



Standards of Accreditation for Clinician Investigator Programs

The *Standards of Accreditation for Clinician Investigator Programs (CIPs)* are a national set of standards maintained by the Royal College of Physicians and Surgeons of Canada (Royal College) for the evaluation and accreditation of CIPs.

This document integrates expectations that are specific to CIPs with expectations set out in the CanERA *General Standards of Accreditation for Residency Programs (General Standards)*, which are maintained conjointly by the Royal College, College of Family Physicians of Canada (CFPC), and Collège des médecins du Québec (CMQ). Please note that some of the General Standards are not applicable to CIPs and as such, there are instances where the numbering in this document does not align with the General Standards. In certain instances, modifications may have been made to a general indicator to address a discipline-specific need. These modified indicators are identified as such and take precedence over the general indicator.

The standards are intended to be read in conjunction with the discipline-specific suite of documents that address the national standards for training.

Standards Organization Framework

Level	Description
Domain	Domains, defined by the Future of Medical Education in Canada-Postgraduate (FMEC-PG) Accreditation Implementation Committee, introduce common organizational terminology to facilitate alignment of accreditation standards across the medical education continuum.
Standard	The overarching outcome to be achieved through the fulfillment of the associated requirements.
Element	A category of the requirements associated with the overarching standard.
Requirement	A measurable component of a standard.
Mandatory and exemplary indicators	<p>A specific expectation used to evaluate compliance with a requirement (i.e., to demonstrate that the requirement is in place).</p> <p>Mandatory indicators must be met to achieve full compliance with a requirement.</p> <p>Exemplary indicators provide objectives beyond the mandatory expectations and may be used to introduce indicators that will become mandatory over time.</p> <p>Indicators may have one or more sources of evidence, not all of which will be collected through the onsite accreditation review (e.g., evidence may be collected via the CanAMS institution/program profile).</p>

550A_PO

DOMAIN: PROGRAM ORGANIZATION

550A_PO_1

STANDARD 1 [CIP modified]: There is an appropriate organizational structure, with leadership and administrative personnel to support the CIP, teachers/supervisors, and residents effectively.

550A_PO_1.1

Element 1.1 [CIP modified]: The CIP director leads the CIP effectively.

550A_PO_1.1.1

Requirement 1.1.1 [CIP modified]: The CIP director is available to oversee and advance the CIP.

550A_PO_1.1.1.1

Indicator 1.1.1.1 [CIP modified]: The CIP director has sufficient protected time to oversee and advance the CIP in accordance with the postgraduate office guidelines, and as appropriate for the size and complexity of the program.

550A_PO_1.1.1.2

Indicator 1.1.1.2 [CIP modified]: The CIP director is accessible and responsive to the input, needs, and concerns of residents.

550A_PO_1.1.1.3

Indicator 1.1.1.3 [CIP modified]: The CIP director is accessible and responsive to the input, needs, and concerns of teachers/supervisors and members of the CIP residency program committee.

550A_PO_1.1.2

Requirement 1.1.2 [CIP modified]: The CIP director has appropriate support to oversee and advance the CIP.

550A_PO_1.1.2.1

Indicator 1.1.2.1 [CIP modified]: The faculty of medicine, postgraduate office, graduate programs, and departments, as applicable, provide the CIP director

with sufficient support, autonomy, and resources for the effective operation of the CIP.

550A_PO_1.1.2.2

Indicator 1.1.2.2 [CIP modified]: Administrative support is organized and adequate to support the CIP director, the CIP, and residents.

550A_PO_1.1.2.3

Indicator 1.1.2.3 [CIP]: The CIP director is responsible to the postgraduate dean and to the dean of the graduate school, as appropriate, for students enrolled in graduate degree programs.

550A_PO_1.1.3

Requirement 1.1.3 [CIP modified]: The CIP director provides effective leadership for the CIP.

550A_PO_1.1.3.1

Indicator 1.1.3.1 [CIP modified]: The CIP director promotes a culture of inclusion that enables members of the CIP residency program committee, residents, teachers/supervisors, and others as required to identify needs and implement changes.

550A_PO_1.1.3.2

Indicator 1.1.3.2 [CIP modified]: The CIP director advocates for equitable, appropriate, and effective educational experiences.

550A_PO_1.1.3.3

Indicator 1.1.3.3 [CIP modified]: The CIP director communicates with individuals involved in the CIP effectively.

550A_PO_1.1.3.4

Indicator 1.1.3.4 [CIP modified]: The CIP director anticipates and manages conflict effectively.

550A_PO_1.1.3.5

Indicator 1.1.3.5 [CIP modified]: The CIP director respects the diversity and protects the rights and confidentiality of residents and teachers/supervisors.

550A_PO_1.1.3.6

Indicator 1.1.3.6 [CIP modified]: The CIP director demonstrates active participation in professional development in medical education.

550A_PO_1.1.3.7

Indicator 1.1.3.7 [CIP modified]: The CIP director or delegate attends at least one CIP advisory committee meeting per year in person or remotely.

550A_PO_1.1.3.8

Indicator 1.1.3.8 [Exemplary] [CIP modified]: *The CIP director demonstrates a commitment to and facilitates educational scholarship and innovation.*

550A_PO_1.1.3.9

Indicator 1.1.3.9 [Exemplary] [CIP]: *The CIP director is a member of the postgraduate education committee.*

550A_PO_1.2

Element 1.2 [CIP modified]: There is an effective and functional CIP residency program committee structure¹ to support the CIP director in planning, organizing, evaluating, and advancing the CIP.

