# Family Medicine Resident Objective Book

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#### PURPOSE

The residency program in Family Medicine at Dalhousie University has undergone revisions to become a Triple C Competency Based Curriculum.

A number of steps have been taken in this process. There has been a complete revision of the program's **Curriculum Objectives**. The **field notes** have been revised and integrated with **In Training Assessment Reports (ITARs).** 

This document will introduce these core elements of the program's curriculum. It will also give you information on:

- CanMEDS FM;
- The structure of the Academic Curriculum;
- Guidelines around the Resident Project.

#### RESPONSIBILITY

*Resident:* To review the relevant objectives prior to each clinical learning experience and determine with the supervisor what can and should be achieved.

*Supervisor/Preceptor*. To review the relevant objectives prior to each clinical learning experience and determine with the resident what can and should be achieved.

*Site and Program*: To ensure that each site provides the learning opportunities and structured evaluation stated in this document.

# PREAMBLE TO THE CURRICULUM DOCUMENT FOR RESIDENTS

The delivery of the Dalhousie Family Medicine Residency Program is based on the provision of both strong clinical experiences and a focused academic curriculum. This delivery is grounded in the Four Principles of Family Medicine<sup>1</sup> and structured around the CanMEDS FM 2017 roles as developed by the CFPC National Working Group on the Postgraduate Curriculum. In this framework, the Family Medicine Expert integrates the competencies included in the roles of Communicator, Collaborator, Manager, Health Advocate, Scholar and Professional.

The CFPC Evaluation Objectives is the other document that has a major influence on the curriculum. It incorporates the Phases of the Clinical Encounter, the Skill Dimensions, the Priority Topics with their Key Features, and the Themes of Communication and Professionalism with their Observable Behaviours.

It is important to differentiate *curriculum objectives* and *assessment objectives*. It is the curriculum objectives that define the broad knowledge base that is required for residents to gain over the training program. It is the assessment objectives that form the basis of assessment of competency in a *sampling* of these areas. Thus it is appropriate that the Priority Topics drive our curriculum to a certain extent, but residents are expected to know more than what is included in the Key Features under each Priority Topic. Key Features are considered when planning the objectives of every seminar.

Residents are assessed on their participation and presentation in seminars and workshops, as well as in many other facets of the program. Please see the Periodic Review document for a full list. Much of the assessment is accomplished in real clinical situations based on the clinical objectives in each clinical learning experience - this is known as workplace-based assessment (WBA). We focus on assessment *for* learning as well as assessment *of* learning. This means that we use all assessment tools to stimulate your learning and to see how you are doing at the same time. Documentation of the in-training assessment occurs with the use of Field Notes - which provide a narrative of what went well, with suggestions for improvement, with common reflection on multiple encounters from multiple observers. This information is summarized later to help populate the In-Training Assessment Reports (ITARs) for each clinical learning experience. Your preceptor will help you create a personalized learning plan with the completion of each Narrative ITAR. This and other information, and with some of your reflections, will be used by your Site Director (or their designate) to complete the Periodic Resident Performance Review. A learning plan will also be developed to stimulate your learning and to help you achieve competence as quickly and efficiently as possible.

<sup>&</sup>lt;sup>1</sup> 1) The Family Physician is a skilled clinician

<sup>2)</sup> The Family Physician is community-based

<sup>3)</sup> The Family Physician is a resource to a defined community

<sup>4)</sup> The doctor-patient relationship is central to the role of Family Physician

# THE TRIPLE C COMPETENCY-BASED CURRICULUM

The Dalhousie Family Medicine academic curriculum was extensively re-organized in 2013 and again in 2018. This reflected the national movement of all post-graduate Family Medicine Residency Programs to adopt the CFPC's Triple C competency-based curriculum.

The curriculum objectives are divided into the 7 CanMEDS-FM 2017 Roles:

- Family Medicine Expert
- Communicator
- Collaborator
- Leader
- Health Advocate
- Scholar
- Professional

Within each role the structure (headings and sub-headings) reflects the CanMEDS-FM enabling competencies. Each heading is written in language that emphasizes that it is the program's responsibility to provide a learning opportunity to the resident to accomplish the following objectives. The implication is, of course, that it is the residents' responsibility to avail themselves of the opportunity.

At the level of individual objectives, each objective is written in a competency-based manner. That is, completion of a certain clinical learning experience or having a certain clinical experience is no longer the goal. The goal is to achieve the clearly stated desired outcome.

In addition, wherever possible, the objective will reference the applicable Priority Topic/Key Feature (developed by the CFPC National Working Group on Certification). This will be indicated by a bracketed reference (e.g. Elderly 2 would obviously reference the second Key Feature in the Priority Topic: Elderly)

**Family Medicine Expert** The learning environment will provide opportunities for residents to learn to: 1. Practice generalist medicine 1.1. Establish and maintain clinical knowledge, skills and attitudes required to meet the needs of adult patients. 1.1.1. address health promotion, screening and disease prevention, while considering racial, cultural and gender differences, in the areas of: Well Adult Care 1.1.1.1. 1.1.1.1.1. Do a periodic health assessment in a proactive or opportunistic manner (Periodic Health Assessment/Screening 1). Selectively adapt the periodic health examination to that patient's specific 1.1.1.1.2. circumstances (Periodic Health Assessment/Screening 2). Address lack of physical activity with a structured approach including 1.1.1.1.3. assessment and exercise prescription. 1.1.1.1.4. Inquire about safe levels of alcohol consumption and screen for use of other substances. 1.1.1.2. Cardiovascular disease. 1.1.1.2.1. Treat modifiable risk factors in patients at risk of stroke and other cardiovascular disease and offer antithrombotic treatment in appropriate populations. (Ischemic Heart Disease 2) Screen appropriate patients for hyperlipidemia. In patients with 1.1.1.2.2. hyperlipidemia, establish target lipid levels, identify modifiable factors, give appropriate lifestyle advice, and periodically assess compliance (Hyperlipidemia 1-6). 1.1.1.3. Cancer 1.1.1.3.1. Be opportunistic in giving cancer prevention advice and apply the periodic health examination where indicated (Cancer 1, 2). 1.1.1.4. Dermatology Be opportunistic discussing skin cancer prevention 1.1.1.4.1. 1.1.1.5. Endocrinology Screen appropriately for diabetes (Diabetes 1). 1.1.1.5.1. Screen for and diagnose obesity, establish readiness to change and address 1.1.1.5.2. with motivational interviewing and follow-up. Advise about treatment options (Obesity 1, 5, 6). Gastroenterology 1.1.1.6. 1.1.1.6.1. Counsel patients at high risk for hepatitis; vaccinate and offer postexposure prophylaxis appropriately (Hepatitis 7). Infectious disease 1.1.1.7. 1.1.1.7.1. Promote immunization as appropriate (Immunization 1-3) Respirology 1.1.1.8. 1.1.1.8.1. Take preventive measures in high-risk groups e.g. influenza and pneumococcal vaccination (Upper Respiratory Tract Infection 7; Chronic Obstructive Pulmonary Disease 5) Regularly evaluate and document smoking status, continuously adopt a 1.1.1.8.2. multiple strategy approach to facilitating smoking cessation (Smoking Cessation 1-3).

1.1.2. correctly diagnose and manage common problems in the following areas:

1.1.2.1. Allergy

1.1.2.1.1. Recognize potential allergic symptoms (skin, ophthalmologic, ENT,

systemic) and manage using allergy testing, avoidance, pharmacotherapy, and desensitization where appropriate. (Allergy 2, 3, 4, 10)

- 1.1.2.1.2. Document allergies to medication, environment and food. (Allergy 1)
- 1.1.2.2. Behavioural Medicine/Mental Health
  - 1.1.2.2.1. The family medicine resident will recognize and diagnose mental health problems commonly found in family practice including anxiety disorder (Anxiety 1-5), mood disorders (Depression 1-10), schizophrenia (Schizophrenia 1-8), personality disorders (Personality Disorder 1-5), post-traumatic stress disorder, phobic states, eating disorders (Eating Disorders 1-6), somatization disorders (Somatization 1-4), chronic pain syndromes and addiction (Substance Abuse 1-9). They will be able to:
    - 1.1.2.2.1.1. Demonstrate familiarity with the DSM diagnostic criteria for these common disorders.
    - 1.1.2.2.1.2. Demonstrate ability to appropriately screen for these disorders in high-risk groups.
    - 1.1.2.2.1.3. Demonstrate ability to assess cognitive status with an appropriate instrument (MMSE or MOCA).
    - 1.1.2.2.1.4. Take an appropriate history to generate differential diagnoses for symptoms, which also includes medical causes and contributors to rule out serious organic pathology.
    - 1.1.2.2.1.5. Assess patient's suicide risk, homicide risk and judgment.
    - 1.1.2.2.1.6. Identify comorbid psychiatric conditions.
    - 1.1.2.2.1.7. Identify the functional impact of the symptoms to help guide and evaluate treatment.
    - 1.1.2.2.1.8. The resident will develop a management plan and provide appropriate follow up for these disorders, including the ability to:
      - 1.1.2.2.1.8.1. Offer appropriate treatment in a way that promotes full discussion of options and patient's own decision-making.
      - 1.1.2.2.1.8.2. Use a multidisciplinary approach to treatment and management and refer appropriately.
      - 1.1.2.2.1.8.3. Use a multifaceted approach to treatment.
      - 1.1.2.2.1.8.4. Include psychosocial support as part of the treatment plan.
      - 1.1.2.2.1.8.5. Demonstrate knowledge of indications, side effect profile, common interactions and monitoring requirements of psychopharmacological agents such as antidepressants, antianxiety medications, mood stabilizers, antipsychotics and other commonly used agents.
      - 1.1.2.2.1.8.6. Demonstrate knowledge of different forms of therapy (including brief psychotherapy, couples and family therapy, behavior therapy, long-term psychotherapy) and the selection of patients for each modality.
      - 1.1.2.2.1.8.7. Demonstrate ability to skillfully and appropriately counsel for behaviour change using techniques of motivational interviewing (Counselling 1-3).
      - 1.1.2.2.1.8.8. Monitor response to treatment using functional benchmarks, adjusting and augmenting as clinically indicated.
      - 1.1.2.2.1.8.9. Diagnose and treat serious complications and side effects of medications.
  - 1.1.2.2.2. Anticipate possible violent or aggressive behaviour and recognize the warning signs (Violent/Aggressive Patient 1).

