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DEVELOPING MANAGERIAL COMPETENCIES IN FAMILY PHYSICIAN TRAINING: CONTENT AND TYPES

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ABSTRACT

The article examines the content, structure, and major types of managerial competencies required in the education of family physicians within primary health care. Drawing on international competency frameworks and health professions education literature, it distinguishes organizational planning, clinical leadership, interprofessional coordination, communication, resource stewardship, quality improvement, and digital information management. The review identifies limitations of exclusively lecture-based instruction and discusses experiential approaches including workplace-based learning, simulation, case discussions, and reflective assessment. A competency-oriented educational framework is proposed to connect clinical decision-making with coordination of care and responsible use of health system resources. As a narrative review, the article presents a conceptual synthesis rather than original clinical or educational outcome data.

Keywords: family medicine, primary health care, managerial competencies, medical education, clinical leadership, care coordination, quality improvement, competency-based education.

INTRODUCTION

Primary health care requires physicians who can combine individual patient care with the coordination of services across multidisciplinary teams. Family physicians frequently work at the interface of prevention, diagnosis, treatment, follow-up, and referral. Their work therefore includes organizational decisions, communication with other professionals, prioritization of competing needs, and responsible management of limited resources. The World Health Organization and UNICEF describe strong primary health care as an integrated approach that connects essential services, multisectoral action, and empowered communities [1]. Preparing physicians for this environment requires educational objectives that extend beyond biomedical knowledge and procedural skills.

Managerial competence in family medicine should not be equated solely with holding an administrative position. In routine practice, physicians organize patient flow, coordinate referrals, communicate priorities, supervise aspects of team activity, and participate in quality and safety initiatives. These responsibilities are closely related to the Leader role in the CanMEDS physician competency framework, which emphasizes engagement in stewardship, leadership, and improvement of health care systems [2]. However, the practical content of such competencies needs to be adapted to the circumstances of primary care and to the learner's stage of training.

AIM AND METHODS

The aim of this narrative review is to clarify the content and principal types of managerial competencies relevant to family physician training and to outline educational approaches for their development and assessment. The article synthesizes selected international guidance and peer-reviewed literature on primary health care, physician competency frameworks, interprofessional collaboration, patient safety, and competency-based medical education. Sources were compared conceptually to identify overlapping domains and to propose a practical educational structure. No systematic search

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protocol, original survey, intervention, or statistical analysis was conducted; accordingly, the proposed framework should be understood as a literature-informed educational model.

RESULTS AND DISCUSSION

CONCEPT AND STRUCTURE OF MANAGERIAL COMPETENCE

Managerial competence may be understood as an integrated ability to plan, organize, coordinate, communicate, monitor, and improve clinical work in ways that support safe and person-centered care. It includes knowledge of service organization, practical decision-making skills, professional attitudes, and the ability to adapt to changing circumstances. The competency-based approach to medical education emphasizes demonstrable abilities rather than completion of teaching time alone [3]. In family medicine, managerial competence becomes visible through actions such as prioritizing urgent needs, arranging continuity of care, collaborating with nurses and specialists, and responding constructively to errors or delays.

A useful distinction can be made between competencies exercised directly during patient encounters and competencies exercised at the level of the practice or health care team. The first group includes clinical prioritization, shared decision-making, referral coordination, and documentation. The second includes workload organization, improvement planning, team leadership, and monitoring of service quality. These domains overlap in everyday practice; for example, a delayed referral may be simultaneously a clinical, communication, and workflow problem. Educational programs should therefore avoid teaching management as an isolated theoretical subject without links to authentic primary care tasks.

ORGANIZATIONAL AND PLANNING COMPETENCIES

Organizational competencies encompass appointment prioritization, allocation of consultation time, continuity arrangements, follow-up scheduling, and coordination of preventive activities. Family physicians must balance acute presentations with chronic disease monitoring, maternal and child health, vaccination, and preventive counseling. Training can develop these abilities through practice-based scheduling exercises, analysis of patient pathways, and supervised responsibility for follow-up plans. Learners should also understand how institutional rules, referral routes, and available community services influence feasible care decisions. Planning is most effective when it remains flexible enough to accommodate urgent clinical needs and patient preferences.

LEADERSHIP AND TEAMWORK COMPETENCIES

Clinical leadership involves taking responsibility for shared goals, communicating expectations, supporting colleagues, and recognizing when to seek assistance. It does not require a rigid hierarchical style; in primary care, leadership often means enabling nurses, pharmacists, social workers, and other professionals to contribute their expertise. WHO guidance on interprofessional education highlights the potential of collaborative practice to strengthen health services [4]. Educational activities can include team-based case conferences, role rotation, structured handovers, and discussion of disagreements about care priorities. Feedback should address not only whether a decision was correct but also how the learner involved others and responded to alternative views.

COMMUNICATION AND CONFLICT-MANAGEMENT COMPETENCIES

Family physicians communicate with patients, relatives, clinical colleagues, and administrators, often under time pressure or uncertainty. Managerial communication includes clear delegation, accurate handovers, negotiation of feasible care plans, and respectful management of conflict. Communication failures may lead to duplication, delays, and confusion about responsibility. Structured simulated consultations and multidisciplinary role-play can help learners practice explaining decisions, handling

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disagreement, and confirming shared understanding. Assessment should include listening, clarity, cultural sensitivity, and the ability to document an agreed plan rather than focusing only on confident speech.