¹ The CIP residency program committee referenced throughout this document has ultimate responsibility and authority for the CIP. In large faculties of medicine, there may also be departmental CIP coordinators and committees, which carry out similar functions to the CIP residency program committee. Any additional CIP coordinators and committees report to the CIP residency program committee.

550A_PO_1.2.1

Requirement 1.2.1 [CIP modified]: The CIP residency program committee structure is composed of appropriate individuals in the CIP.

550A_PO_1.2.1.1

Indicator 1.2.1.1 [CIP modified]: Residents, graduate programs, research programs, and clinical departments are represented on the CIP residency program committee.

550A_PO_1.2.1.2

Indicator 1.2.1.2 [CIP modified]: There is an effective, fair, and transparent process for residents to select their representatives on the CIP residency program committee.

550A_PO_1.2.1.3

Indicator 1.2.1.3 [CIP modified]: There is an effective process for individuals involved in resident wellness and safety programs/plans to provide input to the CIP residency program committee.

550A_PO_1.2.2

Requirement 1.2.2 [CIP modified]: The CIP residency program committee has a clear mandate to manage and evaluate the key functions of the CIP.

550A_PO_1.2.2.1

Indicator 1.2.2.1: There are clearly written terms of reference that address the composition, mandate, roles, and responsibilities of each member; accountability structures; decision-making processes; lines of communication; and meeting procedures.

550A_PO_1.2.2.2

Indicator 1.2.2.2 [CIP modified]: The terms of reference for the CIP residency program committee are regularly reviewed, and refined, as appropriate.

550A_PO_1.2.2.3

Indicator 1.2.2.3 [CIP modified]: The mandate of the CIP residency program committee includes planning and organizing the CIP, including

- selection of residents into the CIP;
- educational design;
- approval of supervisors and research advisory committees, including a process to ensure research supervisors and advisory committee members¹ are qualified to supervise CIP residents;
- overseeing and maintaining standards in the operation of the research component of the program;
- coordinating departmental/divisional components of the CIP, including interdisciplinary linkages;
- policy and process development;
- safety;
- resident wellness;
- assessment of resident progress, including addressing unsatisfactory or marginal progress or performance, including appeals, and verification of residents' satisfactory completion of the research component of the program; and
- continuous improvement.

¹ Research supervisors provide direct supervision of the research. The research advisory committee consists of at least three individuals who have expertise in the research area, including one individual from the resident's entry discipline who can facilitate the integration of clinical and research experience. The research supervisors and research advisory committee oversee the individual research program, provide research and clinical mentoring, evaluate research competencies, and provide interim assessments.

550A_PO_1.2.2.4

Indicator 1.2.2.4 [CIP modified]: The CIP residency program committee documentation demonstrates how it fulfills its mandate effectively; meeting frequency is at least quarterly.

550A_PO_1.2.2.5

Indicator 1.2.2.5 [CIP modified]: The CIP residency program committee structure includes a CIP competence committee, assessment committee, or equivalent body responsible for reviewing residents' progress and completion of the program.

550A_PO_1.2.3

Requirement 1.2.3 [CIP modified]: There is an effective and transparent decision-making process that includes input from residents and others involved in the CIP.

550A_PO_1.2.3.1

Indicator 1.2.3.1 [CIP modified]: Members of the CIP residency program committee are actively involved in a collaborative decision-making process, including regular attendance at and active participation in committee meetings.

550A_PO_1.2.3.2

Indicator 1.2.3.2 [CIP modified]: The CIP residency program committee actively seeks feedback from individuals involved in the CIP, discusses issues, develops action plans, and follows up on identified issues.

550A_PO_1.2.3.3

Indicator 1.2.3.3 [CIP modified]: There is a culture of respect for residents' opinions by the CIP residency program committee.

550A_PO_1.2.3.4

Indicator 1.2.3.4 [CIP modified]: Actions and decisions are communicated in a timely manner to the residents, teachers/supervisors, and administrative

personnel, and with supporting programs, departments, and others responsible for the delivery of the CIP, as appropriate.

550A_PO_2

STANDARD 2 [CIP modified]: All aspects of the CIP are collaboratively overseen by the CIP director and the CIP residency program committee.

550A_PO_2.1

Element 2.1 [CIP modified]: Effective policies and processes to manage clinician investigator education are developed and maintained.

550A_PO_2.1.1

Requirement 2.1.1 [CIP modified]: The CIP residency program committee has well-defined, transparent, and effective policies and processes to manage clinician investigator education.

550A_PO_2.1.1.1

Indicator 2.1.1.1 [CIP modified]: There is an effective mechanism to review and adopt applicable institution policies and learning site policies and processes.

550A_PO_2.1.1.2

Indicator 2.1.1.2 [CIP modified]: There is an effective and transparent mechanism to collaboratively develop and adopt required CIP program- and discipline-specific policies and processes.

550A_PO_2.1.1.3

Indicator 2.1.1.3 [CIP modified]: There is an effective mechanism to disseminate the CIP policies and processes to residents, teachers/supervisors, and administrative personnel.

