



CAREER FRAMEWORK FOR PARAMEDICS

Education

Clinical
practice

Organizational
Leadership

Research

Policy &
Strategy

1st Edition
April 2024

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Foreword

In this document, we are pleased to present the first edition of the Paramedic Association of Canada's *Career Framework for Paramedics*, which outlines the professional capabilities and opportunities for paramedics across five pathways within the profession: clinical practice, organizational leadership, research, education, and policy and strategy.

The paramedic career framework is aimed at providing paramedics, employers, professionals, and regulatory bodies with guidance and clarity on the roles and abilities of paramedics in Canada now, and in the future.

The *Career Framework for Paramedics* diagram provides a visual description of the career opportunities available to paramedics across five pathways within the profession.

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We are grateful to the members of the advisory group for providing their guidance, expertise, and support. Their diverse careers mirror many elements of the *Career Framework for Paramedics*, and their pathways were often pursued without clear guidance on choices and opportunities. As such, learning from their shared wisdom and insight has been instrumental to developing this framework.

In addition, we are grateful to colleagues at many other organizations who provided comments and feedback on earlier drafts of the framework.

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This collaborative project was conducted on colonized Indigenous lands now referred to as Canada. These lands are home to the many diverse First Nations, Inuit, and Métis Peoples whose ancestors have stewarded this land since time immemorial.

Graphics: Aruna @ Aurora Creation, Alan Batt

Introduction

In 2015, the Paramedic Association of Canada convened a meeting of stakeholders within the paramedic community to discuss the future of paramedic practice in Canada. Attendees included educators, regulators, and the Paramedic Chiefs of Canada. These stakeholders agreed that paramedic practice has, is, and will continue to evolve across the country. Despite this, formal education, and preparation of paramedics for practice has not kept pace, and the depth and breadth of knowledge required to provide care to changing demographics of patients will soon extend beyond the scope of diploma education. The group committed to investigate and develop a plan for bachelor-degree education as an entry to practice requirement.

In 2016, the Paramedic Association of Canada published the *Paramedic Profile and Roles, Code of Ethics, Standards of Practice, and Education Guidance* documents. This work was conducted as preparatory steps for a revised competency framework, wherein the paramedic community was invited to participate. This plan, known as 'Vision 2025' has progressed over the last decade, culminating in the development of the CSA Standard Z1660 *National Competency Framework for Paramedics* (NCFP) in 2024. The NCFP is aligned with the Paramedic Chief's of Canada's *Principles to Guide the Future of Paramedicine*. A suite of documents was further developed in 2024 aligned with the NCFP to reflect contemporary perspectives on the paramedic profession in Canada. This includes the *Career Framework for Paramedics*. The NCFP, its supporting documents, and related specialist competency frameworks provide a solid foundation on which to develop bachelor-degree education, assessment, accreditation, and advanced practice roles in Canada.

The United Kingdom, Republic of Ireland, and Australia for example have adopted bachelor-degree entry to practice for paramedics. It is now time for Canadian paramedicine lead the way and best prepare future paramedics for their expanding role within health and social care systems, and to ensure the highest, safest standards of care are provided to our patients. It is also essential to ensure there are career progression opportunities for those holding degrees and postgraduate education, combined with experience, as we move forward in Canada. Enacting the principle of Continuous Learning Environment, the *PAC Career Framework for Paramedics* seeks to illustrate future career progression opportunities for paramedics in Canada.

Background

The College of Paramedics in the United Kingdom developed a *Paramedic Career Framework* in 2006, which has undergone revisions, on several occasions to meet the changing expectations on Paramedics, and is currently on its fifth edition in 2023. This framework, combined with the *Paramedic Post-Graduate Career Guidance* document, has played a key role in clarifying the career opportunities available to UK paramedics inside and outside of ambulance services, and across the health system, and helped define the varied roles paramedics are able to undertake. The Australasian College of Paramedicine is developing a career framework for paramedics to provide similar guidance.

Career opportunities to date for paramedics in Canada have been largely defined by their role as public safety personnel within a paramedic service organization. Paramedics are now being called upon to address large health and social care system issues that require them to navigate areas of the system and professional pathways that are not well defined and require guidance.

It is imperative for paramedicine in Canada to now look beyond entry-to-practice and consider the broader profession, the Canadian healthcare landscape, and the anticipated needs in the future.

Methods

The *Career Framework for Paramedics* was developed from June 2023 to March 2024.

First, initial desk research was undertaken to identify key references, resources, and significant themes or issues for consideration. A system partner list was developed to include a diverse range of organizations and individuals that wished to be updated on development of the framework and to provide comments or feedback as part of a consultation process. We identified career frameworks for paramedics and other health professionals in Canada, the United Kingdom, and Australia. We explored these frameworks to gain an understanding of the purpose and scope of the frameworks, the levels of practice, and career pathways represented in them.

Second, we reviewed literature related to paramedic career pathways and education opportunities in Canada, as well as the broader landscape of Canadian paramedicine literature and emerging concepts. We developed initial iterations of the framework based on the findings of the desk research from June to December 2023.

Third, we assembled an advisory group of paramedics who represented diverse and broad careers across the five pathways within the profession. We conducted an engagement and feedback exercise in February and March 2024 with this group. We amended and refined the framework based on our analysis of the engagement exercise in April 2024.

The PAC Board approved publication of the first edition of the *Career Framework for Paramedics* in April 2024.

Who is this framework for?

Current and future paramedics

The Career Framework promotes paramedicine as a career option for a wide range of individuals as well as giving a clear sense of the ways in which to progress throughout a career. The Career Framework sets out clear expectations for individuals about the requirements for progress through and across the pathways of the profession. It provides clarity about characteristics and requirements to perform at each level. It can be used to support ongoing registration requirements with regulatory bodies, provide clarity to those coming to Canada from overseas, and assist in personal and professional development planning. While it promotes degree level education as a foundation, those without a degree may still use the Career Framework to inform future education and experience choices to advance their career.

Education providers

Educational institutions can use the Career Framework to inform the design of their curricula and the delivery of education and professional development programs, including identifying learning outcomes at various levels. This will ensure that learning contributes to making individuals safe and effective member of the profession. Use of the Career Framework also supports organizational and system wide effectiveness and efficiencies by encouraging the delivery of education and training that is focused on developing core capabilities and optimizes opportunities for interprofessional learning; focused on outcomes-based curricula which equips individuals with the attributes required to meet the needs of the population. It will also inform the need to predict future faculty development requirements, preparing for a profession-wide move towards degree and postgraduate education advancements. In doing so, it should help to increase consistency in knowledge and skills development, prevent unnecessary duplication in education delivery and strengthen skill mix and teamworking. Education providers can also introduce the Career Framework to students, providing them with insight on the various career options across pathways.

Regulatory bodies

The Career Framework can be a resource for regulatory bodies to map various practice roles within the careers of paramedics. It can be used to provide context to registration processes and continuous education matrixes. It can also be used to reference professional development courses to the NCFP for individuals who wish to further their careers and progress within various sectors of the profession. The framework enables regulators to develop mentorship/integration/internship programs to assist practitioners, effectively moving from recruitment to retirement, between and within various roles in the profession both in the domestic and internationally educated health profession sector.

Employers

The Career Framework enables employers to demonstrate that staff they employ meet core capabilities and/or have developmental plans along with the necessary supervision to ensure high quality and safe care delivery that meets the needs of individuals. This supports the need for CPD to ensure practice is safe, effective, remains up to date to ensure the safety and effectiveness of paramedic care. It can be used to conduct formal or informal appraisal, alongside a training needs analysis, comparing current skills and knowledge with required skills and knowledge. It can also be used to review and recognize how capabilities are shared across teams.

Other professionals

The Career Framework can help those in adjacent professions to determine a career path within paramedicine, with the exception of the clinical practice pathway. For example, someone moving from a mental health services policy position into a policy position that is focused on paramedicine or paramedic service delivery may find it useful to articulate their position within this framework to provide clarity on their role and responsibilities.

The public

The Career Framework can be used by people to understand what they can expect from paramedics. It can also be useful for those who want an awareness of the elements of paramedicine in Canada if they are in roles such as patient or lay representatives, or holding positions with organizational boards, or other roles involved in coproduction of services, education, or system development.

How to use the Career Framework

The *Career Framework for Paramedics* is intended to support the *National Competency Framework for Paramedics*, and places the degree-educated paramedic at its core.

Current paramedics using this framework should work with their employers to:

- Identify where their existing role sits on the Career Framework (which may be across several pathways and levels).
- Evidence their capability as part of the performance review/appraisal process
- Identify any gaps in capability.
- Develop a program of development to address any gaps and/or to identify career development opportunities.
- Gather evidence to contribute to their career portfolio

Employers should undertake the following exercises for each of the existing roles for paramedics in their setting:

- Identify where existing roles sit on the Career Framework (which may be across several pathways and levels) and any gaps that exist.
- Use any gaps identified as the basis for supporting Continuing Professional Development.
- Use evidence gathered in performance reviews/appraisals as the basis for a Training Needs Analysis to inform the allocation of training resources.
- Inform the development of new positions using the pathways and levels of the Career Framework, encouraging a portfolio approach to career development.

