation was effective and sustainable.

Suggestions for improvements included to increase the number of Objective Structured Clinical Examination (OSCE) stations per session and increase time given for each session so as to incorporate more time for discussion around the clinical case.

Table 1: outline of teaching sessions

PACES station	Task	Educational Method
1,3	Physical Examination 4 Major Organ Systems (Cardiology, Respiratory, Abdominal, Neurology)	OSCE with real patients
2,4	History taken and Communications	OSCE with Simulated Patient
5	Integrated Clinical Assessment Subspecialty cases (Rheumatology, Endocrinology, Dermatology, Neurology)	OSCE with real patients
-	Exposure to Common Ophthalmology conditions and Fundoscopy Technique	Didactic Session Hands on session with models.



Moving Forward- The Next Chapter

Needs assessment to enhance post graduate teaching is a step in the right direction. However this is also based on the assumption that the learner in question is able to identify his deficits accurately.

The next step will be to extend needs analysis to all the various stakeholders in the educational stratosphere so as to obtain an accurate assessment with respect to the learner's needs. This includes PACES examiners, faculty who engage in resident teaching, and sub specialty physicians.