550A_PO_2.1.1.4

Indicator 2.1.1.4 [CIP modified]: All individuals with responsibility in the CIP follow the institution's policies and procedures regarding ensuring appropriate identification and management of conflicts of interest.

550A_PO_2.2

Element 2.2 [CIP modified]: The CIP director and CIP residency program committee communicate and collaborate with individuals involved in the CIP.

550A_PO_2.2.1

Requirement 2.2.1 [CIP modified]: There are effective mechanisms to collaborate with supporting programs, departments, and the postgraduate office.

550A_PO_2.2.1.1

Indicator 2.2.1.1 [CIP modified]: There is effective communication between the CIP and the postgraduate office.

550A_PO_2.2.1.2

Indicator 2.2.1.2 [CIP modified]: There are effective mechanisms for the CIP to share information and collaborate with supporting programs and departments.

550A_PO_2.2.1.3

Indicator 2.2.1.3 [CIP]: The CIP residency program committee communicates regularly with supporting programs and departments to coordinate each resident's clinical and research training.

550A_PO_2.2.1.4

Indicator 2.2.1.4 [CIP]: For residents who have not yet completed their Royal College accredited residency program, the CIP residency program committee and the clinical residency program communicate regularly about the residents' clinical responsibilities (as applicable), research activities, and their progress in the respective programs.

550A_PO_2.3

Element 2.3 [CIP modified]: Learning sites are organized to meet the requirements of the CIP.

550A_PO_2.3.1

Requirement 2.3.1 [CIP modified]: There is a well-defined, transparent, and effective process to select the CIP's learning sites.

550A_PO_2.3.1.1

Indicator 2.3.1.1 [CIP modified]: There is an effective process to select, organize, and review the CIP's learning sites¹ based on the required educational experiences.

¹ For the purposes of this document, the term learning sites refers to the research program in which the resident is undertaking their research training.

550A_PO_2.3.2

Requirement 2.3.2: Each learning site has an effective organizational structure to facilitate education and communication.

550A_PO_2.3.2.1

Indicator 2.3.2.1 [CIP modified]: Each learning site has a supervisor responsible to the CIP residency program committee.

550A_PO_2.3.2.2

Indicator 2.3.2.2 [CIP modified]: There is effective communication and collaboration between the CIP residency program committee, the site coordinator, and the supervisor for each learning site to ensure program policies and procedures are followed.

550A_PO_2.3.2.3

Indicator 2.3.2.3 [CIP]: For residents undertaking research training as part of a CIP at a different institution than their residency program, the CIP ensures appropriate oversight of that research training¹.

¹ Individuals may undertake their research training as part of a CIP in institutions outside of the faculty of medicine where they are registered in a Royal College accredited clinical residency program. For those undertaking research training at a different institution from their residency program, arrangements should be made to ensure the research training is overseen by the CIP director at the centre supervising the research training, if a program is offered at that university. If this is not possible, the CIP residency program committee and the faculty of medicine in which the resident is registered retain all of the responsibilities for approval and monitoring of the individual's offsite CIP research training, including the validation of its satisfactory completion. For these arrangements, one member of the resident's research advisory committee must be from the location where the research is being done and must provide regular reports on the resident's progress. If part of the research experience is taken in a setting other than the site(s) affiliated with the CIP program, the unaffiliated site may be acceptable, provided it meets the following administrative conditions:

- there is a designated mentor who is a member of the resident's research advisory committee
- specific resident goals and objectives are developed in advance of the research experience
- the educational objectives of the research experience in the unaccredited setting are understood by the resident, the mentor, and the CIP director

- there is a well-defined mechanism for the CIP director to receive regular assessment reports of the resident's progress during the research experience away from the sponsoring university
- the mechanism for assessment of the resident's performance during this period is clearly defined and understood by the resident, the designated mentor, and the CIP director, and is based on the educational objectives of the CIP and the research experience in question.

550A_EP

DOMAIN: EDUCATION PROGRAM

550A_EP_3

STANDARD 3 [CIP modified]: Residents are prepared for careers as clinician investigators.

550A_EP_3.1

Element 3.1 [CIP modified]: The CIP's educational design is based on outcomes-based competencies and/or objectives that prepare residents for careers as clinician investigators.

550A_EP_3.1.1

Requirement 3.1.1 [CIP modified]: Educational competencies and/or objectives are in place that ensure residents progressively meet all required standards for the CIP.

550A_EP_3.1.1.1

Indicator 3.1.1.1 [CIP modified]: The educational objectives meet the requirements as outlined in the *Clinician Investigator Competencies and the Training Experiences for Clinician Investigator Programs*.

550A_EP_3.1.1.2

Indicator 3.1.1.2 [CIP modified]: The competencies and/or objectives address each of the Roles in the CanMEDS Framework specific to CIP.

550A_EP_3.1.1.3

Indicator 3.1.1.3 [CIP]: Individual educational objectives for each resident are developed for the research component of each resident's CIP training and are reviewed annually¹.

¹ For residents with a previous PhD degree, the educational objectives will be identical to those without a PhD degree but will be evaluated in the context of a research fellowship experience.

550A_EP_3.2

Element 3.2 [CIP modified]: The CIP provides educational experiences designed to facilitate residents' attainment of the outcomes-based competencies and/or objectives.

550A_EP_3.2.1

Requirement 3.2.1: Educational experiences are guided by competencies and/or objectives, and provide residents with opportunities for increasing professional responsibility at each stage or level of training.