Education institutions should:

- Identify how existing education program offerings are aligned to the pathways and levels within the Career Framework
- Develop new credentials and courses where appropriate.
- Ensure education program learning outcomes are aligned to levels within the Career Framework.
- Ensure learning outcomes aid learners in demonstrating appropriate educational attainment.
- Promote learning as means of enabling a culture of continuing development.

Mentoring

The ability and willingness for paramedics at all levels of the framework to mentor those who are junior to them is an essential component of developing the next generation of paramedic clinicians, leaders, educators, researchers, and policymakers. A good mentor should be able to support mentee growth and progression and promote self reflection.

Structured mentorship programs and schemes can be leveraged to support career progression across all pathways within the profession. Evidence of mentoring should be gathered by those looking to progress to the next level of a given pathway and added to their portfolio of evidence.

Career by Portfolio

We recognize that paramedics will move through and across various elements of each pathway throughout their career, both within and outside of paramedicine, depending on opportunities, choices, and availability of pathways. In addition, paramedics may function in roles that contain combinations, overlaps or intersections of multiple pathways, perhaps even at differing levels (for example, a position that combines the requirements and/or responsibilities of a Level 3 in Education combined with a Level 2

in Leadership). We encourage all users of the framework to think of a career by portfolio, rather than a career restricted to specific career paths.

Whereas career paths tend to be a singular pursuit (climb a specific ladder in one direction), a career portfolio is reflective of a vast and diverse professional journey, including horizontal promotion opportunities, experience outside of the profession, and diverse educational and experiential achievements. A portfolio can combine traditional paid roles, volunteer roles, self-employed roles, and reflects your professional identity and potential.

Code of Ethics

Professional conduct and ethical behaviours are fundamental to the successful delivery of health and social care to individuals and communities. Whilst professional and ethical behaviours transcend and underpin all pathways and levels in the Career Framework, they are outlined specifically in the PAC *Code of Ethics*.

The Five Pathways

The five pathways outlined in the *Career Framework for Paramedics* reflect pathways generally available to health professionals as career choices. It is essential that these pathways are not viewed as siloed, or exclusive from each other. It is far more likely that as a paramedic pursues career progression, they will have responsibilities across multiple pathways (see *Career by Portfolio* on page 10). In addition, experience gained outside of the paramedicine profession is as relevant as that within, with the exception of clinical expertise. The pathways support each other in supporting the profession in Canada, as illustrated in Figure 1 below.



Figure 1. The five pathways of the *Career Framework for Paramedics*.

Clinical Practice

As paramedic practice in Canada continues to evolve in response to shifting system demands, social responsibility, changes in patient demographics, and public expectations, expanded roles have emerged and paramedics now work as part of interprofessional teams across multiple health and social contexts. This requires the profession to move towards degree entry-to-practice education, and self-regulation across Canada. Utilizing paramedics in response to novel demands is to be encouraged but also requires acknowledging that some of these roles are specialist in nature and would benefit from postgraduate level education and preparation. Examples of current and future pathways that paramedics may wish to pursue include advanced practice roles in community and primary care, critical care and retrieval, special operations, military, mental health, substance use, and virtual care. Advanced clinical practice roles may require additional expansions to your scope of practice (including for example, independent prescribing, or the ability to treat and discharge). Such changes will require appropriate education preparation, and more flexible regulatory models to support paramedics working in highly autonomous roles. In addition, paramedicine must move towards paramedic-led governance, acknowledging the specialized nature of the work paramedics perform.





Organizational Leadership

While all paramedics require leadership skills, some will require specific education and preparation to support advancement into formal service or organizational leadership and management roles within organizations. Effective leadership has emerged as one of the critical foundations needed to sustain and enhance system-wide improvement in paramedicine. There are several health and system leadership frameworks that are useful resources for all paramedics who are interested in developing their leadership abilities along this pathway. These frameworks outline the competencies required of leaders in relation to self, leading others, collaborating with broader system partners, and innovation. For example, the Canadian College of Health Leaders provides resources for integrating the LEADS in a Caring environment leadership capabilities framework. In addition, work-based opportunities that enable paramedic managers to gain experience of increasing leadership and management skills along this pathway should be encouraged within and outside of organizations (e.g., secondments).



Research

Most paramedics in Canada are involved in research in some capacity, be it as participants, users of findings in practice, research assistants, or investigators. In addition, many roles in education, clinical practice, and policy require some level of engagement with research. Research in paramedicine can take many forms, and we encourage paramedics to engage with research from diverse perspectives such as economics, sociology, education, and clinical. To increase experience in this pathway, paramedics may wish to seek opportunities to gain experience as an assistant in research studies as an introduction to the demands of a research career. As paramedics develop in a research career, they would be expected to undertake further education such as a master's degree or doctoral degree with a focus on research. These require learners to develop questions, undertake studies, analyze data, and conduct research under the guidance of a supervisor. Progress to senior academic roles such as Associate Professor and Professor will normally require the completion of a doctoral degree, along with a portfolio of evidence of (and expertise in) research, as well as developing as an executive leader. In addition, recognizing the value of research across the profession, conjoint appointments are necessary between paramedic services, employers of paramedics, and the university sector. These appointments include Adjunct, Visiting, Status-only and Honorary positions, to strengthen the links between research and the other pathways in the profession. Conjoint appointments will advance the profession, improve patient care, and integrate evidence-based decision making across all facets of the profession.



Education

Many paramedics in Canada are also educators, facilitating students as preceptors, assisting with the delivery of clinical skills education in educational institutions, and participating in or leading continuing education initiatives within their service. Therefore, we acknowledge the importance of both in-service practice educator roles, and formal educator roles with educational institutions. The preceptor or college instructor roles are often the first formal educational roles that paramedics engage with. As such, developing a strong foundational approach to adult education at this stage is recommended. Paramedics may consider completing in-service training, or adult education certificates or micro-credentials offered by local education institutions where available. If they wish to progress beyond the preceptor, service educator or instructor level, they should undertake and attain certifications or post-graduate teaching qualifications in Higher Education. Further development at higher levels of academia (e.g., Lecturer, Assistant/Associate Professor) will likely require the

attainment of appropriate master's and/or doctoral degrees, and the development of executive leadership skills. As with the research pathway, conjoint appointments should be created across paramedic services, employers of paramedics, and the university sector. These will strengthen the links between the other pathways and education. Conjoint appointments will advance the profession, improve education and assessment strategies, and integrate a value on education in all facets of the profession.

Policy and Strategy

The addition of a Policy and Strategy pathway to the Career Framework is an explicit recognition of the need for paramedicine to engage with and impact policy development and strategic planning at all levels of organizations, regulatory agencies, and governments. By becoming a policy or strategy advisor within paramedicine, paramedics can help to develop organizational, agency, and government policies and regulatory mechanisms to address today's key challenges facing the health care system and paramedicine. Policy advisors may work on a variety of areas, including paramedicine's intersection with sustainability; self-regulation and national registration; health and social care governance; patient safety and quality of care; national security and defence; Indigenous Peoples; and more.

The absence of paramedics in senior policy and strategy positions across all levels of government and agencies (with one or two notable exceptions) means that the paramedic profession in Canada is largely absent from high-level professional decision making and priority setting—settings in which our nursing and medicine colleagues have senior policy positions (e.g., Chief Medical Officer and Chief Nursing Officer in Health Canada). This highlights a lack of representation, perspective, and consideration regarding quality and safety matters related to paramedicine at the highest levels of health policy and strategy development at provincial and federal levels.



The Five Levels

The five levels of the *Career Framework for Paramedics* outline the qualities and broad responsibilities of positions within paramedicine, working up from Level 1 (paramedic) to Level 5 (senior positions) across the five pathways (see Figure 2). Indicative clinical titles are provided only as examples, and the implementation of the *Career Framework for Paramedics* will require alignment with service-specific titles, protected titles, and regulatory mechanisms across Canada. Alignment with the description and responsibilities of a level should be considered more important than alignment with a specific or indicative title.

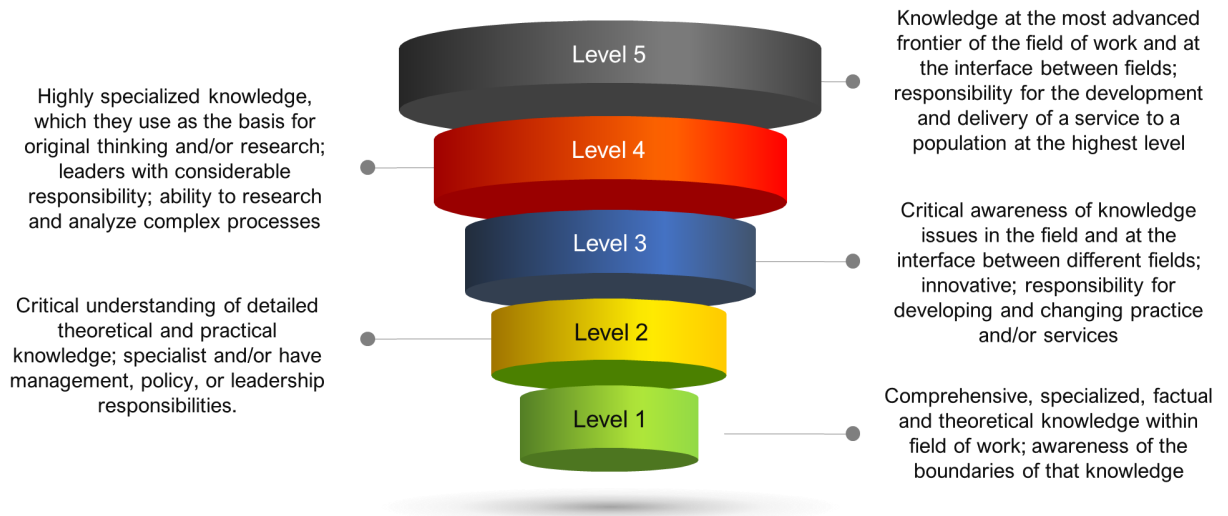


Figure 2. The five levels of the *Career Framework for Paramedics*.