- 1.1.2.2.3. Develop a plan within your practice environment to deal with patients who are verbally or physically aggressive (Violent/Aggressive Patient 1,4).
- 1.1.2.3. Cardiovascular Disorders
  - 1.1.2.3.1. Take an adequate history to make a specific diagnosis of life-threatening conditions in the patient with chest pain and begin timely treatment. (Chest Pain 1, 2, 3, 5)
  - 1.1.2.3.2. Have knowledge of the impact of valvular heart disease on long-term management including prognosis, appropriate medication and follow-up.
  - 1.1.2.3.3. Screen for hypertension, measure blood pressure correctly, and make a diagnosis on multiple visits, and investigate appropriately to rule out secondary causes. Be able to treat hypertension with pharmacological means. For patients with the diagnosis of hypertension assess periodically for end-organ complications (Hypertension 1, 2, 3, 4, 7, 9).
  - 1.1.2.3.4. Recognize and treat hypertensive crisis in timely fashion. Recognize need for workup for secondary hypertension (Hypertension 8).
  - 1.1.2.3.5. Demonstrate the ability to diagnose ischemic heart disease that is classic or atypical, and develop a plan in collaboration with the patient to reduce modifiable risk factors. (Ischemic Heart Disease 1, 2)
  - 1.1.2.3.6. Manage a patient with stable ischemic heart disease in a timely manner according to the severity of the disease, and coordinate appropriate follow-up (Ischemic Heart Disease 4, 5).
  - 1.1.2.3.7. Assess a patient who presents with a painful or swollen leg in terms of his/her risk for ischemic vascular disease or DVT, investigate appropriately and be aware of treatment options including outpatient management of DVT (Deep Vein Thrombosis 1, 2, 4, 5).
  - 1.1.2.3.8. Assess cardiovascular function, determine the underlying cause, and appropriately treat patients with heart failure (systolic and diastolic).
  - 1.1.2.3.9. Have an approach to arrhythmia with emphasis on common arrhythmias such as Atrial Fibrillation and PVCs.
- 1.1.2.4. Cancer
  - 1.1.2.4.1. Be aware of and actively inquire about side effects or expected complications of cancer treatment (Cancer 5).
  - 1.1.2.4.2. Include recurrence or metastatic disease in the differential diagnosis in patients with a distant history of cancer who present with new symptoms (Cancer 6).
  - 1.1.2.4.3. Know the management of common medical complications of patients with malignancy, including effusions, pathological fractures, hypercalcemia, neutropenia, and infections.
  - 1.1.2.4.4. Know how to manage cancer pain, including the use of narcotics and co-analgesics (Palliative Care 4).
  - 1.1.2.4.5. Understand the psychosocial issues facing cancer patients and how they might be addressed (Cancer 4).
- 1.1.2.5. Ears, Nose and Throat Disorders
- 1.1.2.5.1. Diagnose otitis media upon visualization of the TM and include pain referred from other sources in the differential diagnosis of an earache (e.g. Tooth abscess, trigeminal Neuralgia, TMJ dysfunction, pharyngitis, etc.). Treat otitis media in an evidence-based fashion (Earache 1, 2, 4, 5, 6).

- 1.1.2.5.2. Consider serious causes in the differential diagnosis of an ongoing earache (e.g. tumors, temporal arteritis, mastoiditis) (Earache 3).
- 1.1.2.5.3. Differentiate viral from bacterial sinusitis and bronchitis and appropriately prescribe antibiotics (Upper Respiratory Tract Infections 2,3).
- 1.1.2.5.4. Use an evidence-based approach to diagnosing pharyngitis; consider mononucleosis in investigating and managing patients with a sore throat (Upper Respiratory Tract Infection 6).
- 1.1.2.5.5. Demonstrate an approach to vertigo with knowledge of benign and serious causes (BPV, stroke, labyrinthitis) (Dizziness 1,2).
- 1.1.2.6. Endocrinology
  - 1.1.2.6.1. Manage diabetes both in and out of hospital appropriately using lifestyle, oral agents, and insulin and provide patient and family education. Monitor for and manage complications (Diabetes 2,4,5).
  - 1.1.2.6.2. Appropriately investigate and manage patients suspected with thyroid disease and limit testing for thyroid disease to patients with a significant pretest probability of abnormal results. In patients with diagnosed hypothyroidism, check thyroid-stimulating hormone levels only at appropriate times (Thyroid 1, 2).
- 1.1.2.7. Gastrointestinal Disorders
  - 1.1.2.7.1. Demonstrate the ability to diagnose and manage adult abdominal pain. Be able to distinguish between acute and chronic abdominal pain, generate a differential diagnosis and order appropriate investigations in a timely manner (Abdominal Pain 1, 2).
  - 1.1.2.7.2. Appropriately investigate and manage a patient presenting with upper or lower gastrointestinal bleeding (non-life threatening) (Gastrointestinal Bleed 1, 2, 4, 5, 6).
  - 1.1.2.7.3. Identify patients at high risk of GI bleed and modify treatment appropriately (Gastrointestinal Bleed 3).
  - 1.1.2.7.4. Recognize extra intestinal manifestations in a patient with a diagnosis of inflammatory bowel disease (IBD) (Abdominal Pain 8).
  - 1.1.2.7.5. Include cardiac causes and other conditions as part of the differential diagnosis in patients presenting with dyspepsia and rule out serious conditions (Dyspepsia 1, 2, 3).
  - 1.1.2.7.6. Diagnose and manage specific pathology commonly seen in primary care (e.g.. gastroesophageal reflux disease, peptic ulcer disease, ulcerative colitis, Crohn's disease, diverticulitis, pancreatitis, irritable bowel syndrome, biliary disease) (Abdominal Pain 2).
  - 1.1.2.7.7. Establish a diagnosis (e.g. infectious, malabsorption, immune, irritable bowel) and develop a management plan given a patient with acute or chronic diarrhea (Diarrhea 1, 2, 3, 4, 6, 7).
  - 1.1.2.7.8. Have an approach to diagnosis in a patient with abnormal liver enzymes differentiating hepatocellular and obstructive patterns (Hepatitis 1, 2).
  - 1.1.2.7.9. Assess infectivity and HIV status in patients with Hepatitis B and C, counsel regarding harm reduction, and monitor for complications (Hepatitis 4, 9).
- 1.1.2.8. Haematologic Disorders
  - 1.1.2.8.1. Investigate the cause of low hemoglobin and classify the types of

anemia, assess the risk of decompensation of anemic patients, and determine the iron status and investigate the causes of iron deficiency if present (Anemia 1, 2, 3, 4, 8).

- 1.1.2.8.2. In patients with macrocytic anemia consider the possibility of a vitamin B12 deficiency and look for other manifestations of the deficiency (e.g. neurologic symptoms) (Anemia 6).
- 1.1.2.8.3. Demonstrate some knowledge of common hematological malignancy (leukemia, lymphoma, myeloma) including the presenting symptoms, investigations and basic management.
- 1.1.2.8.4. Be able to investigate and manage a patient presenting with a bleeding disorder, or an acute coagulopathy (warfarin overdose, liver disease, sepsis, etc.)
- 1.1.2.9. Infectious Disease
  - 1.1.2.9.1. Demonstrate an awareness of serious and common causes of fever. Investigate patients with fever of unknown origin appropriately and treat fever resulting from serious causes in a timely fashion (e.g. meningitis) (Fever 4, 5, 6).
  - 1.1.2.9.2. Recognize and triage serious infection (pyelonephritis, cellulitis, meningitis, osteomyelitis, sepsis, pneumonia) including antibiotic choice based on the patient's individual risk factors and a decision about hospital admission (Infections 2, 3, 4).
  - 1.1.2.9.3. Use a selective approach in ordering cultures and make rational antibiotic choices in a timely fashion. In a febrile patient with a viral infection, do NOT prescribe antibiotics (Infections 1, 2; Fever 2, 3).
- 1.1.2.9.4. Recognize that infections in the elderly may present atypically (Fever 8).
- 1.1.2.10. Musculoskeletal
  - 1.1.2.10.1. Use history and physical examination to rule out serious causes in a patient with low back or neck pain (Low-back Pain 1; Neck Pain 1, 2).
  - 1.1.2.10.2. Use conservative management for back and neck pain including exercise, posture, and pain medication when necessary (Low-back pain 2, 3, 5; Neck Pain 3).
- 1.1.2.11. Neurologic Disorders
  - 1.1.2.11.1. Diagnose stroke and differentiate, if possible, hemorrhagic from embolic/thrombotic stroke and assess patients presenting with neurological deficits in a timely fashion to determine eligibility for thrombolysis (Stroke 2, 3)
  - 1.1.2.11.2. Involve the patient, the family, and other professionals as needed in decisions about intervention in patients with stroke. Evaluate the resources and supports needed to improve function, and include prevention of complications of stroke. Provide realistic prognostic advice (Stroke 4, 5, 7).
  - 1.1.2.11.3. Have an approach to diagnosis and management of the patient who presents with loss of consciousness, altered level of consciousness, or delirium, including recognition of reversible conditions (shock, hypoxia, hypoglycemia, drug overdose) (Loss of Consciousness 2, 3, 4, 5, 6, 8).
  - 1.1.2.11.4. Differentiate delirium due to general medication from dementia, drug intoxication/withdrawal, and psychotic disorders (Dementia 2).
  - 1.1.2.11.5. Distinguish between pre-syncope/syncope and vertigo in patients with

dizziness, generate an appropriate differential diagnosis and rule out serious conditions, review medications, and investigate appropriately.