550A_EP_3.2.1.1

Indicator 3.2.1.1: The educational experiences are defined specifically for and/or are mapped to the competencies and/or objectives.

550A_EP_3.2.1.2

Indicator 3.2.1.2 [CIP modified]: The educational experiences meet the requirements as outlined in the *Clinician Investigator Competencies and the Training Experiences for Clinician Investigator Programs*.

550A_EP_3.2.1.3

Indicator 3.2.1.3 [CIP modified]: The educational experiences, including initiation, execution, and assessment of research tasks, are appropriate for residents' stage or level of training and support residents' achievement of increasing professional responsibility specific to CIP.

550A_EP_3.2.1.4

Indicator 3.2.1.4 [CIP]: The educational experiences allow residents to attain the required level of competence to ensure preparedness for a career as a clinician investigator, upon completion of the program.

550A_EP_3.2.1.5

Indicator 3.2.1.5 [CIP]: The educational experiences include course work designed to meet residents' individual educational objectives, assigned with the approval of the resident's research supervisor and committee.

550A_EP_3.2.1.6

Indicator 3.2.1.6 [CIP]: The educational experiences, including clinical experiences if any, are relevant to and integrated with the resident's

individualized educational objectives and are consistent with their emerging career as a clinician investigator.

550A_EP_3.2.1.7

Indicator 3.2.1.7 [CIP]: There is protection of the resident's time for research such that clinical activities during the research block, including daytime and afterhours, do not exceed 20% of the total resident work week.

550A_EP_3.2.2

Requirement 3.2.2 [CIP modified]: The CIP uses a comprehensive curriculum plan, which is specific to CIP, and addresses all of the CanMEDS Roles.

550A_EP_3.2.2.1

Indicator 3.2.2.1: There is a clear curriculum plan that describes the educational experiences for each resident.

550A_EP_3.2.2.2

Indicator 3.2.2.2: The curriculum plan incorporates all required educational objectives or key and enabling competencies of the discipline.

550A_EP_3.2.2.3

Indicator 3.2.2.3: The curriculum plan addresses expert instruction and experiential learning opportunities for each of the CanMEDS Roles with a variety of suitable learning activities.

550A_EP_3.2.2.4

Indicator 3.2.2.4 [CIP]: The curriculum plan incorporates course work in which research ethics, teaching skills, communication skills, and research methodology are taught.

550A_EP_3.2.2.5

Indicator 3.2.2.5 [CIP]: The curriculum plan incorporates issues related to age, gender, culture, and ethnicity in research protocols, and data presentation and discussion.

550A_EP_3.2.3

Requirement 3.2.3: The educational design allows residents to identify and address individual learning objectives.

550A_EP_3.2.3.1

Indicator 3.2.3.1: Individual residents' educational experiences are tailored to accommodate their learning needs and future career aspirations, while meeting the national standards and societal needs for their discipline.

550A_EP_3.2.3.2

Indicator 3.2.3.2 [CIP modified]: The CIP fosters a culture of reflective practice and lifelong learning among its residents.

550A_EP_3.2.4

Requirement 3.2.4 [CIP]: The educational environment supports and promotes resident learning in an atmosphere of scholarly enquiry.

550A_EP_3.2.4.1

Indicator 3.2.4.1 [CIP]: There is a high level of scholarly achievement, demonstrated by the publication record of both supervisors and residents and the ability to obtain funding for such scholarly activities.

550A_EP_3.2.4.2

Indicator 3.2.4.2 [CIP]: The learning environment is rich in academic activities (e.g., journal clubs, seminar series, retreats), and supportive of translational aspects of research.

550A_EP_3.2.4.3

Indicator 3.2.4.3 [CIP]: The learning environment includes interdisciplinary communication and collaboration, and open discussion at seminars, and conferences.

550A_EP_3.3

Element 3.3 [CIP modified]: Teachers/supervisors facilitate residents' attainment of competencies and/or objectives.

550A_EP_3.3.1

Requirement 3.3.1 [CIP modified]: Resident learning needs, stage or level of training, and other relevant factors are used to guide all teaching and supervision to support resident attainment of competencies and/or objectives.

550A_EP_3.3.1.1

Indicator 3.3.1.1 [CIP modified]: Teachers/supervisors use experience-specific competencies and/or objectives to guide educational interactions with residents.

550A_EP_3.3.1.2

Indicator 3.3.1.2 [CIP modified]: Teachers/supervisors align their teaching/supervision appropriately with residents' stage or level of training, and individual learning needs and objectives.

550A_EP_3.3.1.3

Indicator 3.3.1.3 [CIP modified]: Teachers/supervisors contribute to the promotion and maintenance of a positive learning environment.

550A_EP_3.3.1.4

Indicator 3.3.1.4 [CIP modified]: Residents' feedback to teachers/supervisors facilitates the adjustment of teaching/supervision approaches and learner assignment, as appropriate, to maximize the educational experiences.

550A_EP_3.4

Element 3.4: There is an effective, organized system of resident assessment.

550A_EP_3.4.1

Requirement 3.4.1 [CIP modified]: The CIP has a planned, defined, and implemented system of assessment.

550A_EP_3.4.1.1

Indicator 3.4.1.1: The system of assessment is based on residents' attainment of experience-specific competencies and/or objectives.