Before Level 1

Learners at the start of their career undertake education and training to prepare them to function at Level 1 of the Career Framework. They learn how to solve problems, make judgements, and develop values of ethical conduct and self-development.

Indicative or reference clinical title: Student Paramedic

Level 1

People at Level 1 have a comprehensive, specialized, factual and theoretical knowledge within their field of work and an awareness of the boundaries of that knowledge. They can use knowledge to solve problems creatively, make judgements which require analysis and interpretation, and actively contribute to service and self-development. They may have responsibility for supervision of staff or training.

Indicative or reference clinical title: Paramedic

Level 2

People at Level 2 require a critical understanding of detailed theoretical and practical knowledge, are specialist, and/or have management, policy, or leadership responsibilities. They demonstrate initiative and are creative in finding solutions to problems. They have some responsibility for team performance and service development, and they consistently undertake self-development.

Indicative or reference clinical title: Specialist Paramedic

Level 3

People at Level 3 of the career framework have a critical awareness of knowledge issues in the field and at the interface between different fields. They are innovative and have a responsibility for developing and changing practice and/or services in a complex and unpredictable environment. They work in autonomous contexts and roles and have responsibility for service delivery.

Indicative or reference clinical title: Paramedic Practitioner

Level 4

People at Level 4 of the career framework require highly specialized knowledge, some of which is at the forefront of knowledge in the field, which they use as the basis for original thinking and/or research. They are leaders with considerable responsibility, and the ability to research and analyze complex processes. They have responsibility for service improvement or development. They may have considerable clinical and/or management responsibilities, be accountable for service delivery or have a leading education or policy role.

Indicative or reference clinical titles: Consultant Paramedic; Senior Paramedic Practitioner

Level 5

People at Level 5 require knowledge at the most advanced frontier of the field of work and at the interface between fields. They will have responsibility for the development and delivery of a service to a population at the highest level of the organization.

Indicative or reference clinical titles: Lead Consultant Paramedic; Director of Paramedicine

Beyond Level 5

As paramedics advanced further in their careers, they may move beyond Level 5 positions in paramedicine to positions in government, national agencies, private industry and others. The placement of Level 5 as the outer ring on the *Career Framework for Paramedics* acknowledges that there are opportunities outside of this framework. It is beyond the scope of the framework to address such opportunities.

Academic qualifications and roles

The attainment and achievement of the academic qualifications referred to in the *Career Framework for Paramedics* does not automatically entitle the award holder to utilize the titles contained herein. These are roles that require the individual to have applied for specific posts with the corresponding title, and meet the professional, statutory, regulatory, educational, experiential, and employing organization's requirements. Clinical roles require the knowledge, skills, and expertise relevant to the area and level of practice, as well as appropriate academic attainment.

The Career Framework for Paramedics

This first edition of the *Career Framework for Paramedics* provides guidance to paramedics who are considering their career opportunities. It is also designed to advise service users, employers of paramedics (including paramedic services, critical care, and air ambulance services), the Canadian Armed Forces, and colleges and universities delivering entry-to-practice and postgraduate education and conducting research. It also provides government, regulatory, and statutory bodies insight into the ongoing development of paramedicine and paramedics across Canada. The document provides direction and guidance regarding the educational requirements for the five professional career pathways. The document also aims to assist and guide individuals and organizations who are developing career pathways to support career development for paramedics.

The five pathways within the *Career Framework for Paramedics* outline those pathways generally available to paramedics and other health professionals as career choices. Each pathway has five levels of development and expertise, with the bachelor-degree educated paramedic at the core (Level 1). Progressing through levels from Level 1 to Level 5 signifies increasing capability and responsibility. See Figure 3 for details.

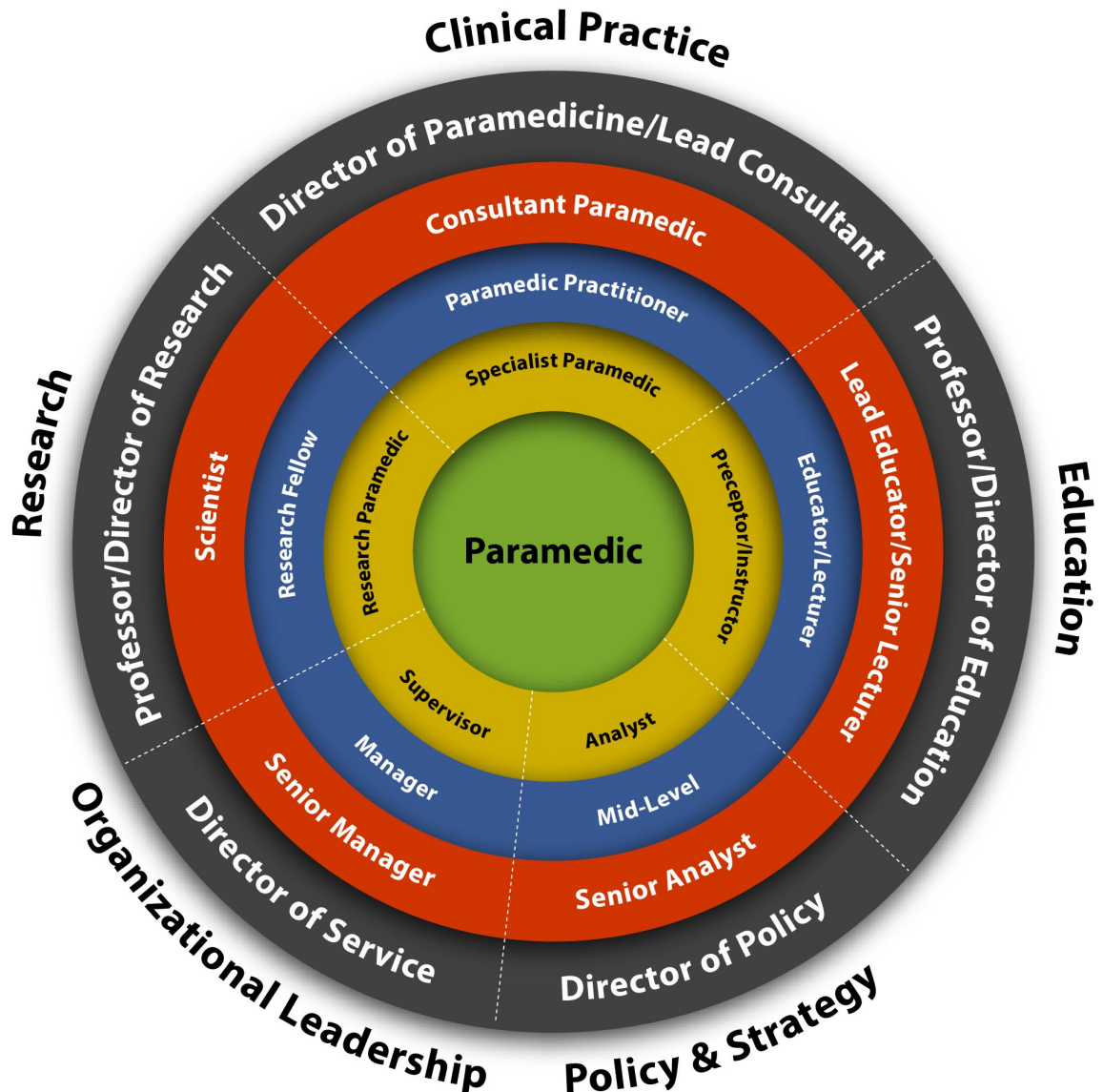


Figure 3. The *Career Framework for Paramedics*.

Progressing on the framework

At **Level 1**, completing a paramedic degree (recommended) or diploma should be followed by a minimum 1-year consolidation phase (post-graduate year 1 or PGY-1) where the newly qualified paramedic is provided with appropriate clinical and career support and a framework to evidence their practice. Where possible they should be offered exposure to the five pathways via short placements, secondments, or team-based opportunities.

Progress to **Level 2** on the framework is suggested from PGY-3, supported by experience and education such as micro-credentials, certificates, graduate qualifications, and/or applicable professional designations.

Progress to **Level 3** is suggested from PGY-5 supported by experience and education such as micro-credentials, postgraduate qualifications, and/or applicable professional designations.

