

The following is an excerpt from *The CanMEDS Assessment Tools Handbook: An introductory guide to assessment methods for the CanMEDS competencies*.

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THE ROYAL COLLEGE OF PHYSICIANS AND
SURGEONS OF CANADA

THE
CANMEDS
ASSESSMENT TOOLS HANDBOOK



An Introductory Guide to Assessment Methods
for the CanMEDS Competencies

First Edition

Glen Bandiera • Jonathan Sherbino • Jason R. Frank
Editors

The CanMEDS Assessment Tools Handbook

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About this document

One of the most frequently received requests at The Royal College of Physicians and Surgeons of Canada Office of Education is for assessment tools to guide medical educators as they evaluate physician competencies. In response to this need, we have designed this handbook as a resource for medical educators, clinical teachers and all those interested in assessing physician competence using the CanMEDS 2005 Physician Competency Framework.

The handbook draws upon several sources. The tool classification scheme and some of the references are from the CanMEDS Assessment Tools Working Group chaired by Peter Tugwell and colleagues in the 1990s. Supported by a grant from the RCPSC/AMS Endowment Fund for Research in Medical Education, the Working Group assembled a list of tools for assessing the CanMEDS competencies. The CanMEDS office also maintains a bibliography of literature relating to the framework. We searched this database for tools using the terms “evaluation,” “assessment” and “competence” and sorted them by CanMEDS Role. The chapter authors of the handbook selected key papers from this source and from the education literature that they believe medical educators will find useful.

This handbook was created for you, and we hope that you will find it of value. This is the first edition, and we expect that updates will be needed as the science of competency-based medical education evolves. We welcome feedback and comments at canmeds@rcpsc.edu and will acknowledge all significant contributions in future editions.

Finally, this document would not have been possible without the extraordinary efforts of the CanMEDS staff, who skillfully managed the logistics of a multi-contributor text. We are grateful to Tammy Hesson, who did an outstanding job coordinating the production of this handbook. We would also like to thank Ginette Bourgeois and Terri Bronstein for their key roles, Anne Marie Todkill for her skillful editing and the gordongroup team, who laid it out.

The Editors

Introduction

The CanMEDS initiative is a collaborative endeavour to enhance physician competence, professional practice—and, ultimately, patient care. With input from hundreds of Royal College Fellows and staff, family physicians and other medical educators, the initiative has defined a contemporary framework of medical competencies that is aligned with the needs of today's society. Now 11 years old, CanMEDS has been updated as the new *CanMEDS 2005 Framework*.¹

Implementing the CanMEDS framework requires practical tools for the assessment of physicians' competence in each of their professional roles. Recognizing this need, The Royal College of Physicians and Surgeons of Canada has developed this manual, the *CanMEDS Assessment Tools Handbook*. The handbook is intended to support program directors, rotation coordinators and front-line educators in successfully assessing learner performance in each of the seven CanMEDS Roles.

Three general principles have guided the development of the handbook.

First, the assessment of learners occurs in multiple circumstances over time. Although not every educational setting will lend itself to the assessment of all seven CanMEDS Roles, each Role should be evaluated in a variety of ways specific to relevant settings. Accordingly, the handbook describes several appropriate assessment tools for each CanMEDS Role, enabling educators to choose those tools that best suit their particular program. For example, a program director might use high-fidelity simulation to address several key competencies within the Manager Role. The same program director might also include a short-answer question about quality assurance principles on an in-training written examination, again addressing the Manager Role.

Second, as the Medical Expert Role is central to the CanMEDS framework, direct observation is central to the assessment of performance. Learners can be assessed repeatedly over time by multiple observers as all aspects of medical competence are put into practice. Direct observation, therefore, provides direct insight into actual performance.

Third, we have operationalized the concept of “competence” as a progressive development of abilities. Learners should be assessed at various points in their program to ensure progress along a spectrum of performance and should be provided with guidance for further improvement.

Our intention is that this handbook will serve as a searchable reference for educators seeking quick, practical answers on how to begin to assess specific CanMEDS Roles.

¹ Frank JR, editor. *The CanMEDS 2005 physician competency framework. Better standards. Better physicians. Better care.* Ottawa: The Royal College of Physicians and Surgeons of Canada; 2005.

The Handbook

Organized into three sections, the handbook provides both at-a-glance summaries of assessment tools as well as more detailed outlines of their applications, strengths and limitations. Supplementing these brief descriptions, select examples illustrating the tools and approaches described in the handbook will also be posted on the CanMEDS website at <http://rcpsc.medical.org/canmeds>.

Part 1: Quick reference

This section contains two visual aids. Table 1 provides a rapid outline of the strengths and limitations of common assessment tools. Table 2 presents a matrix that matches appropriate assessment tools to each CanMEDS Role.

Part 2: Overview of contemporary assessment tools

This section provides a more detailed explanation of various assessment tools. Each tool is addressed in a separate chapter, with synopses organized under the following headings:

- Definition
- Advantages
- Disadvantages
- Good for assessing
- Limited ability to assess
- Key points
- References

To ensure that assessment is as objective as possible, tools should be designed to maximize reliability (delivering consistent results in the same situation time after time) and validity (assessing intended knowledge, attitudes, skills or behaviours accepted as legitimate by teachers and learners). It is important, therefore, to tailor the tool to the key competencies being assessed in a given situation and to make assessment items (e.g., short-answer questions, in-training evaluation report statements, checklist items) as explicit and descriptive as possible. An emphasis should be placed on the assessment of concrete, observable learner behaviours or well-defined components of a learner's knowledge base. In developing new tools, users of the handbook are encouraged to consult the references at the end of the chapters for examples of previous work as well as experts in the field of learner assessment.

Part 3: Selected tools for assessing the CanMEDS Roles

This section is based on a detailed literature review specific to each Role. Each chapter focuses on a single CanMEDS Role and on how best to assess learners with respect to that Role. Chapters are organized as follows:

- definition of the CanMEDS Role with associated key competencies
- description and rationale for the best available tools to assess learner performance in that Role
- key literature relating to assessment tools for the specific Role
- other literature relating to the assessment of the specific Role.

The handbook uses typical definitions of assessment tools and reflects the current state of medical education research. Our intent is that, as assessment research advances, updated iterations of this manual will be produced. We trust you will find the handbook useful and invite your feedback.

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