550A_EP_3.4.1.2

Indicator 3.4.1.2 [CIP modified]: The system of assessment clearly identifies the methods by which residents are assessed for each educational experience, including:

- presentation of findings of research activities at a local, national, or international venue, ideally based on peer-reviewed abstract;
- submission of at least one article for peer-review publication.

550A_EP_3.4.1.3

Indicator 3.4.1.3 [CIP modified]: The system of assessment clearly identifies the level of performance expected of residents.

550A_EP_3.4.1.4

Indicator 3.4.1.4 [CIP modified]: The system of assessment includes identification and use of appropriate assessment tools tailored to the CIP's educational experiences.

550A_EP_3.4.1.5

Indicator 3.4.1.5 [CIP modified]: The system of assessment meets the requirements within the specific standards for CIP.

550A_EP_3.4.1.6

Indicator 3.4.1.6 [CIP]: The system of assessment includes interim performance assessments made by supervisors (and/or research advisory committees), covering areas including but not limited to: attitudes, assessment of the literature (critical appraisal), presentation of information, analysis of information, technical skills, writing skills, and ability to develop hypotheses.

550A_EP_3.4.1.7

Indicator 3.4.1.7 [CIP]: The individualized educational objectives developed for the research component of each resident's CIP training are used to inform the interim assessment of progress and verify the completion of the research component of the program.

550A_EP_3.4.1.8

Indicator 3.4.1.8 [CIP]: The interim performance assessments are completed at least every six months within the research component of the CIP training, and yearly thereafter.

550A_EP_3.4.1.9

Indicator 3.4.1.9 [Exemplary] [CIP]: *The research advisory committee reviews the resident's progress every 6 months until the program requirements are met.*

550A_EP_3.4.1.10

Indicator 3.4.1.10 [CIP]: The system of assessment includes a method for final assessment that is clearly defined by the faculty of medicine (as verification of completion of the research component rests with the faculty of medicine).

550A_EP_3.4.1.11

Indicator 3.4.1.11 [CIP modified]: Teachers/supervisors are aware of the expectations for resident performance and use these expectations in their assessments of residents.

550A_EP_3.4.2

Requirement 3.4.2: There is a mechanism in place to engage residents in a regular discussion for review of their performance and progression.

550A_EP_3.4.2.1

Indicator 3.4.2.1: Residents receive regular, timely, meaningful, in-person feedback on their performance.

550A_EP_3.4.2.2

Indicator 3.4.2.2 [CIP modified]: The CIP director and/or an appropriate delegate meet(s) regularly with residents to discuss and review their performance and progress.

550A_EP_3.4.2.3

Indicator 3.4.2.3 [CIP modified]: Residents' progress toward the attainment of competencies, including records (e.g., interim and final assessments) of the research component for all residents enrolled in the CIP program¹, is documented in a secure, individual portfolio.

¹ Information on program applicants, residents accepted in the CIP, and graduates is kept on file in the office of the postgraduate dean and provided to the Royal College on an annual basis.

550A_EP_3.4.2.4

Indicator 3.4.2.4: Residents are aware of the processes for assessment and decisions around promotion and completion of training.

550A_EP_3.4.2.5

Indicator 3.4.2.5 [CIP modified]: The CIP fosters an environment where formative feedback is actively used by residents to guide their learning.

550A_EP_3.4.2.6

Indicator 3.4.2.6 [CIP modified]: Residents and teachers/supervisors have shared responsibility for recording residents' learning and achievement of competencies and/or objectives.

550A_EP_3.4.3

Requirement 3.4.3: There is a well-articulated process for decision-making regarding resident progression, including the decision on satisfactory completion of training.

550A_EP_3.4.3.1

Indicator 3.4.3.1 [CIP modified]: The CIP competence committee, assessment committee, or equivalent body regularly reviews residents' progress based on the program's system of assessment.

550A_EP_3.4.3.2

Indicator 3.4.3.2 [CIP modified]: Using all available evidence regarding performance, including the contents of the portfolio, the competence committee, assessment committee, or equivalent body makes a summative assessment regarding residents' completion of the CIP¹.

¹ For residents in a graduate degree program, an assessment by the graduate school with the awarding of the degree, in addition to successfully completing the other parts of the CIP, constitutes satisfactory completion of the program. For residents in a research fellowship, the CIP director has a process of equal rigour to the graduate degree pathway, by which verification of completion can be carried out, including elements such as courses taken and grades (if applicable), interim assessment reports, assessment of presentations, assessment of manuscripts and publications, success in competition for research awards, and verification by the resident's research committee that the objectives of the research training component have been met.

550A_EP_3.4.3.3

Indicator 3.4.3.3 [CIP modified]: The CIP director provides the Royal College with an Attestation of Completion of the Research component of the CIP on university letterhead, for each resident who has successfully completed the CIP.

550A_EP_3.4.3.4

Indicator 3.4.3.4 [CIP modified]: The CIP competence committee, assessment committee, or equivalent body is able to access resident assessment data in a way that supports its recommendations and decision-making about resident progress in alignment with assessment guidelines.

550A_EP_3.4.4

Requirement 3.4.4: The system of assessment allows for timely identification of and support for residents who are not attaining the required competencies or objectives as expected.

550A_EP_3.4.4.1

Indicator 3.4.4.1: Residents are informed in a timely manner of any concerns regarding their performance and/or progression.