- 1.1.2.11.6. Differentiate different types of tremors, i.e. resting tremor, intention tremor (Parkinsonism 4).
- 1.1.2.11.7. Accurately distinguish between idiopathic and atypical Parkinson's disease, involve other health care professionals to enhance the patient's functional status, assess and anticipate side effects of anti-Parkinson medications, and look for other coexisting conditions (Parkisonism 1, 5, 6)
- 1.1.2.11.8. Be able to recognize and appropriately investigate benign versus lifethreatening causes of headaches (trauma, subarachnoid hemorrhage, meningitis) (Headache 1, 2).
- 1.1.2.11.9. Diagnose and manage the common causes of headaches (e.g. migraine, tension, cluster) (Headache 3, 5).
- 1.1.2.12. Ophthalmologic Disorders
  - 1.1.2.12.1. Distinguish serious from non-serious causes of a red eye always using a Snellen chart for visual acuity as well as fluorescein when necessary. Consider underlying systemic causes, when the diagnosis is iritis (Red Eye 1, 2, 9).
  - 1.1.2.12.2. Distinguish allergic, viral and bacterial conjunctivitis and provide pseudomonas coverage for those with bacterial conjunctivitis using contact lenses (Red Eye 6, 7).
  - 1.1.2.12.3. Diagnose and manage other common eye lesions such as hordeolum, chalazion, pterygium, pingueculum.
- 1.1.2.13. Renal and Urologic
  - 1.1.2.13.1. Have an approach to patients presenting with dysuria, identify high-risk patients (DM, underlying renal disease) investigate for UTI, STIs, prostatitis, vaginitis, etc. when appropriate and manage (Dysuria 1, 2, 3, 4).
  - 1.1.2.13.2. Have an approach to acute renal failure, including underlying cause, understand acute and chronic management and monitoring for complications.
  - 1.1.2.13.3. Understand presentation, investigations and management (medical and surgical) or renal calculi.
- 1.1.2.14. Respirology
  - 1.1.2.14.1. Include asthma and COPD as part of the differential diagnosis in a patient with respiratory symptoms (Asthma 1; Chronic Obstructive Pulmonary Disease 1)
  - 1.1.2.14.2. Objectively determine the severity of asthma or COPD (i.e. pulmonary function testing), and manage acute exacerbations appropriately including assessment for hospitalization (Asthma 4; Chronic Obstructive Pulmonary Disease 2, 3, 8).
  - 1.1.2.14.3. Effectively use monitoring, pharmacotherapy and lifestyle change to manage COPD and asthma (Asthma 5, 6; Chronic Obstructive Pulmonary Disease 4, 6, 7).
  - 1.1.2.14.4. Generate a broad differential diagnosis for cough (i.e. GERD, asthma, rhinitis, presence of a foreign body, medications, malignancy, pertussis) in patients with an acute, persistent or recurrent cough (Cough 1, 3).
  - 1.1.2.14.5. Assess the patient with pneumonia with regard to: risks for unusual pathogens, underlying neoplasia, identification of the appropriate patient population for hospitalization, rational antibiotic choices and arranging contact

tracing where appropriate (Pneumonia 3, 5, 7, 11).

- 1.1.2.15. Rheumatologic
  - 1.1.2.15.1. For patient presenting with joint pain, distinguish benign from serious pathology, using history and investigating appropriately (Joint Disorder 1)
  - 1.1.2.15.2. Have an approach to patients presenting with non-specific MSK complaints, to make the diagnosis of rheumatologic conditions, fibromyalgia, soft tissue injury and consider sources of referred pain (Joint Disorder 2, 4).
  - 1.1.2.15.3. Identify non-articular symptoms of rheumatic disease (Joint Disorder 8).
  - 1.1.2.15.4. In patients experiencing musculoskeletal pain actively inquire about the impact of the pain, treat with appropriate analgesics and consider aids and community resources (Joint Disorder 9).
- 1.1.2.16. Skin Disorders
  - 1.1.2.16.1. Distinguish benign from serious pathology (e.g. Melanoma, pemphigus, cutaneous T-cell lymphoma) by physical examination and appropriate investigations (e.g. Biopsy or excision) (Skin Disorder 2).
  - 1.1.2.16.2. Understand the cutaneous manifestations of systemic disease and be able to diagnose using history, physical and appropriate investigations (Skin Disorder 3).
  - 1.1.2.16.3. Have an approach to diagnosis and management of other common primary care dermatologic problems such as eczema, acne, skin infections (viral, bacterial, fungal, parasitic), psoriasis, allergic/contact conditions, skin ulcers (vascular, pressure).
- 1.1.2.17. Undifferentiated and/or multiple
  - 1.1.2.17.1. Investigate and manage weakness appropriately, differentiating generalized and specific weakness and identifying neurologic and other causes.
  - 1.1.2.17.2. Assess all spheres of function in a disabled patient and offer a multifaceted approach (rehabilitation, community support, lifestyle modification) (Disability 4, 5).
  - 1.1.2.17.3. In patients presenting with multiple medical problems take an appropriate history and prioritize to develop a mutually agreed agenda (Multiple Medical Problems 1, 2).
  - 1.1.2.17.4. In patients complaining of fatigue consider depression, adverse effects of medication and other medical causes (Fatigue 1, 2, 3).

# **1.2.** Establish and maintain clinical knowledge, skills and attitudes required to meet the needs of elderly patients.

- 1.2.1. Discuss the aging process and the implications of the biological changes associated with aging, the concepts of successful aging and the importance of a comprehensive approach to care.
- 1.2.2. Focus on key determinants of health and their interrelationships in the elderly (eg. biological, psychological, socioeconomic).
- 1.2.3. Differentiate between normal changes of aging and those changes that are pathological
- 1.2.4. Describe the developmental challenges faced by the older person (e.g. dealing with loss, coping with chronic disease).
- 1.2.5. Demonstrate a functional approach to history taking and treatment planning.
  - 1.2.5.1. Discuss the functional impact of illness in elderly patients including:
    - 1.2.5.1.1. Diagnoses often correlate poorly with function.
    - 1.2.5.1.2. Functional impairment may be a first sign of illness (Elderly 4).
    - 1.2.5.2. Describe and be able to assess the concepts of Basic Activities of Daily Living

- (BADL's) and Instrumental Activities of Daily Living (IADL's).
- 1.2.5.3. Use functional assessment tools such as the Katz ADL Index and incorporate this information into a comprehensive geriatric assessment including:
  - 1.2.5.3.1. Physical Health
  - 1.2.5.3.2. Mental Health including cognitive status and competency
  - 1.2.5.3.3. Socioeconomic status
  - 1.2.5.3.4. Environmental factors
  - 1.2.5.3.5. Level of Care
  - 1.2.5.3.6. Belief system
- 1.2.5.4. Use functional rating scales in clinical situations
- 1.2.6. Include an assessment of social support available to the elderly patient.
- 1.2.7. Obtain corroborative information where appropriate from families or caregivers.
- 1.2.8. Perform a comprehensive geriatric assessment including:
  - 1.2.8.1.1. Identify the patient's problems using a comprehensive patient problem list
  - 1.2.8.1.2. Establish the patient's diagnosis(es)
  - 1.2.8.1.3. Identify the patient's problem(s) associated with the diagnosis(es)
  - 1.2.8.1.4. Rank the impact and importance of the problem
  - 1.2.8.1.5. Be able to deal with multiple interacting problems
  - 1.2.8.1.6. Identify the patient's perspective
  - 1.2.8.1.7. Establish realistic goals
- 1.2.9. Recognize and describe the non-specific presentation of the disease in the elderly (Elderly 5).
- 1.2.10. Demonstrate the ability to adapt their interviewing techniques to enable elderly people to understand and communicate with the resident.
- 1.2.11. Establish the expectations of the elderly person and reach common ground with regards to goals for management.
- 1.2.12. Help a patient establish and document their advance directives.
- 1.2.13. Describe the role and impact of the family or caregiver on the care of the elderly and be able to effectively recognize and manage problems that caregivers might encounter.
  - 1.2.13.1. Describe the importance of corroborative information in providing effective care for elderly patients.
  - 1.2.13.2. Discuss family dynamics (roles, conflict, role reversal) and their impact on the care provided to elderly patients.
  - 1.2.13.3. Describe signs of caregiver stress and fully assess caregiver needs.
  - 1.2.13.4. Manage and participate in family care conferences to see the value of information sharing, assessment of family supports and the opportunity to provide education and comfort to families in need.
- 1.2.14. Discuss the major geriatric clinical problem areas:
  - 1.2.14.1. Confusion or memory failure
  - 1.2.14.2. Falling or postural instability
  - 1.2.14.3. Reduced mobility
  - 1.2.14.4. Incontinence of urine
  - 1.2.14.5. Constipation and fecal incontinence
  - 1.2.14.6. Difficulties in activities of daily living
- 1.2.15. Safely prescribe medications to elderly patients taking into account the following issues:
  - 1.2.15.1. The pharmacodynamic and pharmacokinetic properties of commonly used medications in the elderly (e.g. antidepressants, beta blockers, oral hypoglycemics, NSAIDs, diuretics).
  - 1.2.15.2. A safe approach to drug dosing in the elderly, including required adjustments in

renal impairment.