Progress to **Levels 4 and 5** is suggested from PGY-8 and PGY-12 respectively, supported by appropriate experience and education such as master's and doctoral degrees, and/or executive-level education and applicable professional designations. See Figure 4 for suggestions on progression through Levels 1 to 5. Further detail is provided in Appendix B.

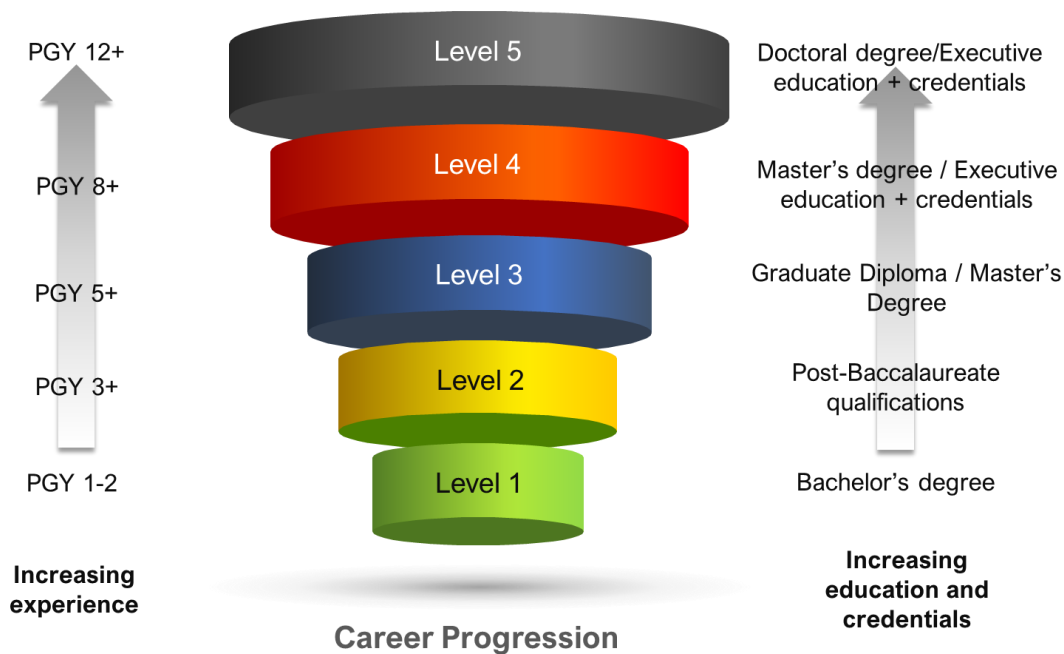


Figure 4. Suggested milestones for progression from level 1 to level 5.

Note: Educational requirements may vary across different institutions and organizations; for example, some universities may require applicants for lecturer positions to have a doctoral degree or equivalent. We also recognize that many paramedics undertake additional education in a part-time capacity alongside other commitments. The Framework is a structure to support and guide paramedicine's development and clarify career opportunities and requirements; its aim is not to be prescriptive in relation to qualifications, timeframes, or credentials, and it does not intend to cover every possibility and individual circumstance. See Table 1 for suggested academic qualifications, standards, and experiential components to facilitate progression

Clinical Practice

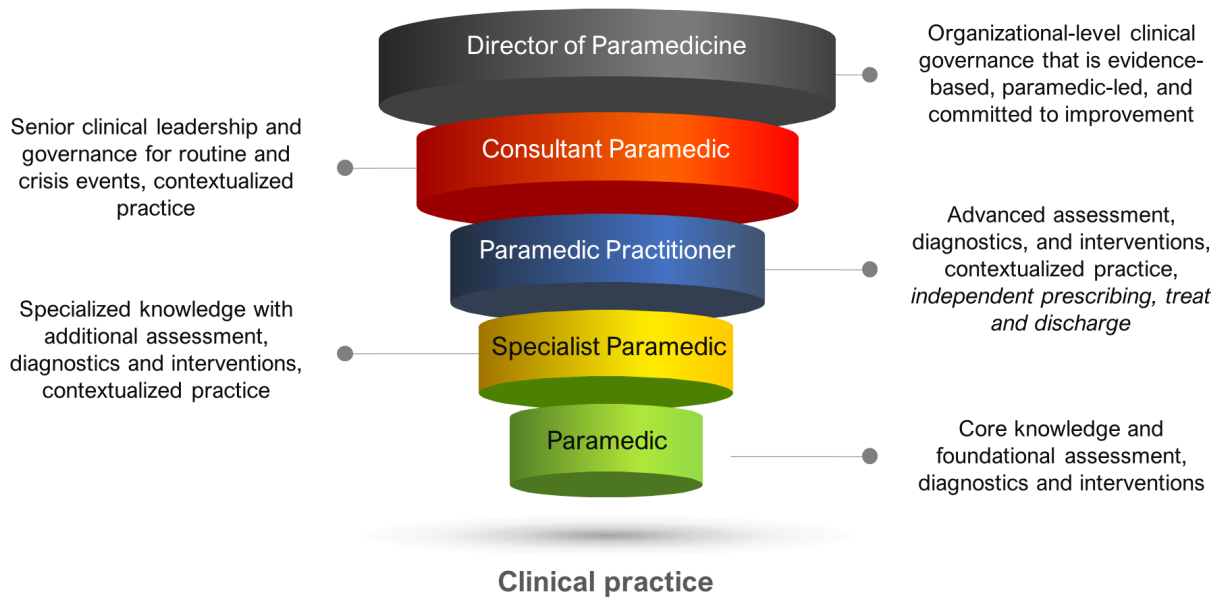


Figure 5. Indicative titles and responsibilities from levels 1 to 5 in the clinical practice pathway. Italicized items are suggestions of appropriate level for expansion of responsibilities.

Organizational Leadership

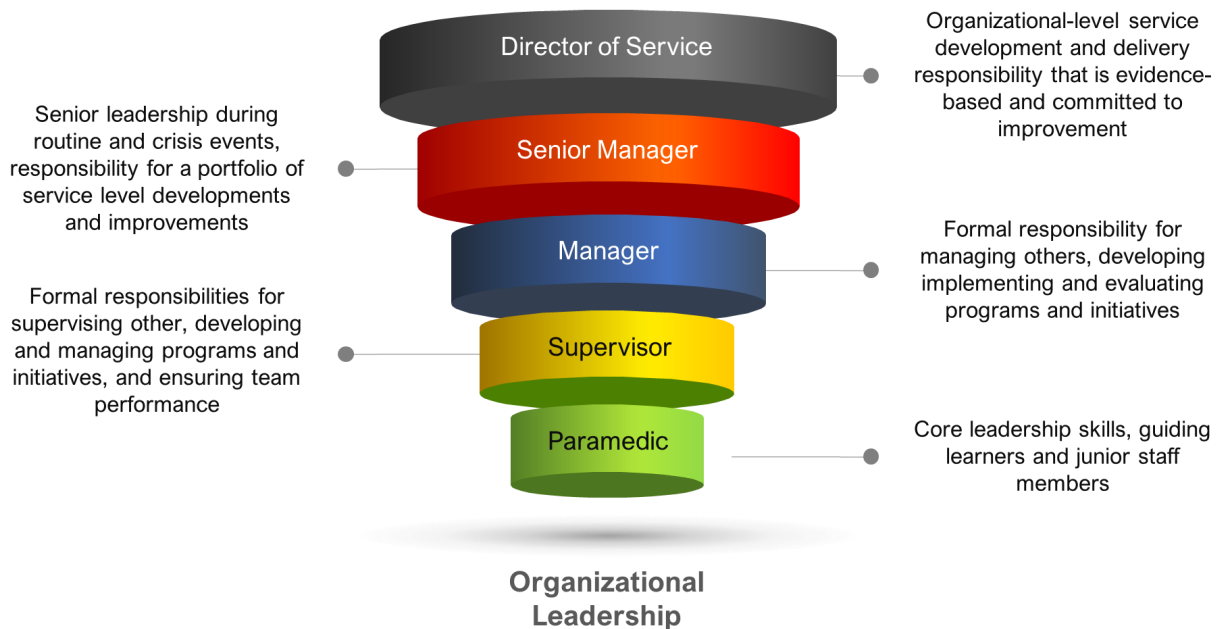


Figure 6. Indicative titles and responsibilities from levels 1 to 5 in the operational leadership pathway.