550A_EP_3.4.4.2

Indicator 3.4.4.2: Residents who are not progressing as expected are provided with the required support and opportunity to improve their performance, as appropriate.

550A_EP_3.4.4.3

Indicator 3.4.4.3: Any resident requiring formal remediation and/or additional educational experiences, is provided with

- a documented plan detailing objectives of the formal remediation and their rationale;
- the educational experiences scheduled to allow the resident to achieve these objectives;
- the assessment methods to be employed;
- the potential outcomes and consequences;
- the methods by which a final decision will be made as to whether or not the resident has successfully completed a period of formal remediation; and
- the appeal process.

550A_R

DOMAIN: RESOURCES

550A_R_4

STANDARD 4 [CIP modified]: The delivery and administration of the CIP is supported by appropriate resources.

550A_R_4.1

Element 4.1 [CIP modified]: The CIP has the clinical, physical, technical, and financial resources to provide all residents with the educational experiences needed to acquire all competencies and/or objectives.

550A_R_4.1.1

Requirement 4.1.1 [CIP modified]: The CIP has the necessary financial, physical and technical resources.

550A_R_4.1.1.1

Indicator 4.1.1.1 [CIP modified]: Residents have appropriate access to adequate facilities and services to conduct their work, including workspaces and internet.

550A_R_4.1.1.2

Indicator 4.1.1.2 [CIP modified]: The CIP director, residency program committee, and administrative personnel have access to adequate space, information technology¹, and financial support to carry out their duties.

¹ Including information technology that enables information related to CIP applicants, residents accepted to the CIP, and CIP graduates to be kept on file in the office of the postgraduate dean and provided to the Royal College on an annual basis.

550A_R_4.1.1.3

Indicator 4.1.1.3 [CIP]: The CIP has access to adequate research facilities; research training may require a laboratory, or a clinical or population health research setting, as appropriate.

550A_R_4.1.1.4

Indicator 4.1.1.4 [CIP]: The CIP has access to securely funded research programs.

550A_R_4.1.1.5

Indicator 4.1.1.5 [Exemplary] [CIP]: *The CIP has access to PhD programs for resident training, with the understanding that this incurs a longer period of training.*

550A_R_4.1.1.6

Indicator 4.1.1.6 [CIP]: The CIP has access to formal courses in research methodology and related subjects.

550A_R_4.2

Element 4.2 [CIP modified]: The CIP has the appropriate human resources to provide all residents with the required educational experiences.

550A_R_4.2.1

Requirement 4.2.1 [CIP modified]: Teachers appropriately implement the CIP curriculum, supervise and assess residents, and contribute to the program.

550A_R_4.2.1.1

Indicator 4.2.1.1 [CIP modified]: The number, credentials, competencies, and scope of practice of the teachers/supervisors are adequate to provide the breadth and depth of the CIP, including assessment and feedback to residents.

550A_R_4.2.1.2

Indicator 4.2.1.2 [CIP modified]: The number, credentials, competencies, and scope of practice of the teachers/supervisors are sufficient to supervise all aspects of residents' research activities.

550A_R_4.2.1.3

Indicator 4.2.1.3 [CIP modified]: Each resident has a designated research supervisor who fulfills the requirements of the CIP residency program committee. Research supervisors for residents enrolled in graduate programs, are approved by the faculty of graduate studies or other responsible faculties.

550A_R_4.2.1.4

Indicator 4.2.1.4 [CIP]: Research supervisors adhere to the terms and conditions required by the CIP for resident research training, and have:

- established research funding, with sufficient funds to allow successful completion of the degree by the resident;
- established research productivity (manuscripts, abstracts, presentations);
- an international/national reputation in their field; and
- experience supervising graduate students.

550A_R_4.2.1.5

Indicator 4.2.1.5 [CIP]: Each resident has a research advisory committee that consists of at least three individuals who have expertise in the research area, including one individual who represents the resident's Royal College discipline, who can facilitate the integration of clinical and research experience.

550A_R_4.2.1.6

Indicator 4.2.1.6 [CIP]: Research supervisors and the research advisory committee for each resident are responsible for:

- overseeing the individual research program;
- research and clinical mentoring;
- evaluating research competencies;
- providing interim assessments; and
- reporting to the CIP residency program committee (via the CIP competence committee, assessment committee, or equivalent body).

550A_LTA

DOMAIN: LEARNERS, TEACHERS, AND ADMINISTRATIVE PERSONNEL

550A_LTA_5

STANDARD 5: Safety and wellness are promoted throughout the learning environment.

550A_LTA_5.1

Element 5.1 [CIP modified]: Physical, psychological, cultural, and professional safety and wellness are actively promoted.

550A_LTA_5.1.1

Requirement 5.1.1: Residents are appropriately supervised.

550A_LTA_5.1.1.1

Indicator 5.1.1.1 [CIP]: There is a process for ensuring that research supervisors and advisory committee members are qualified to supervise CIP residents.

550A_LTA_5.1.1.2

Indicator 5.1.1.2 [CIP modified]: Residents and teachers/supervisors follow institution policies and any program-specific policies regarding supervision of residents.

550A_LTA_5.1.2

Requirement 5.1.2 [CIP modified]: Clinician Investigator education occurs in a physically, psychologically, culturally, and professionally safe learning environment.

550A_LTA_5.1.2.1

Indicator 5.1.2.1 [CIP modified]: Safety is actively promoted throughout the learning environment for all those involved in the CIP.