- 1.2.15.3. The importance of drug monitoring, as well as strategies for enhancing treatment adherence.
- 1.2.15.4. The dangers of polypharmacy in the elderly and learn to effectively monitor for hazardous drug- drug interactions as well as adverse drug reactions (Elderly 1).
- 1.2.15.5. The need to safely stop commonly used drugs and monitor for signs of withdrawal (e.g. SSRIs, benzodiazepines).
- 1.2.15.6. The need to choose drugs within a class that offer the best balance between therapeutic benefit and adverse effects
- 1.2.15.7. The importance of using non-pharmacological alternatives to drug therapy in the elderly wherever appropriate.
- 1.2.15.8. The over-the-counter drugs the patient may be using (Elderly 2)
- 1.2.15.9. The potential for substance abuse
- 1.2.16. Undertake a Cognitive Assessment including:
  - 1.2.16.1. Recognizing signs of declining cognitive function in elderly individuals, such as poor hygiene, memory complaints from patients of their family members and difficulty with IADLs such as banking and meal preparation.
  - 1.2.16.2. The use of cognitive assessment tools in appropriate situations and recognize their limitations in assessing cognition.
- 1.2.17. Undertake a Competency Assessment
  - 1.2.17.1. Describe the fundamental aspects of a competency assessment (e.g. Medical competence, financial competence, housing competence).
  - 1.2.17.2. Describe the laws pertaining to competence (e.g. POA, Public Guardian and Trusteeship, the Mental Health Act).
  - 1.2.17.3. Identify impaired and intact decision-making abilities as some may be retained in a given individual.

# **1.3. Establish and maintain clinical knowledge, skills and attitudes required to meet the needs of children and adolescents.**

- 1.3.1. Behavioural Issues:
  - 1.3.1.1. Evaluate and manage excessive crying and colic in infancy.
  - 1.3.1.2. Evaluate and manage feeding problems in infancy and food-related behavioural issues in childhood.
  - 1.3.1.3. Evaluate and manage bed wetting on an age-appropriate basis.
  - 1.3.1.4. Recognize, diagnose using appropriate clinical tools, refer and collaboratively manage Attention Deficit/Hyperactivity Disorder (Behavioural Problems 1-3).
- 1.3.2. Cardiovascular disorders:
  - 1.3.2.1. Distinguish innocent and abnormal cardiac murmurs.
- 1.3.3. Ear, nose and throat disorders: Diagnose, manage and refer when appropriate the following conditions: otitis externa, otitis media (Earache 1,4,7,8), sinusitis and pharyngitis (Upper Respiratory Tract Infection 2-4,6).
- 1.3.4. Gastrointestinal Disorders: Diagnose and manage chronic GI conditions constipation, chronic diarrhea, gastroesophageal reflux, lactose intolerance, chronic abdominal pain.
- 1.3.5. Infectious Disease: Demonstrate knowledge of reportable diseases and parameters for interim exclusion from school and recreational activities.
- 1.3.6. Musculoskeletal Disorders:
  - 1.3.6.1. Evaluate and manage a child presenting with limp, intoeing, alignment abnormalities/scoliosis, joint instability, swelling or pain.
  - 1.3.6.2. Evaluate fractures involving the growth plate and fractures/dislocations more common in children.

1.3.7. Neurologic Disorders:

- 1.3.7.1. Diagnose and manage common headaches in children.
- 1.3.7.2. Distinguish simple from complex febrile seizures and investigate/manage appropriately.
- 1.3.8. Psychiatric Disorders: Recognize the high prevalence of eating disorders in adolescents and manage appropriately (Eating Disorders 1).
- 1.3.9. Respiratory Disorders: Diagnose and manage common respiratory conditions (e.g. croup, asthma)
- 1.3.10. Skin disorders: Recognize and manage common skin conditions (e.g. atopic dermatitis, acne, viral exanthems, candidiasis, impetigo, seborrheic dermatitis, and cellulitis).
- 1.3.11. Recognize early signs of less common but serious problems.
  - 1.3.11.1. Recognize important rashes and investigate for possible serious underlying illness (petechiae, purpura, erythema nodosum, erythema migrans, café au lait spots).
  - 1.3.11.2. Recognize potential anaphylaxis, educate parents and patients and prescribe Medicalerts and EpiPen appropriately (Allergy 9).
  - 1.3.11.3. Evaluate severity of respiratory distress and manage respiratory emergencies (ex. epiglottitis, retropharyngeal abscess, anaphylaxis, foreign body aspiration, pneumonia, pneumothorax and status asthmaticus).
  - 1.3.11.4. Recognize and evaluate precocious puberty and primary amenorrhea.
  - 1.3.11.5. Recognize atypical presentations of common GI complaints (abdominal pain, vomiting, and constipation) that may suggest rare but serious complications.
  - 1.3.11.6. Recognize the significance of dysmorphism, congenital anomalies or developmental delay and refer for assessment.
- 1.3.12. Employ case-finding as well as evidence-based surveillance and screening tools (e.g. Rourke Baby Record) to detect illness, deviation from normal growth and development and prevent injury (Wellbaby Care 1) and to provide suggestions to encourage motor, language and social development (Well-baby Care 4).
- 1.3.13. Understand and be able to counsel parents about normal nutritional needs at different ages. Effectively monitor growth and suggest intervention as necessary (Well-baby Care 2).
- 1.3.14. Learn to administrate an organized vaccination program within family practice including routine vaccinations and those for travel and special populations. Discuss benefits, safety and side effects of vaccinations with parents (Well-baby care 2, 6; Immunization 1, 2, 4).
- 1.3.15. Provide education and advice on injury prevention and common behavioural and family issues.
- 1.3.16. When caring for adolescents, review and counsel about substance abuse, peer issues, home environment, diet/eating disorders, academic performance, social stress/mental illness and sexuality/STDs/contraception.
- 1.3.17. Have an approach to obesity in childhood including guidance on exercise and diet (Obesity 7, 8)
- 1.4. Establish and maintain clinical knowledge, skills and attitudes required in maternal and newborn care.
  - 1.4.1. Diagnose and manage complications of early pregnancy (threatened & inevitable abortion, ectopic pregnancy, trophoblastic disease).
  - 1.4.2. Conduct a first prenatal visit, discuss the rationale for all tests, explain routine prenatal visits (Pregnancy 4).
  - 1.4.3. Screen all pregnant women for abuse (Pregnancy 5).
  - 1.4.4. Conduct a prenatal visit in the first, second, and third trimester including maternal and fetal high risk factors which influence prenatal morbidity and mortality.
  - 1.4.5. Counsel a woman re indications and timing for ultrasound.

- 1.4.6. Counsel a healthy woman who is planning a pregnancy (Pregnancy 1).
- 1.4.7. Counsel women with specific risks (Pregnancy 1) including:
  - 1.4.7.1. Women over 35 or with a family history of genetic abnormalities.
  - 1.4.7.2. VBAC
  - 1.4.7.3. Women with specific medical diseases (diabetes, hypertension, multiple sclerosis, inflammatory bowel disease, etc.) during pregnancy.
  - 1.4.7.4. Women with a poor past obstetrical history i.e. (preterm labour, 2nd trimester pregnancy loss).
- 1.4.8. Ask the woman and her partner open-ended questions about feelings, worries, expectations at routine visits, prenatally, intra-partum and post-partum.
- 1.4.9. Counsel a woman in the third trimester on the use of analgesia, anaesthesia in labour, effects on the mother and fetus.
- 1.4.10. Counsel a woman regarding expectations for labour and delivery: ambulation, different positions for delivery, early mother-infant contact.
- 1.4.11. Counsel a woman regarding the potential for operative intervention such as forceps, caesarean section.
- 1.4.12. Manage common pregnancy symptoms.
- 1.4.13. Counsel a woman regarding signs of labour.
- 1.4.14. Take a detailed history on a new patient presenting in labour.
- 1.4.15. Describe normal rate of progress in nulliparous and multiparous patients.
- 1.4.16. Describe indications for induction or augmentation of labour (Pregnancy 8).
- 1.4.17. Describe indications for continuous electronic fetal monitoring.
- 1.4.18. Manage a normal labour.
- 1.4.19. Demonstrate ability to interpret fetal heart rate patterns.
- 1.4.20. Describe the indications, risks, and prerequisites for low forceps, vacuum extraction
- 1.4.21. Inform the woman and her partner about common positive and negative emotional experiences during and after pregnancy, such as body image, sexuality, ambivalent feelings about pregnancy and baby, fear of abnormalities, "baby blues," intense attachment to baby, etc.
- 1.4.22. Discuss emotional and organizational preparation for the baby.
- 1.4.23. Discuss parenting with the woman and her partner including their own experiences growing up, their expectations/philosophy of raising children.
- 1.4.24. Discuss benefits to mother & baby of breastfeeding; explore the woman's and her partner's feelings and concerns about breastfeeding at least twice during the pregnancy.
- 1.4.25. Discuss circumcision
- 1.4.26. Counsel a breastfeeding mother regarding initiation of breast feeding.
- 1.4.27. Diagnose and manage common breastfeeding problems (i.e. sore nipples, engorgement, "not enough milk", difficulties latching on).
- 1.4.28. Counsel a woman and her partner regarding normal neonatal/post- partum course prior to discharge from hospital including the normal sequence of the attachment process.
- 1.4.29. Perform a 6-week post-partum exam.
- 1.4.30. Diagnose and manage endometritis, subinvolution, infected episiotomy (Pregnancy 10).
- 1.4.31. Counsel a mother post C-section (e.g., activity, resuming intercourse, etc.).
- 1.4.32. Independently examine a newborn and recognize variants of normal (Newborn 1).
- 1.4.33. Provide normal newborn care.
- 1.4.34. Describe current neonatal screening programs.
- 1.4.35. Recognize congenital anomalies and abnormalities, such as Down's Syndrome.
- 1.4.36. Diagnose and manage common neonatal diseases and conditions.
  - 1.4.36.1. Jaundice

- 1.4.36.2. Sepsis
- 1.4.36.3. Murmurs
- 1.4.36.4. Hypoglycemia
- 1.4.36.5. Respiratory distress
- 1.4.36.6. Orthopedic abnormalities
- 1.4.36.7. IUGR
- 1.4.37. Manage the issues surrounding the care of newborns of mothers with medical/nonmedical conditions (i.e. diabetes, drug abuse, auto-immune diseases, medication use, social issues, AIDS, etc.). 9.12.
- 1.4.38.9.13. Describe the nutritional needs and normal growth pattern in the first weeks following birth for premature and full term infants.

