

About The McMAP Project

Background

The McMaster Modular Assessment Program (McMAP) is an intentionally organized series of interconnected work-based assessment instruments. Using McMAP Junior, Intermediate and Senior will ensure a rigorous assessment of all of the specialist Emergency Medicine (EM) competencies that can be appropriately observed in the clinical environment.

McMAP was developed in collaboration with 6 institutions in Canada and the United States (McMaster University, Louisiana State University, Michigan State University, Oregon Health & Science University, University of Alberta, University of Saskatchewan). It is based on a needs assessment of EM residents and front-line EM teachers and educators. Key themes that inform McMAP are: the need for clear criterion-based (i.e. objective) standards; the need to facilitate regular, constructive feedback; and the need to encourage reflection among learners.

About McMAP Senior

McMAP Senior is the capstone of this workplace-based assessment program. In McMAP Senior, the emphasis is on Emergency Department management, teaching/supervising junior learners and consolidating clinical skills. Facilitated, reflective practice continues to be emphasized. As always, McMAP Senior builds on the competencies addressed in McMAP Junior and McMAP Intermediate.

Most importantly, McMAP Senior actively affirms a culture of feedback. At the conclusion of each shift the senior learner not only receives feedback from faculty, but also provides constructive, specific, observation-based feedback to junior learners.

Each assessment instrument functions as a “micro” CEX – a truncated version of the mini clinical examination exercise widely used in work-based assessment. Each McMAP instrument involves multiple physician competencies organized

around an essential task of an EM physician. For example, providing discharge instructions to a patient incorporates Medical Expert, Communicator, and Collaborator competencies. However, to the frontline user, this background curriculum blueprinting is invisible, improving usability.

Each instrument uses choice architecture to provide “just-in-time” faculty guidance. Specifically, checklists that deconstruct a task into simpler sub-elements and criterion-based behavioural anchors (e.g. clinical descriptions of various standards of performance) for scoring performance guide faculty towards a shared mental model of the expected standard.

For more information on the development and design of McMAP check out the innovation report manuscript in Academic Medicine:

Chan, T., & Sherbino, J. (2015). The McMaster Modular Assessment Program (McMAP): A Theoretically Grounded Work-Based Assessment System for an Emergency Medicine Residency Program. *Academic medicine: journal of the Association of American Medical Colleges*. DOI:10.1097/ACM.0000000000000707 PMID:25881648

How it Works – Big Picture

A McMAP passport consists of eight assessment instruments organized around two related CanMEDS Roles. One instrument is completed per shift. Each instrument is typically repeated once during a one-month rotation. Depending on rotation planning in your program, it is possible that each passport will be repeated at least once a year, ensuring adequate sampling to improve the reliability of aggregated data.

Each instrument has two main parts. The first part includes the assessment matrix for the specific McMAP task assigned for the shift. The second part includes a daily global performance assessment that allows the faculty member to assess and provide feedback on overall performance during the shift. Mandatory narrative comments are required for both elements.

In our experience, making the narrative comments mandatory serves two purposes. First, it serves as a force-function to promote verbal feedback between resident and faculty at the completion of a shift. This is one of the main goals of McMAP. Second, the qualitative data from the narrative comments helps shape the end-of-rotation report, providing nuance about the performance of a resident.

McMAP also includes an exceptional events reporting system. (See Appendix A) Faculty members can anonymously submit, on an ad hoc basis, a standardized form documenting outlier behaviour. This data is received by an independent party (e.g., the chair of the assessment subcommittee of the residency training committee), who then determines the response to this exceptional event.

How it Works – During a Shift

Every shift a resident is observed by a faculty member completing a specific McMAP task. This takes approximately five minutes. The entire patient encounter does NOT need to be directly observed in order to complete the assessment. For example, a task focused on taking a history does not require observation of the physical exam. At or near the end of the shift, the faculty member completes the instrument linked to the task for the day. Completion of the form, plus discussion

of the resident's performance during the shift, typically requires five minutes.

Our experience suggests that it is best to allow the resident and faculty member to negotiate at the beginning of a shift the task to be addressed that day. Some tasks are harder to complete than others because of the need for specific patient presentations (e.g. lead a resuscitation). While McMAP has been designed to be flexible to the unpredictability of EM practice, faculty and learners should be opportunistic in choosing a McMAP task.

Summarizing the Data

The daily data can be collated into a summary table (see Appendix B), automatically populated if using a digital passport or by hand if using a paper passport. This summary table allows the faculty supervisor responsible for completing the end-of-rotation report to observe trends and gaps in performance.

McMAP uses a narrative end-of-rotation report, following a standardized template, to summarize the data from the “performance biopsies” that have occurred during the rotation.

Using McMAP

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If you have any suggested modifications or additions to McMAP we would be pleased to consider them for incorporation into subsequent versions.

If you would like further details on how to host McMAP on an electronic platform, please contact us. We currently use a secure, free, cloud-based platform that allows residents and faculty to access their digital passports via mobile devices or computers.

For any inquiries, please contact us at: mcmmapem@univmail.cis.mcmaster.ca.

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Usage



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