550A_LTA_5.1.2.2

Indicator 5.1.2.2: Well-defined, transparent, and effective policies and processes are in place addressing residents' physical safety.

550A_LTA_5.1.2.3

Indicator 5.1.2.3: Well-defined, transparent, and effective policies and processes are in place addressing residents' psychological safety.

550A_LTA_5.1.2.4

Indicator 5.1.2.4: Well-defined, transparent, and effective policies and processes are in place addressing residents' cultural safety.

550A_LTA_5.1.2.5

Indicator 5.1.2.5: Well-defined, transparent, and effective policies and processes are in place addressing residents' professional safety.

550A_LTA_5.1.2.6

Indicator 5.1.2.6: Policies and processes regarding resident safety consider discipline, program, resident, and culturally specific contexts.

550A_LTA_5.1.2.7

Indicator 5.1.2.7: Policies and processes regarding resident safety effectively address both situations and perceptions of lack of resident safety and provide multiple avenues of access for effective reporting and management.

550A_LTA_5.1.2.8

Indicator 5.1.2.8: Concerns with the safety of the learning environment are appropriately identified and remediated.

550A_LTA_5.1.2.9

Indicator 5.1.2.9 [CIP modified]: Residents are supported and encouraged to exercise discretion and judgment regarding their personal safety.

550A_LTA_5.1.2.10

Indicator 5.1.2.10 [CIP modified]: Residents and teachers/supervisors are aware of the process to follow if they perceive safety issues, in both research and educational activities.

550A_LTA_5.1.2.11

Indicator 5.1.2.11 [CIP]: Policies and processes regarding resident safety include:

- laboratory hazards
- complaints
- fatigue risk management
- travel
- violence, including sexual and gender-based violence

550A_LTA_5.1.3

Requirement 5.1.3 [CIP modified]: Clinician Investigator education occurs in a positive learning environment that promotes resident wellness.

550A_LTA_5.1.3.1

Indicator 5.1.3.1 [CIP modified]: There is a positive learning environment for all involved in the CIP.

550A_LTA_5.1.3.2

Indicator 5.1.3.2: Residents are aware of and able to access confidential wellness services that can support physical, psychological, cultural, and/or professional resident wellness concerns.

550A_LTA_5.1.3.3

Indicator 5.1.3.3: The institution's policies and processes regarding resident absences and educational accommodation are applied effectively.

550A_LTA_5.1.3.4

Indicator 5.1.3.4: The mechanism to receive, respond to, and adjudicate incidents of discrimination, harassment, and other forms of mistreatment is applied effectively.

550A_LTA_5.1.3.5

Indicator 5.1.3.5: Residents are supported and encouraged to exercise discretion and judgment regarding their personal wellness.

550A_LTA_6

STANDARD 6 [CIP modified]: Residents are treated fairly and supported adequately throughout the progression of the CIP.

550A_LTA_6.1

Element 6.1 [CIP modified]: The progression of residents through the CIP is supported, fair, and transparent.

550A_LTA_6.1.1

Requirement 6.1.1: There are well-defined, transparent, and effective formal processes for the selection and progression of residents.

550A_LTA_6.1.1.1

Indicator 6.1.1.1: Processes for resident selection, promotion, remediation, dismissal, and appeals are applied effectively, transparently, and in alignment with applicable institution policies.

550A_LTA_6.1.1.2

Indicator 6.1.1.2 [CIP modified]: The CIP encourages and recognizes resident leadership.

550A_LTA_6.1.2

Requirement 6.1.2: Guidance is available to facilitate resident achievement and success.

550A_LTA_6.1.2.1

Indicator 6.1.2.1 [CIP modified]: The CIP provides formal, timely career planning and counselling to residents throughout their progress through the CIP.

550A_LTA_7

STANDARD 7 [CIP modified]: Teachers/supervisors deliver and support all aspects of the CIP.

550A_LTA_7.1

Element 7.1 [CIP modified]: Teachers/supervisors are assessed, recognized, and supported in their development as positive role models for residents in the CIP.

550A_LTA_7.1.1

Requirement 7.1.1 [CIP modified]: Teachers/supervisors are regularly assessed and supported in their development.

550A_LTA_7.1.1.1

Indicator 7.1.1.1 [CIP modified]: There is an effective process for the assessment of teachers/supervisors involved in the CIP, aligned with applicable institution processes, that balances timely feedback with preserving resident confidentiality.

550A_LTA_7.1.1.2

Indicator 7.1.1.2 [CIP modified]: The system of teacher/supervisor assessment ensures recognition of excellence in teaching and is used to address performance concerns.

550A_LTA_7.1.1.3

Indicator 7.1.1.3 [CIP modified]: Resident input is a component of the system of teacher/supervisor assessment.

550A_LTA_7.1.1.4

Indicator 7.1.1.4 [CIP modified]: Faculty development for teaching/supervision that is relevant and accessible to teachers/supervisors is offered on a regular basis.

550A_LTA_7.1.1.5

Indicator 7.1.1.5 [CIP modified]: There is an effective process to identify, document, and address unprofessional behaviour by teachers/supervisors.

550A_LTA_7.1.1.6

Indicator 7.1.1.6 [CIP modified]: The CIP identifies and addresses priorities for faculty development within residency training.