# **1.5. Establish and maintain clinical knowledge, skills and attitudes required in the area of global health and care of the vulnerable and underserviced:**

- 1.5.1. concerning basic travel medicine (Travel Medicine 1-8):
  - 1.5.1.1. To advise a patient on appropriate immunizations prior to overseas travel.
  - 1.5.1.2. To make recommendations concerning malaria prophylaxis, and other health precautions including those around potable water and traveler's diarrhea.
- 1.5.1.3. To demonstrate an approach to the management of fever in the returning traveler.
- 1.5.2. concerning the health of immigrants to Canada (Immigrants 1-6):
  - 1.5.2.1. To demonstrate awareness of overseas screening for immigrants and refugees to Canada.
  - 1.5.2.2. To apply appropriate screening recommendations, including assessment of vaccination status and updates as appropriate, for newly arrived landed immigrants.
  - 1.5.2.3. To inquire and maintain openness to the use of alternative healers, practices and medications.
  - 1.5.2.4. To demonstrate a knowledge of the demographics of new immigrants to Canada.
  - 1.5.2.5. To demonstrate an approach to finding information on diseases less commonly seen in Canada.
- 1.5.3. acquire knowledge of the epidemiology of different underserviced and vulnerable groups in Canada, including aboriginal populations, inner-city/homeless populations and Persons with Developmental Disabilities (PWDD) including:
  - 1.5.3.1. To demonstrate knowledge of the epidemiology of aboriginal health issues, including diabetes mellitus, metabolic syndrome, substance abuse and domestic violence.
  - 1.5.3.2. To describe key differences between aboriginal communities on and off reserves, including issues of inadequate housing and unclean water supply.
  - 1.5.3.3. To demonstrate knowledge of the epidemiology of inner-city populations, including mental health concerns, substance abuse, impact of homelessness, lack of preventative medical care.
  - 1.5.3.4. To demonstrate knowledge of the unique health and social challenges faced by PWDD
- 1.5.4. be familiar with basic global burden of disease, including the major causes of mortality worldwide:
  - 1.5.4.1. To demonstrate a basic clinical and epidemiological knowledge of diarrheal disease, HIV, malaria and tuberculosis.
  - 1.5.4.2. To demonstrate a basic understanding of the impact on health of individuals of migration, forced displacement, war and armed conflict.

# **1.6.** Establish and maintain clinical knowledge, skills and attitudes required in Men's health care.

- 1.6.1. Be aware of men's less frequent access of the health care system and thus the need to make efficient use of the visits that do occur.
- 1.6.2. Sexual Health
  - 1.6.2.1. Exhibit sensitivity in dealing with issues of sexual dysfunction and inclusiveness with regards to sexual orientation.
  - 1.6.2.2. Discuss men's role in Sexually Transmitted Infection prevention, contraception and responsible fathering.
  - 1.6.2.3. Appropriately recognize and manage reproductive tract infections and problems:
    - 1.6.2.3.1. Sexually transmitted infections (Sexually Transmitted Infections 1-8)
    - 1.6.2.3.2. Urethritis
    - 1.6.2.3.3. Epididymitis
    - 1.6.2.3.4. Orchitis
    - 1.6.2.3.5. Prostatitis
    - 1.6.2.3.6. Benign prostatic hypertrophy (Prostate 6).
    - 1.6.2.3.7. Penile anomalies
    - 1.6.2.3.8. Scrotal and testicular abnormalities
    - 1.6.2.3.9. Genital trauma
    - 1.6.2.3.10. Erectile and ejaculatory dysfunctions
  - 1.6.2.4. Appropriately screen for, manage and refer neoplastic disease of the male genital tract.
    - 1.6.2.4.1. Penile carcinoma
    - 1.6.2.4.2. Testicular carcinoma
    - 1.6.2.4.3. Prostatic carcinoma (Prostate 1-5)
- **1.7.** Establish and maintain clinical knowledge, skills and attitudes required in palliative care.
  - 1.7.1. Assess and manage pain and symptoms effectively through history, appropriate physical exam and relevant investigations (Palliative Care 4).
    - 1.7.1.1. Demonstrate knowledge of classification and neurophysiology of pain.
    - 1.7.1.2. Prescribe opioids effectively including initiating dosage, titration, breakthrough dosing, prevention of side effects, monitoring, dose equivalency and opioid rotation.
    - 1.7.1.3. Describe the clinical presentation of opioid neurotoxicity and be able to put a management plan in place to address the problem.
    - 1.7.1.4. Prescribe adjuvant modalities and medications for pain and symptom relief.
    - 1.7.1.5. Be aware of non-pharmacologic strategies for pain and symptom management.
    - 1.7.1.6. Develop and implement management plans for other symptoms including: A) fatigue; B) anorexia and cachexia; C) constipation; D) dyspnea; E) nausea and vomiting; F) delirium; G) skin and mouth care; H) anxiety and depression.
  - 1.7.2. Monitor the efficacy of symptom management plans.
  - 1.7.3. Review and adjust management plans to accommodate the changes that may occur as the end of life approaches (Palliative Care 5)
  - 1.7.4. Describe a management plan for urgent/emergent problems in the palliative setting including spinal cord compression, hypercalcemia, superior vena cava syndrome and terminal agitation.
  - 1.7.5. Distinguish between physician-assisted suicide, euthanasia and terminal sedation, and withholding and withdrawing therapy.
  - 1.7.6. Demonstrate an understanding of the personal, family and social consequences of lifethreatening illness (Palliative Care 3).
  - 1.7.7. Demonstrate cultural, gender, religious and aboriginal sensitivity in addressing end-of-life care.

- 1.7.8. Demonstrate the ability to develop a management plan that appropriately balances disease-specific treatment and symptom management according to the individual needs of the patient and family.
- 1.7.9. Demonstrate the role of the family physician in assessing and managing grief in patients and families including normal and atypical grief (Grief 1-4).
- 1.7.10. Identify and assess spiritual issues in end-of-life care (Palliative Care 3).
- 1.8. Establish and maintain clinical knowledge, skills and attitudes required in Women's Health Care.
  - 1.8.1. An awareness that many medical disorders manifest differently in women.
  - 1.8.2. An awareness of the widespread and complex health effects of sexual abuse on women and resources available to assist affected women.
  - 1.8.3. An awareness of effects on female patients regarding the public perception of women and body image.
  - 1.8.4. Obtain a detailed reproductive health history as part of a well woman visit including history of risk factors for STIs.
  - 1.8.5. Counsel a woman regarding reproductive and contraceptive choices (Contraception 1,3).
  - 1.8.6. Counsel a woman regarding safe sex practices (Sex 1, Sexually Transmitted Infections 1).
  - 1.8.7. Diagnose and manage menstrual disorders, and irregularities throughout the life cycle.
  - 1.8.8. Diagnose and manage infection/inflammation of the reproductive tract, and urinary tract, including STIs (Sexually Transmitted Infections 2,6,7; Vaginitis 1-3).
  - 1.8.9. Diagnose and manage acute & chronic abdominal and pelvic pain, always considering pregnancy as a possible cause (Abdominal Pain 3).
  - 1.8.10. Diagnose and initiate management of endometriosis
  - 1.8.11. Diagnose and manage urinary incontinence & uterovaginal prolapse.
  - 1.8.12. Screen for, detect and manage genital tract neoplasia (Cancer 2).
  - 1.8.13. Diagnose and undertake initial management of infertility (Infertility 1-6).
  - 1.8.14. Counsel a woman regarding normal physical, psychological changes to be expected at the menopause and options for their management (Menopause 1-8).
  - 1.8.15. Counsel a woman with an unwanted pregnancy regarding the choices available to her (Pregnancy 3)
  - 1.8.16. Identify and counsel women with eating disorders (Eating Disorders 2-6).
  - 1.8.17. Diagnose and manage breast lumps in women (Breast Lump 2).
  - 1.8.18. Counsel re recommendations and controversies of screening for breast cancer using clinical examination, self-examinations, and imaging and genetic testing (Breast Lump 1).
  - 1.8.19. Refer and provide primary care follow-up for breast cancer patients (Breast Lump 30).
  - 1.8.20. Initiate evaluation and treatment of victims of rape and sexual assault (including psychosocial and legal issues) (Rape/Sexual Assault 1-6).
- 2. Perform a patient centred clinical assessment and establish a management plan.
- 3. Plan and perform procedures and therapies for assessment and/or management.