Research

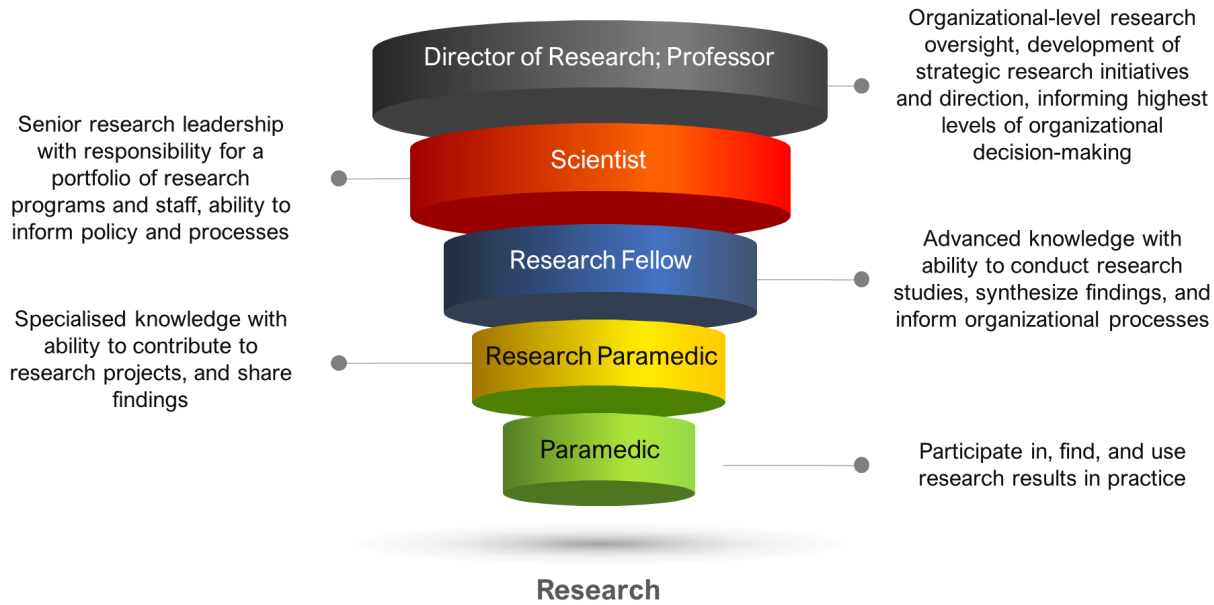


Figure 7. Indicative titles and responsibilities from levels 1 to 5 in the research pathway.

Education

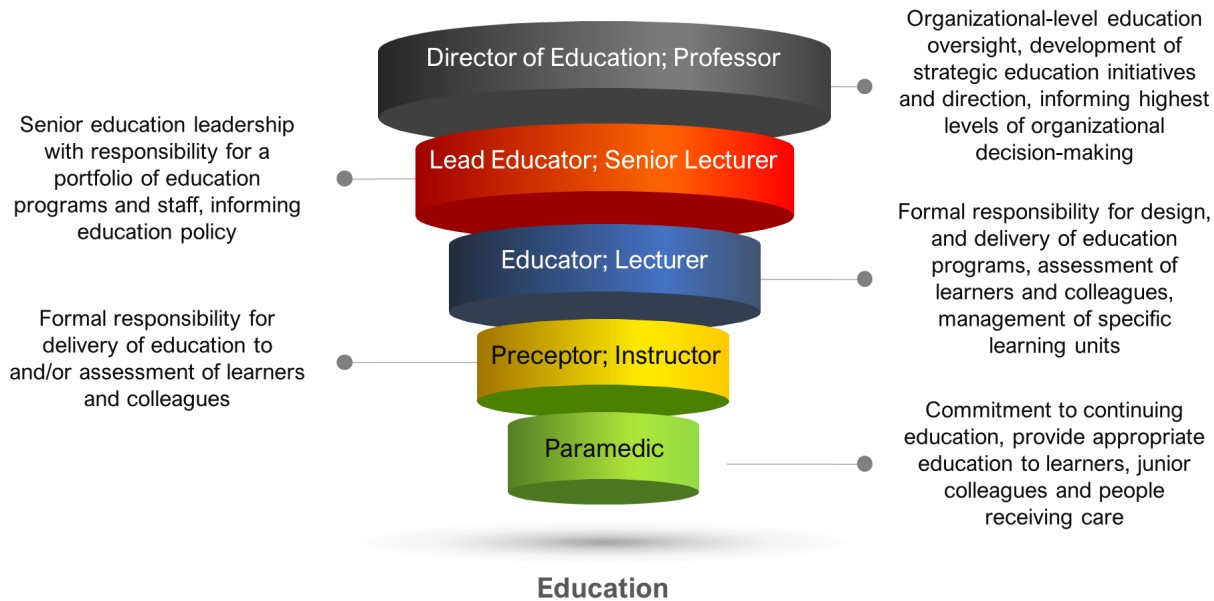


Figure 8. Indicative titles and responsibilities from levels 1 to 5 in the education pathway.

Policy and Strategy

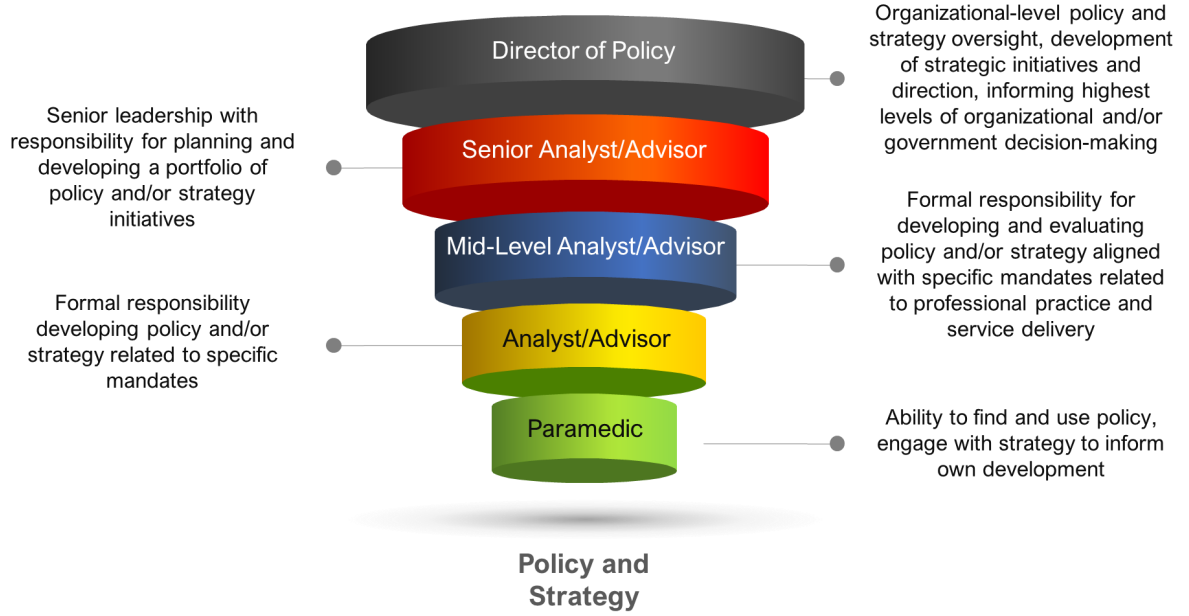


Figure 9. Indicative titles and responsibilities from levels 1 to 5 in the policy and strategy pathway.

Level	Suggested Academic Level	Standards that may be applicable	Period of study	Experience/competency to progress to next level
Level 1	Diploma Advanced Diploma Bachelor degree^ Bachelor (Hons.)	NCFP Regulatory standards	2-4 years	Minimum 1 year experience; develop portfolio of experience and CPD Mentored by Level 2/3/4/5.
Level 2	Bachelor (Hons.) Graduate Certificate Graduate Diploma Post-Baccalaureate Certificate	NCFP Regulatory standards Specialist competency frameworks CPD Portfolio	1-2 years	Suggested 2 years experience; complete recognized and appropriate education program; develop portfolio of experience and CPD Mentored by Level 3/4/5.
Level 3	Post-Baccalaureate Diploma Master's degree^	NCFP Regulatory standards Specialist competency frameworks CPD Portfolio	1-2 years	Suggested 3 years experience; complete recognized and appropriate education program; develop portfolio of experience and CPD Mentored by Level 4/5.
Level 4	Master's degree^ Executive education	NCFP Regulatory standards Specialist competency frameworks CPD Portfolio Credentialing exams	1-2 years	Suggested 4 years experience; complete recognized and appropriate education program; develop portfolio of experience and CPD Mentored by Level 5. <i>See Table 2 for detail on advanced practice roles.</i>
Level 5 +	Doctoral degree^ Executive education	NCFP Regulatory standards Specialist competency frameworks CPD Portfolio Credentialing exams	2-4 years	

Table 1. Suggested academic qualifications, standards, and experiential components to facilitate progression. ^For detailed education level descriptors, please see the *PAC Education and Practice Guidance for Paramedics* document. Timeframes are indicated in full-time equivalents.

Developing Advanced Practice Clinical Roles for Paramedics

PAC promotes and encourages the development of advanced practice roles for paramedics across Canada, based on learnings from other systems that have embraced advanced practice roles for paramedics and other Allied Health Professionals.

PAC believes the Specialist Paramedic and Paramedic Practitioner roles will reflect and demonstrate the characteristics and competencies of advanced paramedic practice, including for example the ability to diagnose, treat, prescribe, discharge, and refer. These roles must be grounded in the values, knowledge, theories and practice of the paramedic profession while incorporating knowledge, theories and many practice activities traditionally associated with medicine, nursing, social work and others.

PAC believes advanced practice roles can contribute significantly to improving high-quality, cost-effective person-centered care through a broad range of health-care models. There are opportunities for multiple categories of advanced practice roles to be defined across the country in areas such as community and primary care, critical care and retrieval, and virtual care as examples.