550A_LTA_7.1.2

Requirement 7.1.2 [CIP modified]: Teachers/supervisors in the CIP are effective role models for residents.

550A_LTA_7.1.2.1

Indicator 7.1.2.1 [CIP modified]: Teachers/supervisors appropriately balance their own research priorities with their responsibility to provide high quality research supervision and teaching.

550A_LTA_7.1.2.2

Indicator 7.1.2.2 [CIP modified]: Teachers/supervisors contribute to academic activities of the CIP and institution, including lectures, workshops, examination preparation, and internal reviews.

550A_LTA_8

STANDARD 8 [CIP modified]: CIP administrative personnel are valued and supported in the delivery of the CIP.

550A_LTA_8.1

Element 8.1 [CIP modified]: There is support for the continuing professional development of CIP administrative personnel.

550A_LTA_8.1.1

Requirement 8.1.1 [CIP modified]: There is an effective process for the professional development of the CIP administrative personnel.

550A_LTA_8.1.1.1

Indicator 8.1.1.1 [CIP modified]: There is a role description that outlines the knowledge, skills, and expectations for CIP administrative personnel.

550A_LTA_8.1.1.2

Indicator 8.1.1.2 [CIP modified]: CIP administrative personnel receive professional development, provided by the institution and/or through the CIP, based on their individual learning needs.

550A_LTA_8.1.1.3

Indicator 8.1.1.3 [CIP modified]: CIP administrative personnel receive formal and/or informal feedback on their performance in a fair and transparent manner, consistent with any applicable university, health organization, or union contracts.

550A_CI

DOMAIN: CONTINUOUS IMPROVEMENT

550A_CI_9

STANDARD 9 [CIP modified]: There is continuous improvement of the educational experiences, to improve the CIP and ensure residents are prepared for careers as clinician investigators.

550A_CI_9.1

Element 9.1 [CIP modified]: The CIP residency program committee systematically reviews and improves the quality of the CIP.

550A_CI_9.1.1

Requirement 9.1.1 [CIP modified]: There is a well-defined, systematic process to regularly review and improve the CIP.

550A_CI_9.1.1.1

Indicator 9.1.1.1 [CIP modified]: There is an evaluation of each of the CIP's educational experiences, including the review of related competencies and/or objectives at least every two years.

550A_CI_9.1.1.2

Indicator 9.1.1.2: There is an evaluation of the learning environment, including evaluation of any influence, positive or negative, resulting from the presence of the hidden curriculum.

550A_CI_9.1.1.3

Indicator 9.1.1.3: Residents' achievements of competencies and/or objectives are reviewed.

550A_CI_9.1.1.4

Indicator 9.1.1.4 [CIP modified]: The resources available to the CIP are reviewed.

550A_CI_9.1.1.5

Indicator 9.1.1.5: Residents' assessment data is reviewed.

550A_CI_9.1.1.6

Indicator 9.1.1.6 [CIP modified]: The feedback provided to teachers/supervisors in the CIP is reviewed.

550A_CI_9.1.1.7

Indicator 9.1.1.7 [CIP modified]: The CIP's policies and processes for clinician investigator education are reviewed.

550A_CI_9.1.2

Requirement 9.1.2 [CIP modified]: A range of data and information is used to inform the review and improvement of all aspects of the CIP.

550A_CI_9.1.2.1

Indicator 9.1.2.1 [CIP modified]: The process to review and improve the CIP program uses various sources of data and input, including feedback from residents, teachers/supervisors, the CIP director, CIP administrative personnel, and others, as appropriate.

550A_CI_9.1.2.2

Indicator 9.1.2.2 [CIP modified]: Information identified by the postgraduate office's internal review process and any data collected by the postgraduate office are used to support the review of the CIP.

550A_CI_9.1.2.3

Indicator 9.1.2.3: Mechanisms for feedback take place in an open, collegial atmosphere.

550A_CI_9.1.2.4

Indicator 9.1.2.4 [CIP]: There is a process to gather assessments and feedback about the CIP on a regular basis.

550A_CI_9.1.2.5

Indicator 9.1.2.5 [Exemplary] [CIP modified]: *Feedback from recent graduates is regularly used to improve the CIP.*

550A_CI_9.1.2.6

Indicator 9.1.2.6 [Exemplary] [CIP modified]: *The educational program is aware of and considers innovations related to Clinical Scientist Development Programs in Canada and abroad.*

550A_CI_9.1.2.7

Indicator 9.1.2.7 [Exemplary] [CIP modified]: *Resident e-portfolios (or equivalent tools) are used to support the review of the CIP and continuous improvement.*

550A_CI_9.1.3

Requirement 9.1.3: Based on the data and information reviewed, strengths and areas for improvement are identified and addressed.

550A_CI_9.1.3.1

Indicator 9.1.3.1 [CIP modified]: Areas for improvement are used to develop and implement relevant and timely action plans to improve the quality of the CIP.

550A_CI_9.1.3.2

Indicator 9.1.3.2 [CIP modified]: The CIP director and CIP residency program committee share identified strengths and areas for improvement, including associated action plans, with residents, teachers/supervisors, CIP administrative personnel, and others, as appropriate, in a timely manner.

550A_CI_9.1.3.3

Indicator 9.1.3.3 [CIP modified]: There is a clear and well-documented process to review the effectiveness of actions taken to improve the quality of the CIP, and to take further action as required.