# 3.1. Generally and in the care of adults:

- 3.1.1. Demonstrate the knowledge base required to effectively evaluate the indications for procedural and surgical procedures.
- 3.1.2. Demonstrate the ability to conduct a comprehensive pre-operative assessment and identify important peri-operative issues. This includes knowledge of testing required and indications for anaesthesia consultation.
- 3.1.3. Demonstrate awareness of the indications and contraindications of each procedure.
- 3.1.4. Demonstrate the ability to mentally rehearse the landmarks, technical steps and potential complications of each procedure.
- 3.1.5. Demonstrate knowledge of normal postoperative healing and the ability to identify and

manage post- operative complications, i.e. infection, wound dehiscence, keloid formation.

- 3.1.6. Demonstrate the ability to act effectively as a surgical assistant for major surgical procedure
- 3.1.7. Skin Based Surgery:
  - 3.1.7.1. Local anaesthetic infiltration and digital block
  - 3.1.7.2. Abscess incision and drainage
  - 3.1.7.3. Insertion of sutures--simple interrupted, vertical mattress, horizontal mattress and subcuticular
  - 3.1.7.4. Laceration repair (suture and tissue adhesive)
  - 3.1.7.5. Skin biopsy-shave, punch and excisional
  - 3.1.7.6. Excision of cystic and solid lesions i.e. epidermoid cysts and lipomas
  - 3.1.7.7. Cryotherapy
  - 3.1.7.8. Removal of foreign body
  - 3.1.7.9. Surgical management of ingrown toenail
- 3.1.8. Eye, ear, nose and throat procedural skills
  - 3.1.8.1. Instillation of fluorescein
  - 3.1.8.2. Slit lamp examination
  - 3.1.8.3. Removal of corneal or conjunctival foreign body
  - 3.1.8.4. Removal of cerumen
  - 3.1.8.5. Removal of foreign body from nose or ear
  - 3.1.8.6. Cautery for anterior epistaxis
  - 3.1.8.7. Anterior nasal packing
  - 3.1.8.8. Measurement of intraocular pressure
- 3.1.9. Gastrointestinal and genitourinary procedural skills
  - 3.1.9.1. Anoscopy
  - 3.1.9.2. Incision and drainage of a thrombosed external hemorrhoid
  - 3.1.9.3. Cryotherapy or chemical therapy of genital warts
  - 3.1.9.4. Aspirate breast cyst
  - 3.1.9.5. Pap smear
  - 3.1.9.6. Insertion and removal of an intrauterine device
  - 3.1.9.7. Endometrial aspiration/biopsy
- 3.1.10. Musculoskeletal procedural skills
  - 3.1.10.1. Splinting of injured extremities
  - 3.1.10.2. Reduction of minor dislocations/subluxations i.e. pulled elbow, finger dislocations
  - 3.1.10.3. Application of simple casts i.e. short arm cast, scaphoid cast, below knee walking cast
  - 3.1.10.4. Aspiration and injection of knee joint
  - 3.1.10.5. Aspiration and injection of the shoulder joint and subacromial bursa
  - 3.1.10.6. Corticosteroid injection for epicondylitis or plantar fasciitis
  - 3.1.10.7. Trigger point injection
  - 3.1.10.8.
- 3.1.11. Resuscitative procedural skills
  - 3.1.11.1. Intradermal, IV, IM and SC injections
  - 3.1.11.2. Venipuncture
  - 3.1.11.3. Peripheral intravenous line; adult and child
  - 3.1.11.4. Oral airway insertion
  - 3.1.11.5. Bag-valve-mask ventilation
  - 3.1.11.6. Endotracheal intubation
  - 3.1.11.7. Cardiac defibrillation

- 3.1.11.8. Lumbar puncture
- 3.1.11.9. Placement of transurethral catheter
- 3.1.11.10. Nasogastric tube insertion

# 3.2. In maternal and newborn care:

- 3.2.1. Judge uterine size in early pregnancy differentiate 8, 10, 12-week size uterus.
- 3.2.2. Assess fetal presentation.
- 3.2.3. Auscultate fetal heart
- 3.2.4. Diagnose small-for-dates, large-for-dates
- 3.2.5. Assess a woman's breasts and nipples for potential problems with breast feeding
- 3.2.6. Skillfully perform a normal vaginal delivery
- 3.2.7. Repair second degree perineal tears
- 3.2.8. Recognize 3rd and 4th degree tears
- 3.2.9. Recognize indications for episiotomy
- 3.2.10. Do and repair an episiotomy
- 3.2.11. Do ARM (artificial rupture of membrane)
- 3.2.12. Apply scalp electrode
- 3.2.13. Use a vacuum extractor or low forceps for failure to progress in the second stage
- 3.2.14. Manage shoulder dystocia
- 3.2.15. Manage cord prolapsed, unexpected breech
- 3.2.16. Manage important complications of the third stage such as retained placenta and postpartum hemorrhage, uterine inversion
- 3.2.17. Recognize uterine rupture in VBAC
- 3.2.18. Assist at a caesarean section

3.2.19. Recognize and manage the adverse effects labour and delivery may have on full-term and preterm infants, i.e. asphyxia – (causes, prevention, detection, sequelae), trauma, drugs, especially analgesia and anaesthesia.

- 3.2.20. Describe the principles and procedures for neonatal resuscitation (Newborn 3) and perform a neonatal resuscitation, including bagging, insertion of ET tube (insertion of umbilical vein catheter is optional) (Newborn 3,4).
- 4. Establish a plan for ongoing care and timely consultation when appropriate.
- 5. Actively facilitate continuous quality improvement for health care and patient safety, both individually and as part of a team.
- 6. Establish an inclusive and culturally safe practice environment.
- Contribute generalist abilities to address complex, unmet patient or community needs and emerging health issues, demonstrating community-adaptive expertise.
   To recognize and emergine and
  - 7.1. To recognize and appropriately manage acute, urgent and emergent presentations:
    - 7.1.1. Awareness and management of anaphylaxis (Allergy 4,7,8,9)
    - 7.1.2. Appropriate management of acute presentations of chest pain (Chest Pain 1,2,3,5)
    - 7.1.3. Recognize and manage the acutely ill, new or diagnosed diabetic patient and manage appropriately, including management of hypoglycemia, DKA and hyperglycemia (Diabetes 3,6,7)
    - 7.1.4. Recognize and manage potentially life-threatening upper respiratory presentations such as epiglottitis and retropharyngeal abscess (Upper Respiratory Infection 1).
    - 7.1.5. Appropriate management of epistaxis (Epistaxis 1-7)
    - 7.1.6. Appropriate management of poisoning including recognition of important toxidromes (Poisoning 2-7)
    - 7.1.7. Appropriate investigation and management of the febrile patient (Fever 4-7).
    - 7.1.8. Appropriate assessment, management and, if necessary, referral of patients presenting with potential fracture (Fractures 1-8), lacerations (Lacerations 1-7), bite wounds and burns.

- 7.1.9. Appropriate assessment, stabilization, management and referral of patients presenting with multiple or complicated trauma (Trauma 1-10).
- 7.1.10. Appropriate assessment, investigation and management of acute abdominal pain (Abdominal Pain 1, 4, 6) and GI bleed (Gastro-intestinal Bleed 1-6).
- 7.1.11. Appropriate first line management of common infections (Fever 2, 3; Infections 1-6).
- 7.1.12. Appropriate investigation and management of dehydration and electrolyte disturbances (Dehydration 2-5)
- 7.1.13. Appropriate investigation and management of delirium (Dementia 2) and loss of consciousness (Loss of Consciousness 1-11).
- 7.1.14. Appropriate assessment and management of new-onset headache (Headache 1,2)
- 7.1.15. Appropriate assessment, stabilization, investigation and management of an acute seizure episode (Seizures 1-4)
- 7.1.16. Appropriate recognition, assessment, management and referral of ophthalmologic emergencies (red eye (Red Eye 1-9), acute visual loss, trauma etc.)
- 7.2. To develop a comprehensive approach to Domestic Violence (Domestic Violence 1-4).
- 7.3.To develop a comprehensive approach to Sexual Assault (Sexual Assault (Rape/Sexual Assault 1-5).
- 7.4. To develop a compassionate and effective approach to patients in crisis (Crisis 1-11).
- 7.5.To develop a compassionate and effective approach to the Difficult Patient (Difficult Patient 1-8).
- 7.6.To develop a compassionate and effective approach to patient requests for Medical Assistance in Dying (MAID)
  - 7.6.1. Understand the current ethical, legal and regulatory environment concerning MAID.
  - 7.6.2. Understand and acknowledge the patient's request in the context of their experience of suffering and within the continuity of a palliative approach to end of life care.
  - 7.6.3. Appropriate assessment of issues which may compromise patient autonomy (e.g. competence, depression).
  - 7.6.4. Provide compassionate, non-judgmental support in their decision process.
  - 7.6.5. When indicated, appropriately provide (or refer for provision) MAID according to accepted protocols.

	Collaborator					
The learning environment will provide opportunities for residents to:						
1.	Work effectively with others in a collaborative team-based model for patient care generally and specifically to.					
	1.1. Collaborate in the care of the elderly through:					
	1.1.1. Incorporating contributions from inter-professional team members into a thorough functional assessment.					
	1.1.2. Recognize the role of the family physician as part of an inter-professional team in Long Term Care					
	1.2. Collaborate in the care of vulnerable and underserviced populations by demonstrating an openness to and respect for appropriate communication with other professionals, including cultural interpreters and translators, legal aid workers, CAS workers, social workers, and members of other community support groups.					
2.	Work collaboratively in different models of maternity care including team-based approaches.					
3.	Recognize and facilitate necessary transitions in care with other colleagues in the health professions, including but not limited to shared care, transfer of care and/or handover of care to enable continuity and safety.					