PAC advocates for the creation of provincial and territorial legislation and regulations that allow for advanced practice roles for paramedics to be created across the health system, within and outside of paramedic service organizations. This includes the need for self-regulation, establishing protected titles, and creating specialist registration.

PAC believes a graduate degree in paramedic practice will be essential for preparing paramedics to meet the competencies required for these advanced practice roles. The competencies of individual advanced practice roles should first be identified.

Developing the Specialist Paramedic role

The Specialist Paramedic will be a paramedic with advanced knowledge and skills in making complex decisions who holds a post-baccalaureate qualification in paramedic practice with expertise in a clinical specialty. Examples include community and primary care, critical care and retrieval, and virtual care.

Specialist Paramedics will improve access to specialist clinical care for communities. They will be educated in paramedicine and clinical skills, and possess the knowledge and skills to contribute to high-quality person-centered clinical care that goes beyond that of a paramedic. This may include the knowledge and skills to diagnose, interpret diagnostic tests, treat and perform specific procedures within their legislated scope of practice.

The role should be clinically focused, with the ability to incorporate research evidence to support evidence-based practice, and the ability to provide clinical leadership to colleagues.

Developing the Paramedic Practitioner role

Paramedic Practitioners will be unique health professionals with additional post-graduate education and clinical experience. Paramedic Practitioners will be educated in paramedicine and clinical skills, and possess the knowledge and skills to autonomously diagnose, order and interpret diagnostic tests, prescribe treatment and perform specific procedures within their legislated scope of practice.

The Paramedic Practitioner role must incorporate clinical practice, clinical leadership, and research. They will work with individuals, families, groups, communities and diverse populations across the continuum of care. They will collaborate with people

receiving care to incorporate their values, beliefs and preferences in making decisions about care planning.

PAC believes the education and experience of Paramedic Practitioners will uniquely position them to function both independently and collaboratively in a variety of settings across the continuum of care. They will work with, rather than replace, other health professionals. They will work as part of interprofessional teams that include registered nurses, physicians, social workers and others.

Elements	Nurse Practitioner (NP)	Physician Assistant (PA)	Paramedic Practitioner	Requirements to develop role
Existing education	Bachelor degree	Varies, min 2 years of undergraduate education for Bachelor programs; 4-year Bachelor degree for Master's programs	Bachelor degree	Adopt degree level entry to practice
Existing licensure	Registered Nurse	None	Registered paramedic	Evolve to self-regulation models across Canada
Education for advanced practice role	Master's degree	Bachelor or Master's (most common) degree in PA studies	Master's degree [^]	Develop master's degrees in advanced practice
Entry to advanced practice role	NP exam + registration	PACCC exam + licensure	Exam + licensure	Develop advanced practice exams and specialty licensure level
Additional education	Independent prescribing		Independent prescribing	Adapt or adopt independent prescribing education
Autonomous roles	Perform physical exams; Order tests; Diagnose and treat illnesses; Write prescriptions; Admit and discharge; Provide referrals	Conduct patient assessments; Order and interpret investigations; Formulate treatment plans; Prescribe medications; Assist in surgical procedures; Order/perform diagnostic and therapeutic procedures	Perform patient assessments; Order and interpret tests; Diagnose illnesses; Formulate treatment plans; Prescribe medications; Admit and discharge; Provide referrals	Define advanced practice competencies and roles for paramedics
Further information	https://www.cna-aiic.ca/en/nursing/advanced-nursing-practice	https://canadianpa.ca		

Table 2. Elements of nurse practitioner and physician assistant role education and preparation for advanced practice, and a recommended model for paramedic practitioner role development.

Paramedic Practitioners should be recognized as 'medical practitioners' in federal legislation and regulations such as the Income Tax Act, Employment Insurance certificates, and the Canada Pension Plan disability benefits, similar to NP colleagues.

To practice as a Paramedic Practitioner, you should be a qualified and registered paramedic with working experience, educated to master's level with an advanced practice degree. Requirements for paramedicine in Canada to develop and evolve advanced practice roles broadly aligned with advanced practice roles for nurses and physicians assistants are outlined in Table 2.

Career Planning

Next, we outline some examples of paramedics at varying stages of their careers (and their plans to advance them) and illustrate these on radar diagrams mapped to the *Career Framework for Paramedics*. Each of these examples illustrates the choices made by individuals related to which pathways to pursue, to which extent. Note: we mapped existing clinical roles within Canadian paramedicine to the levels of the Career Framework as a suggestion—however, we caution that future practice must be informed by increasing experience and education.

By mapping your career in this fashion, you can use the results to plan your future professional development activities, educational pursuits, and areas for improvement. *Note: we have made all examples gender-neutral to avoid stereotyping and encourage broader engagement.*

Example 1 – Director of Service

A is Director of Service/Chief Executive (Level 5 - Organizational Leadership) for a large paramedic service in Canada.

They worked clinically as a Critical Care Paramedic (equivalent to Level 3 – Clinical) for several years in both ground and rotor wing settings. They have completed a master’s degree in leadership and hold multiple professional designations. They sit on policy setting committees with the provincial regulatory body and provincial government (Level 4 – Policy and Strategy).

They have not engaged formally with education or research pathways in their career to date other than in their initial entry-to-practice education (Level 1 – Education; Research).

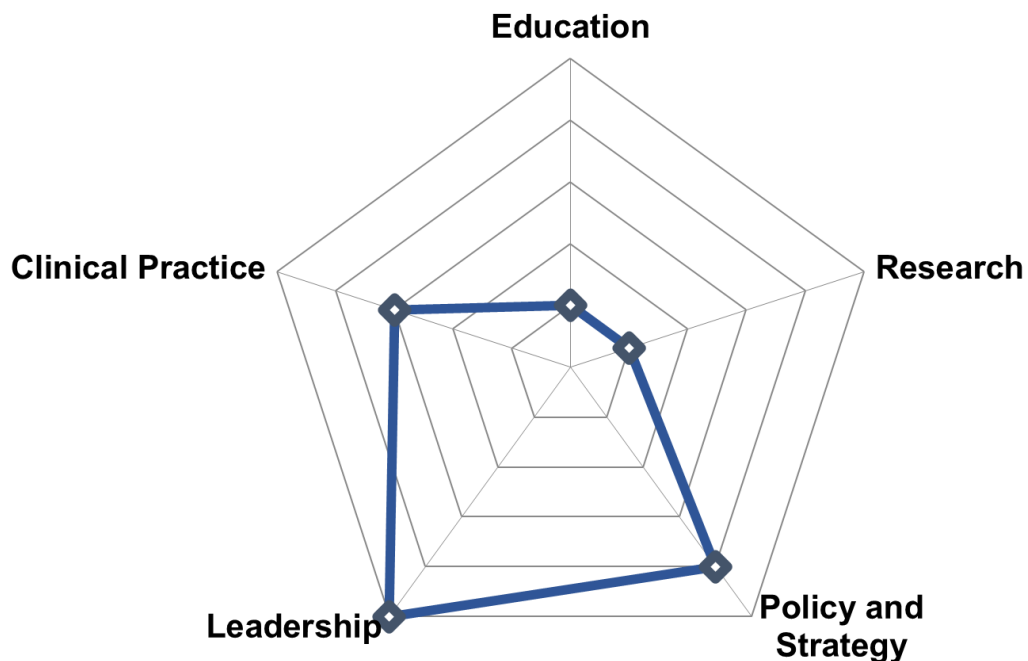


Figure 10. Example career pathway radar map for Director of Service

Example 2 – Professor

B is a Professor (Level 5 – Research; Education) in a large university in Canada. They worked clinically as a Critical Care Paramedic (equivalent to Level 3 – Clinical) for several years in a ground setting.

They completed a master’s degree and a PhD focused on public policy. They worked outside of paramedicine in public policy academia for several years, before returning to establish a new paramedic education program. In their position they direct undergraduate and postgraduate education programs, conduct research, and supervise graduate students.

They have not formally engaged with leadership development in paramedicine but do hold leadership responsibilities within the university (Level 3 – Organizational Leadership).

They provide input on policy and strategy at an advisory level to provincial and federal organizations (Level 4 – Policy and Strategy), and mentor people at Levels 3 and 4 on the Education, Research, and Clinical pathways.