CLINICAL DECISION-MAKING AND ANALYTICAL COMPETENCIES

Managerial decisions in family medicine are inseparable from clinical reasoning. Physicians must decide which problems require immediate attention, which can be monitored, and when specialist consultation is necessary. Evidence-based medicine provides a framework for combining research evidence, clinical expertise, and patient values [5]. Training should use cases involving uncertainty, competing demands, and incomplete information. Learners may compare alternative management pathways, identify risks of delay, and justify referrals using transparent reasoning. These exercises also build the habit of revisiting decisions when new information becomes available.

RESOURCE STEWARDSHIP AND ETHICAL MANAGEMENT

Resource stewardship concerns responsible use of diagnostic tests, medications, consultation time, and referral capacity. It requires awareness of opportunity costs without reducing clinical care to financial targets. A family physician may need to choose among appropriate investigations, consider the burden of repeated visits, or coordinate access to scarce services. Such decisions should remain guided by clinical indications, fairness, and patient safety. Teaching can use case-based discussions of overuse, underuse, and inequitable access, accompanied by reflection on ethical obligations. Learners should understand that efficient care is not synonymous with withholding necessary treatment.

QUALITY IMPROVEMENT AND PATIENT SAFETY COMPETENCIES

Quality improvement competence includes recognizing recurring service problems, measuring processes, testing small changes, and evaluating whether those changes benefit patients. The WHO Global Patient Safety Action Plan identifies system-level improvement and safety culture as essential priorities [6]. Family physician trainees can participate in supervised projects such as improving follow-up of abnormal test results, reducing missed appointments, or clarifying medication reconciliation procedures. Educational emphasis should be placed on identifying system contributors to error rather than assigning blame to individuals. Measures should be proportionate, meaningful, and interpreted cautiously, particularly when the number of observations is small.

DIGITAL AND INFORMATION-MANAGEMENT COMPETENCIES

Digital competence includes accurate clinical documentation, secure handling of patient information, appropriate use of electronic records, and critical interpretation of digital decision-support tools. Digital systems can facilitate coordination but may also introduce risks through incomplete records, alert fatigue, or inappropriate reliance on automated suggestions. Trainees should learn to verify data, communicate across systems, protect confidentiality, and recognize when digital workflows interfere with patient-centered interaction. Simulated electronic-record tasks and audits of anonymized documentation can provide useful opportunities for supervised learning. Digital skills should be evaluated together with professional judgment and information governance.

EDUCATIONAL METHODS FOR COMPETENCE DEVELOPMENT

Traditional lectures can introduce concepts such as leadership styles, workflow design, and quality indicators, but knowledge alone does not demonstrate the ability to manage complex situations. Competency-based education requires alignment among expected outcomes, learning activities, and assessment [3]. Case-based learning allows learners to compare alternative responses to realistic primary care problems, while simulation offers a safe environment for practicing team coordination and communication. Workplace-based learning then provides opportunities to apply these skills in real

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clinical settings under supervision. Reflection and timely feedback help connect observed behavior with specific improvement goals.

A progressive curriculum could begin with introductory knowledge about health systems and professional roles, continue with structured simulations and supervised team tasks, and culminate in workplace projects addressing continuity of care or patient safety. Responsibility should increase as learners demonstrate reliable performance. The CanMEDS framework and broader health professions education literature support integrating leadership and collaborative competencies across training rather than confining them to a single course [2,7]. Local implementation nevertheless requires consideration of workforce roles, service organization, available supervisors, and national educational standards.

ASSESSMENT OF MANAGERIAL COMPETENCIES

Assessment should combine several methods because no single test captures managerial performance comprehensively. Written questions can assess conceptual understanding, while observed structured exercises can evaluate communication, prioritization, and team decisions. Workplace-based assessments, multisource feedback, portfolios, and supervised quality improvement projects may provide evidence of performance in authentic settings. Miller's framework distinguishes knowing, knowing how, showing how, and doing, underscoring the importance of observing applied competence [8]. Evaluation criteria should be explicit and behaviorally anchored, and learners should receive actionable feedback. Because organizational outcomes depend on many factors, trainees should not be judged solely by changes in service-level indicators.

PROPOSED COMPETENCY FRAMEWORK

Based on the literature synthesis, a practical framework for family physician training can be organized into seven interrelated domains: organizational planning, team leadership, communication and conflict management, analytical clinical prioritization, resource stewardship, quality and safety improvement, and digital information management. For each domain, the curriculum should specify observable tasks, opportunities for supervised practice, and appropriate assessment methods. For instance, referral coordination may be assessed through a simulated patient pathway and subsequent workplace observation, whereas quality improvement competence may be demonstrated through a modest, supervised service-improvement cycle. This framework is a conceptual proposal and requires local validation before being used as a formal assessment standard.

CONCLUSION

Managerial competencies form an important part of the professional preparation of family physicians in primary health care. Their content extends beyond formal administration and includes planning, teamwork, communication, clinical prioritization, resource stewardship, quality improvement, and digital information management. The literature supports incorporating these domains into longitudinal, competency-oriented training that links theoretical learning with supervised practice. A combination of simulation, case analysis, workplace observation, reflective learning, and multisource assessment may provide a more meaningful approach than reliance on lectures or written examinations alone. Future educational research should evaluate the feasibility, validity, and practical outcomes of locally adapted managerial competency frameworks in family medicine training programs.

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