#### Communicator

The learning environment will provide opportunities for residents to:

1. Develop rapport, trust and ethical therapeutic relationships with patients and their families.

**1.1.** Develop the confidence and skills to manage routine patient encounters **1.2.** Develop the confidence and skills to manage difficult or emotionally intense situations or interactions, including:

- 1.2.1. When confronted with difficult patient interaction seek out information about patient's life circumstances, current context and functional status to better understand the patient's frame of reference.
- 1.2.2. Identify own attitudes and beliefs, which may be contributing to the situation.
- 1.2.3. Look for and attempt to limit the impact of personal feelings [e.g. anger, frustration] and remain vigilant for new symptoms and physical findings to be sure they receive adequate attention.
- 1.2.4. Work towards establishing common ground and an atmosphere of safety and trust.
- 2. Elicit and synthesize accurate and relevant information from, and perspectives of, patients and their families.
- 3. Share health care information and plans with patients and their families generally and in the following specific situations:

#### 3.1. Communicate effectively with children including:

- 3.1.1. Adapt communication methods based on the age of the child always attempting to maximize the child's participation in their medical care.
- 3.1.2. Effectively evaluate the illness experience and influence on relationships for children and their families especially for children with chronic conditions or critical illness.
- 3.1.3. Find common ground with children and adolescents as well as parents in managing medical or developmental issues cognizant of personal/cultural differences in parenting.

### 3.2. Develop skill in the proper use of interpreters:

- 3.2.1. To demonstrate the appropriate use of a medical interpreter in patient encounters.
- 3.2.2. To demonstrate a working knowledge of the translation resources in the community.
- 3.3. Recognize the communication needs, both verbal and written, of patients who are illiterate, semi-literate or who are literate in a language other than English
  - 3.3.1. To constantly maintain awareness that a patient may not be able to read distributed materials, prescription information, etc. and to avoid putting the patient into an uncomfortable position with respect to his/her literacy.
  - 3.3.2. To provide materials appropriate to patient's literacy level and linguistic ability, when possible.

### 3.4. Develop skills in the unique challenges of communication in palliative care situations:

3.4.1. Demonstrate the ability to provide supportive counselling and resources to those coping with loss.

- 3.4.2. Demonstrate the ability to discuss advance care planning, including developing, revising and implementing advance directives with patients and families.
- 4. Engage patients and their families in developing plans that reflect the patient's health care needs, values and goals.
  - 4.1. Develop a common understanding on issues, problems and plans with patients and their families in order to develop, provide and follow-up on a shared plan of care.
  - 4.2. Develop effective motivational interviewing skills in counseling patients around lifestyle issues and prevention of disease (Lifestyle 2-5).
- 5. Document and share written and electronic information about the medical encounter to optimize clinical decision making, patient safety, confidentiality and privacy.

# Health Advocate

The learning environment will provide opportunities for residents to

- 1. Respond to an individual patient's health needs by advocating with the patient within and beyond the clinical environment.
  - **1.1.** Recognize the role of Social Determinants of Health in the health of their patients and advocate with them as active partners for system-level change in a socially accountable manner.
  - 1.2. Identify patients who are vulnerable or marginalized and assist them in issues (e.g. housing, mobility, nutrition, access to financial resources etc.) that promote their health.
  - 1.3. Identify patients at risk because of social, family or other health situations; work appropriately with protective services when indicated.
- 2. Act as a resource to their community, assess and respond to the needs of the community by advocating with them as active partners for system-level change in a socially accountable manner.
  - 2.1. Demonstrate awareness of community resources to help patients in the community
  - 2.2. Learn principles and strategies for effective advocacy
  - 2.3. Become aware of important societal and geopolitical trends which will affect their patients' health such as climate change, global patterns of migration, economic globalization and patterns of income redistribution within Canada

#### Leader

The learning environment will provide opportunities for residents to:

- 1. Contribute to the improvement of comprehensive, continuity-based, and patientcentred health care delivered in teams, organizations and systems. 1.1. Explore leadership roles and the skills required for these roles.
  - **1.2.** Participate in activities that contribute to the effectiveness of their own program, primary practice, healthcare organizations and systems. Specifically:
    - 1.2.1. Participation in program, healthcare organization and/or community committees
    - 1.2.2. Become familiar with an effectively organized medical record
- 2. Engage in stewardship of health care resources.
  - 2.1. Recognize the need to balance the individual patient's concerns against the responsible use of public resources.
  - 2.2. Recognize the impact of high-resource vs. low-resource public health interventions on population health
- 3. Demonstrate collaborative leadership in professional practice to enhance health care.
- 4. Manage career planning, finances, and health human resources in a practice including developing familiarity with:
  - 4.1. Different methods of compensation
  - 4.2.Billing procedures and strategies
  - 4.3. Issues around commencing practice such as evaluating practice and locum opportunities, licensing, group versus solo practice, staffing issues, office equipment and layout
  - 4.4. Issues around personal and professional financial management such as accounting, tax planning, budgeting and debt management, insurance.

### Professional

# The learning environment will provide opportunities for residents to:

- 1. Demonstrate a commitment to patients through clinical excellence and high ethical standards.
- **1.1.** Demonstrate appropriate respect for the patient's safety and dignity, in particular appropriate boundaries, chaperoning and draping.

# **1.2.** Demonstrate commitment to the patient's good.

- 1.2.1. Understanding ethics as an integral part of every clinical encounter, not just when controversies arise.
- 1.2.2. Understand fundamental ethical principles of family medicine, including respect for patient dignity and beneficence-in-trust.
- 1.2.3. Understand and demonstrate specific professional qualities that stem from commitment to the good of their patients, such as effacement of self-interest, compassion, intellectual honesty, justice and prudence.
- 1.2.4. In cases where there is ethical conflict between physician and patient, be prepared to transfer care to another physician if appropriate.

# 1.3. Demonstrate ethical decision making and valid consent

- 1.3.1. A patient-centered approach to key ethical issues in clinical practice, such as informed consent, privacy/confidentiality, withholding and withdrawing medical interventions, surrogate decision making and advance directives.
- 1.3.2. An appreciation of their own roles and responsibilities in decision making as well as those of patients, and respectfully discuss and manage value differences and conflicts.

# 1.4. Demonstrate awareness of potential areas of conflict.

- 1.4.1. The issues of allocation of scarce resources, gatekeeper role and prioritization of need and how these relate to the duty to the patient.
- 1.4.2. Situations where there is an obligation to a third party that may conflict with the duty to the patient.
- 1.4.3. The issues that may arise in a physician's relationship with the pharmaceutical industry.
- 1.4.4. The unique issues and responsibilities around prescribing controlled drugs.
- 1.4.5. Set clear boundaries with respect to appointment length, prescribing practices and accessibility especially with those patients who have a personality disorder (Personality Disorder 1).
- 1.4.6. Take steps to end the physician-patient relationship when it is in a patient's best interests and do so according to accepted guidelines.

# **1.5.** Demonstrate professional behaviour in the area of Patient Safety and Errors.

- 1.5.1. Develop an awareness for cognitive biases and other aspects of critical thinking and how they may play a role in patient safety and medical errors.
- 1.5.2. Develop and demonstrate skills in error/adverse event disclosure and apology.
- 1.5.3. Demonstrate awareness of the physician's role in prevention of iatrogenic infections and compliance with guidelines around hand washing.
- 2. Demonstrate a commitment to society by recognizing and responding to societal needs in health care.
- 2.1. Develop a sense of cultural humility and the skills of cultural competence which enable constructive, helpful and professional provision of medical care to members of different cultural and socioeconomic groups.
  - 2.1.1. To demonstrate an awareness and sensitivity to the patient's culture, beliefs values, gender and age.

- 2.1.2. To define her or his own background, culture, beliefs, values and biases and the impact these may have on interactions with patients.
- 2.2. Develop an awareness of professional opportunities available to physicians interested in a career in Global Health in Canada (including in aboriginal populations, inner cities, and with immigrant and refugee populations) and overseas.
- 2.3. Become aware of the concept of health as a human right and demonstrate knowledge of the Canadian Charter of Rights and Freedoms and the Universal Declaration of Human Rights as they pertain to health.
- 3. Demonstrate a commitment to the profession by adhering to standards and participating in physician-led regulation.
- **3.1.** Demonstrate awareness of obligations to report patients at risk of harm to themselves or others.
- **3.2.** Demonstrate understanding of privacy legislation and physician confidentiality.
- **3.3.** Demonstrate awareness of obligations to report situations of abuse or neglect concerning children, the elderly and other vulnerable populations.
- 3.4. Demonstrate sensitivity to potential ethical issues in their collaborative relationships with nonmedical colleagues, institutions, professional associations, government bodies, etc.
- 3.5. Contribute to the activities of professional associations locally, provincially and nationally.
- 4. Demonstrate a commitment to physician health and well-being to foster optimal patient care.
- 4.1. Demonstrate self-awareness and self-care while caring for their patients.
- 4.2. Display a commitment to personal health and balance between personal life and professional responsibilities.
- 5. Demonstrate a commitment to reflective practice.
- 5.1. Demonstrate a recognition of their own strengths and limitations and when to ask for help.
- 5.2. Demonstrate a mindful approach to practice by maintaining composure and equanimity, even in difficult situations, and by engaging in thoughtful dialogue about values and motives.