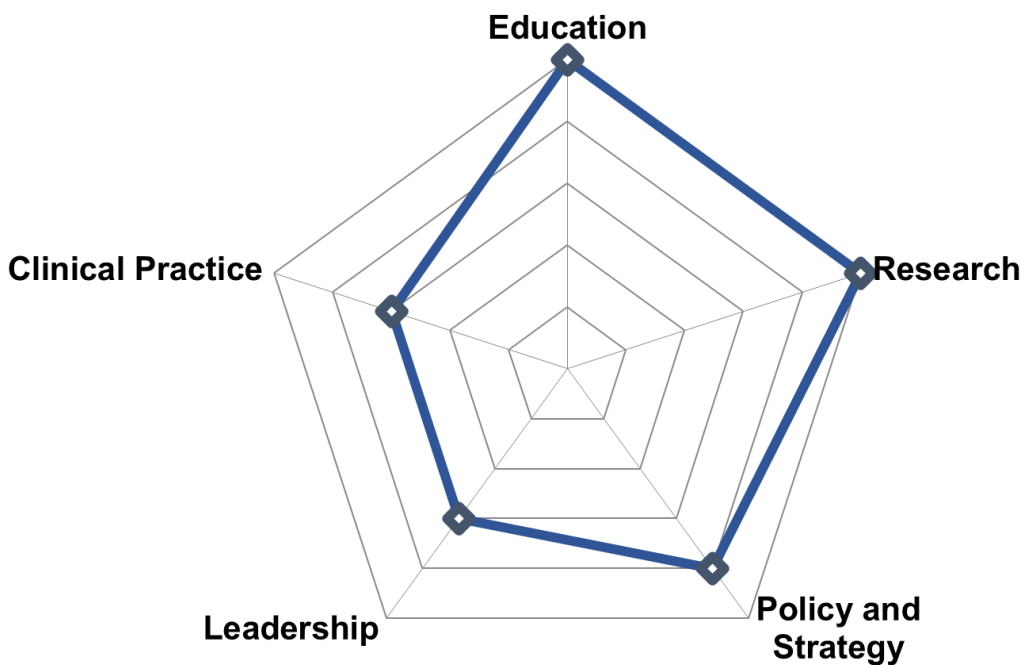


Figure 11. Example career pathway radar map for Professor

Example 3 – Specialist Paramedic with research plans

C is a paramedic who works for a municipal paramedic system in Canada. They work clinically as a Community Paramedic (equivalent to Level 2 – Clinical) and have completed a master’s degree in research.

They have a conjoint appointment as an Adjunct Lecturer, where they teach and conduct research (Level 3 – Education; Research). They have not formally engaged with leadership or policy and strategy pathways.

They plan to pursue a PhD soon to further their career (towards Level 5 in the Research and Education pathways), and an Advanced Practice qualification (towards Level 3 in the Clinical Practice pathway).

They have engaged a career mentor who is at Level 5 (Education and Research). Their plans are outlined by the orange line in Figure 12.

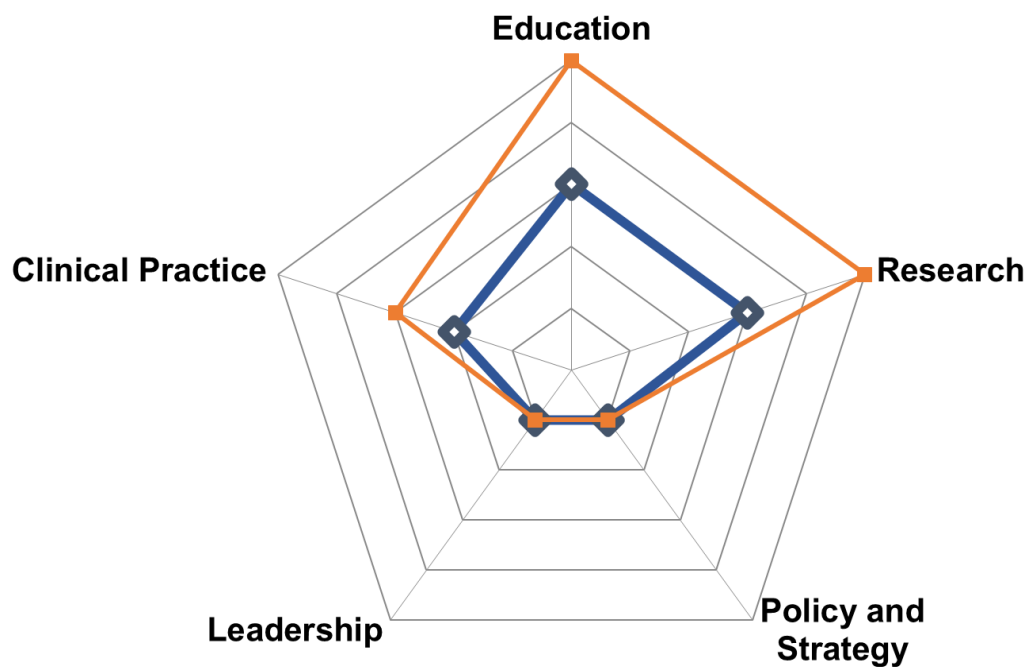


Figure 12. Example career pathway radar map for Specialist Paramedic with research plans

Example 4 – Paramedic with education plans

D is a paramedic with two years experience who works for a municipal paramedic system in Canada.

They work clinically as a Paramedic (equivalent to Level 1 – Clinical) and have completed a bachelor’s degree in Paramedicine.

They are interested in advancing their career with plans to undertake an adult education certificate and become a preceptor for their service. They have sought mentoring from a current preceptor within the service.

They are also exploring opportunities to help in practical lab sessions at the university. Their plans are outlined by the orange line in Figure 13.

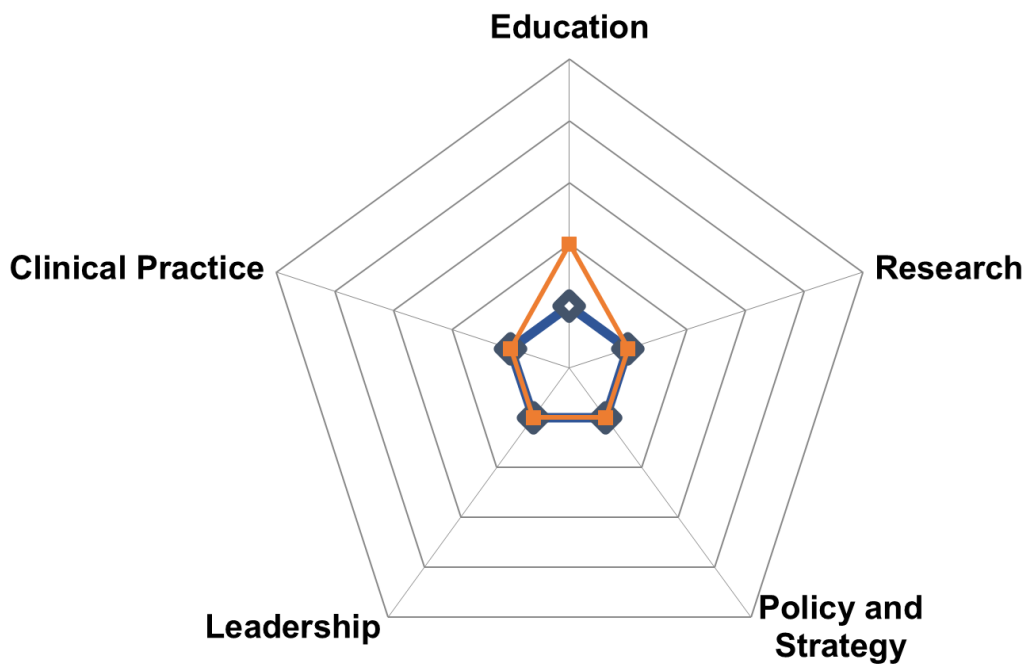


Figure 13. Example career pathway radar map for paramedic with education plans.

Example 5 – Paramedic with senior/executive level experience outside of the profession

E is a paramedic with over twenty years experience who works as a senior administrator (Level 5 – Organizational Leadership) for an academic institution in Canada.

They worked clinically as a Paramedic (equivalent to Level 1 – Clinical) and have completed a doctoral degree.

Over the past 20 years they have held senior positions in a provincial regulatory body (Level 5 – Policy & Strategy), government agencies (Level 5 – Policy & strategy), and academic institutions (Level 5 – Education).

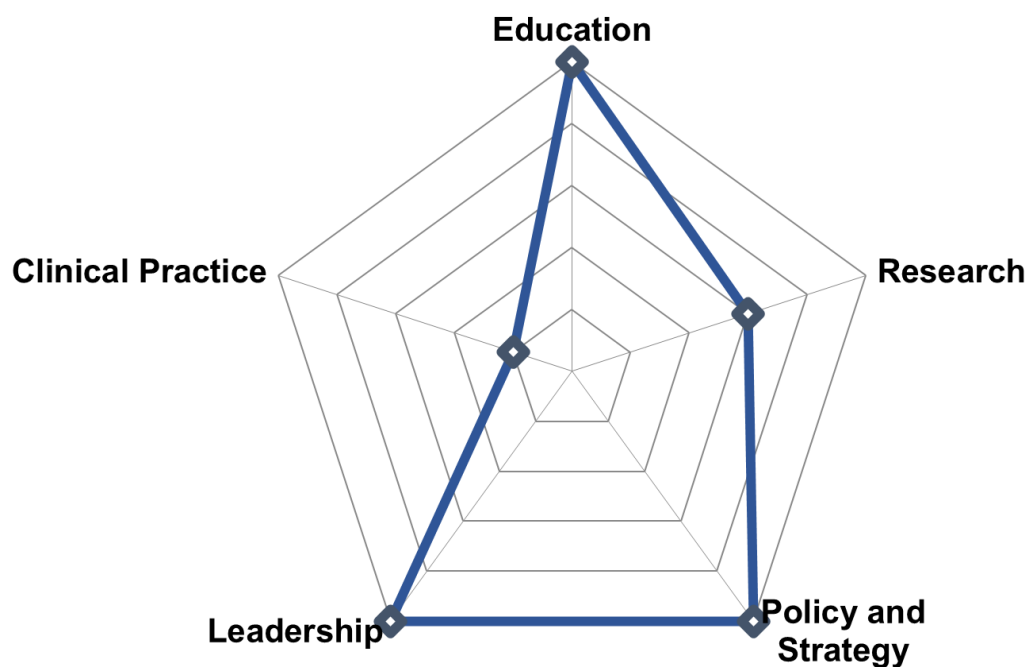


Figure 14 Example career pathway radar map for Paramedic with senior/executive level experience outside of the profession

Example 6 – Student paramedic with plans to advance clinically and in education

F is a second-year student paramedic in an education program in Canada.

They are interested in becoming a Specialist Community Paramedic (Level 2—Clinical), and eventually assuming a conjoint appointment with a university as a Lecturer-Practitioner (Level 3—Education).

This will involve advancing their education and experience in community paramedicine, ideally by undertaking a combination of structured formal education and credentials, and gaining experience via secondment or placement with community paramedicine and interprofessional primary care teams.

They will also need to complete a qualification in adult education, and ideally gain experience as a preceptor, and perhaps instructor in a paramedic education program. Their plans are outlined by the orange line below in Figure 15.

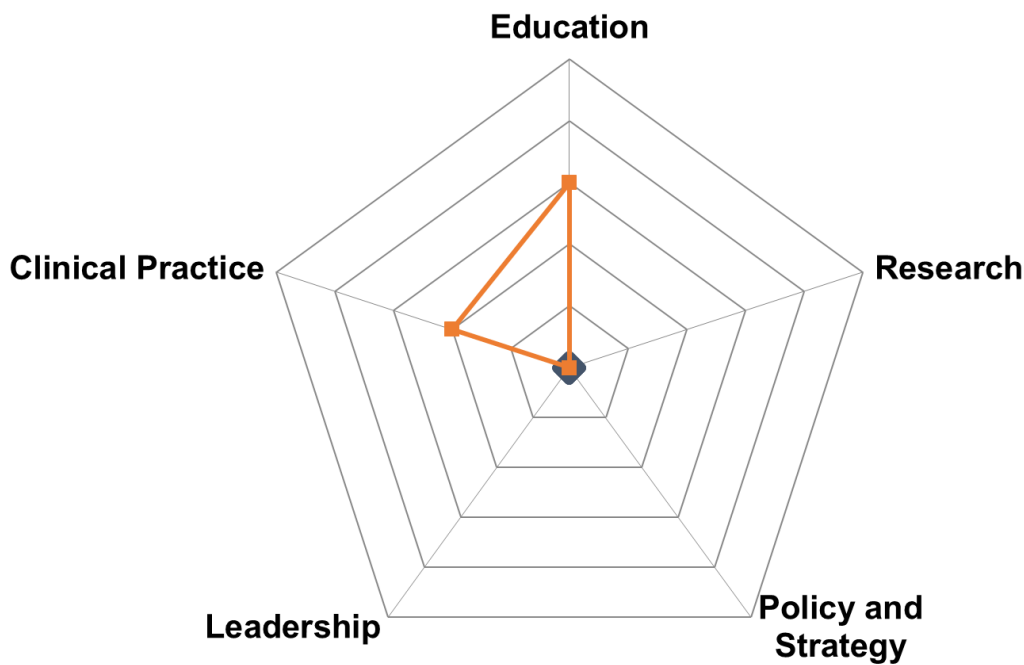
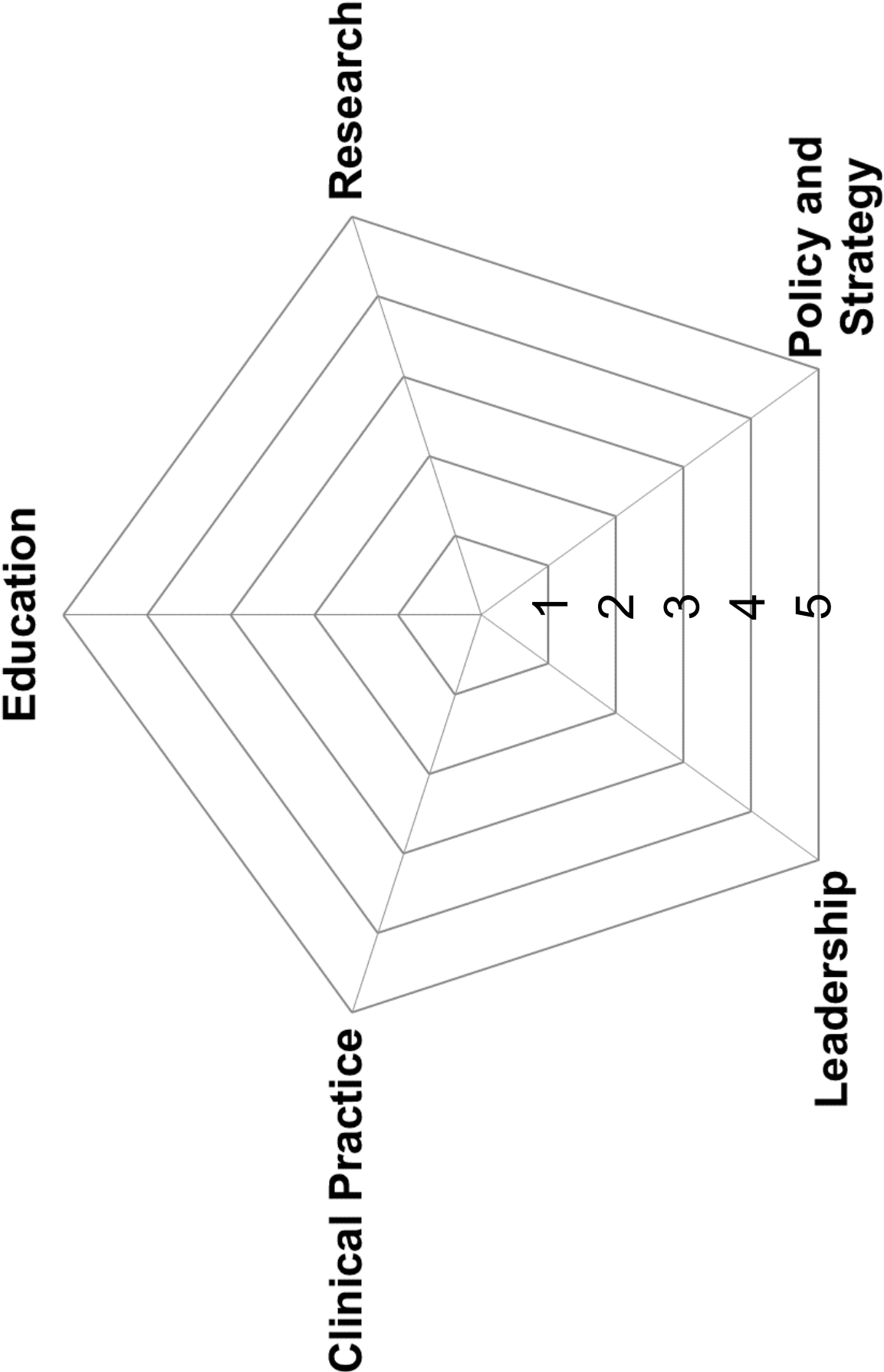


Figure 15. Example career pathway radar map for student paramedic with plans to advance clinically and in education

Blank radar map



Appendix 1. Suggested resources, courses, and credentials

This section will remain updated on the *Career Framework for Paramedics* project webpage on the Open Science Framework (<https://doi.org/10.17605/osf.io/wdh9m>) and the Paramedic Association of Canada's website.



All pathways

Micro-credential, Certificate, Bachelor, Post-Baccalaureate, Master's and Doctoral qualifications in Advanced Practice, Education, Clinical Simulation, Research, Public Policy, Public Health, Health Policy, Safety and Quality, Leadership, Business Administration, Health Administration.

Bridging or 'top-up' degrees for diploma holders must be created.

Advanced practice degrees and credentials must be developed as outlined in Table 2.

Mentoring schemes should be used and/or developed across all pathways.

Clinical Practice

Clinical fellowship schemes

Continuing education courses addressing context-specific practice.

Education

Advance HE/Higher Education Academy Fellowship Scheme (UK)

Certified Healthcare Simulation Educator (CHSE)

Academy of Medical Educators recognition scheme (UK)

Research

Interagency Advisory Panel on Research Ethics Course on Research Ethics

Research Careers Tool

Vitae Researcher Development Framework

National Research Training Programs

CIHR Health Service Impact Scheme

Policy and Strategy

Certified Associate in Project Management (CAPM)

Certified Professional in Patient Safety (CPPS)

Certified Quality Auditor (CQA)

Government of Canada - Advanced Policy Analyst Program

Government of Canada - Recruitment of Policy Leaders campaign (annual)

Indigenous Continuing Education Centre

Institute for Healthcare Improvement (IHI) Open School

Project Management Professional (PMP)

Provincial Governments – Intern Officers/Internship Programs

Organizational Leadership

Certified Healthcare Executive (CHE)

Certified Municipal Management program (CMM)

PCC Leadership Development Competency Framework

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