#### Scholar

The learning environment will provide opportunities for residents to:

- 1. Engage in the continuous enhancement of their professional activities through ongoing learning.
  - **1.1.** Develop evidence-based practices for the medical care of their patients
  - **1.2. Maintain and enhance their professional activities through ongoing self-directed learning based on reflective practice. (Learning 6-8)**
- 2. Teach students, residents, the public and other health care professionals.
- 3. Integrate best available evidence into practice considering context, epidemiology of disease, comorbidity, and the complexity of patients.
  - 3.1. Critically evaluate medical evidence and apply this evidence in the care of their patients.
  - 3.2. Develop skill at efficiently answering point of care questions using a variety of evidence-based strategies.
- 4. Contribute to the creation and dissemination of knowledge relevant to family medicine.
  - 4.1. Complete a research project and presenting it to their colleagues and department.
  - 4.2. Participate in and conduct quality improvement activities.

#### **CURRICULUM DELIVERY**

One of the challenges with a distributed, multiple-site program such as Dalhousie's is that of delivering the curriculum at each site in a comprehensive and equitable manner. To accomplish this, the curriculum will be delivered using a variety of methods at each site. This will include, but not be limited to:

- Clinical Learning Experiences (both Family Medicine and other Specialty-based)
- Hospital/Department rounds
- Postgraduate Medical Education modules (PGME) both video conference and e- modules
- Academic Curriculum (both on-site and distributed)
- Problem-based Small Group Learning (PBSGL)
- The Annual Family Medicine Education Weekend

Some explanatory comments about the Academic Curriculum in particular are in order. The Academic Curriculum is a selection of clinical topics that have been deemed essential to present to residents in an academic manner. Each site will have different strategies to accomplish this (for example academic half days each week or academic days during core clinical learning experience). The Program Curriculum Committee has developed a list of topics (see below) that must be delivered at each site. In addition to these topics, each site has developed other topics, based on local interest and expertise.

Mandatory Academic Curriculum Topics 2022-2023				
Abdominal Pain: Office Approach	Headache			
Abnormal Uterine Bleeding	Hypertension			
Abortion Care	Immigrants			
ADHD	Immunization/Public Health			
Adolescent Health	Indigenous Health			
Allergies/Anaphylaxis	Infertility			
Anemia	Inflammatory Bowel Disease			
Antimicrobial Stewardship	Ischemic Heart Disease			
Anxiety	LGBTQ+ Health			
Arrhythmia/Atrial Fibrillation	Low Back Pain			
Arthritis: OA/RA/Gout	Lifestyle Medicine			
Asthma	MAID			
Boundary Issues	Menopause			
Breastfeeding and Feeding of Infants	Newborn Care (first 28 days)			
Burnout	Obesity			
Cerebrovascular Disease	Occupational Medicine			
Congestive Heart Failure	Opioid Prescribing and Chronic Non-Cancer Pain			
Competency Assessment	Osteoporosis			
Concussion	Periodic Health Screening			
Contraception	Personality Disorders			
COPD	Poisoning			
COVID-19	Poverty			
Dementia	Prostate Disease			
Depression	Post-Traumatic Stress Disorder			
Developmental Disabilities	Quality Improvement/Patient Safety			
Diabetes	Red Eye			
Diarrhea	Seizure Disorders			
Dizziness	Sexually Transmitted Infections			
Domestic Violence and Abuse	Skin Disorders			
Dyspepsia, GERD, Gastritis and	Substance Lies Disorder			
Peptic Ulcer Disease	Substance Use Disorder			
Ethics	Thyroid Disease			
Evidence Based Medicine	lence Based Medicine Ulcers and Wound Care			
First Trimester Pregnancy Care	ester Pregnancy Care Vaginitis			
Frailty	Venous Thromboembolism			
Gastrointestinal Bleed				

# MANDATORY ACADEMIC CURRICULUM TOPICS

#### PORTFOLIOS

At the moment, the Dalhousie Residency does not require a formal learning portfolio. Evidence shows that reflection on clinical experience improves and deepens learning. We use the Periodic Review to aid in this reflection. This process includes much of the data that would be in a portfolio. The Periodic Review involves resident reflection on their own, and with the Site Director or designate, to develop individualized learning plans. Evidence shows that guided self- reflection is best at promoting growth. Residents may also choose to construct their own individualized learning portfolios. With this in mind, residents are encouraged to consider documenting their learning throughout the residency. Help and guidance are available for residents who are constructing a portfolio. Some of the portfolio can be documented through One45.

Examples of items that could be included in a portfolio:

Procedures completed

Conferences attended

Seminars presented – with evaluations Clinical questions that have been researched Chronic problems managed

Deliveries completed Pregnant women followed Learning plans Benchmarking assessments Self, peer or observer assessments Chart notes

Letters from patients

Worksheets, checklists or logbooks of agreed upon activities Notes from meetings between the resident and his/ her teachers Samples of work demonstrating clinical competence Evidence of self-assessment and self-reflection

Narratives describing personal experience and critical incidents Copies of summative evaluations.

# ASSESSMENT, EVALUATION and FEEDBACK

To ensure that residents are meeting curricular and program objectives, assessment of resident performance is conducted at regular intervals. The two main types of assessment are *formative* (providing timely feedback to help residents gauge their performance and take corrective action as necessary) and *summative* (ascertaining whether residents have met the stated objectives). The majority of assessment in the Dalhousie Family Medicine program is formative in nature.

Much formative feedback is delivered verbally during Clinical Learning Experiences (CLE). However, to help guide learning it is beneficial to document this feedback. In Family Medicine programs across the country, the documentation of this type of feedback typically occurs using 'field notes.' These daily feedback forms, be on paper or in electronic form, simply capture the output of the process of feedback that occurs between preceptor and resident.

Collected field notes help provide evidence of competence that is used to inform the program of your progress. Data collected on field notes is often used to back up statements of performance on your In-Training Assessment Reports (ITARs) that are completed for each of your rotations.

The remainder of this section summarizes the components of assessment and evaluation and is divided into the following:

- Policy on the Evaluation Process
- Field Notes
- Easy to Follow Instructions for Using Field Notes
- Field Note Sample
- Characteristics of a Good Field Note
- Template for In-Training Assessment Process
- In-Training Assessment Report (ITAR) for Family Medicine
  - Professionalism
    - Selectivity
    - Clinical Reasoning
    - Patient-Centered Approach
    - Procedure Skills
    - Communication Skills
    - Overall Progress to Date
- Benchmarking
- Periodic Review Worksheets
  - Part A: Resident Reflection
  - Part B: Program
  - Part B: Cumulative

If you have any questions about evaluation and assessment during residency, feel free to contact your site evaluation coordinator or the Chair of the Evaluation Sub-Committee, Dr. Keith Wilson (<u>kwwilson@dal.ca</u>).

#### **Assessment Tools and Tasks**

As mentioned above, much of your assessment in Family Medicine residency is formative in nature. However, in following a Programmatic Assessment model, low-stakes assessments collectively are used to determine competence in learning objectives. The main components of the Dalhousie Family Medicine's assessment model include Field Notes, In-Training Assessment Reports (ITARs), Benchmarking, Periodic Review and Competence Committee. Briefly these concepts are outlined here and further information can be found later in this document. Additionally, the Program's In-Training Assessment Processes table listed below summarizes the various assessment tasks and responsibilities.

#### **Field Notes**

Feedback and assessments are essential to your education. Feedback is most effective when it occurs immediately

after an encounter, and with coaching. We suggest that you and your preceptor complete **a field note for each half day of clinical experience**. This will give you a wealth of information on how to practice effectively and will encourage reflection and deeper learning on your part. You will be given a (prescription sized) pad of these forms for clinical learning experiences that are not using the electronic field notes. You may be asked to complete a certain number of these field notes per rotation depending on your site. However, it is most important to remember that the field note is simply **documentation of a process that is already taking place**: the feedback itself is the most important part.

Across the programme, during your core Family Medicine rotations and regularly at Integrated Sites, you will be primarily using electronic field notes. The same 'rules' apply in terms of expectations. You will be provided login information to the "Narrly" field note system at your site. With this system, you will be able to track your progress and monitor for adequate sampling. Additionally, you and your preceptor/supervisor can initiate field notes. More information on completing field notes is outlined below in this document.

#### **In-Training Assessment Reports**

Your preceptors will use observation and documentation from Field Notes to summarize your progress in the Skill Dimensions as outlined by the College of Family Physicians of Canada. A final Family Medicine ITAR is shown later in this document.

#### Benchmarking

As part of the assessment of your overall progress, there are several key areas that may not fully capture your competence development using Field Notes. The Family Medicine Benchmarks are a way of capturing these concepts with expectations leading to independent/unsupervised practice by the end of your residency programme. Twice annually, you will meet with your primary preceptor or designate to gauge your progress in the benchmarks using self-reflection and discussion. This is a formative exercise and is outlined in more detail later in this document.

#### **Periodic Review**

The Periodic Review is an opportunity for you to self-reflect on your progress thus far and to thinking about your own learning objectives going forward. This happens at least twice per year and requires self-reflection coupled with guidance from your Site Director, Evaluation Coordinator or designate at your site. The outcome of this process is usually a co-created learning plan. The documents that are used to guide this process are included below.

#### **Competence Committee**

In order to determine whether you are ready to progress to the next level of your residency, all of your assessment data is reviewed at least two times per year by your site's Competence Committee. The committee's goal is to ensure that all residents achieve the requirements of the Program, leading to successful completion of your residency. The Competence Committee allows for an informed decision-making process that looks at triangulating your assessment data in order to ascertain your progression towards competence. This approach ensures support for resident learning over time. The committee reports to the Residency Program Committee Executive and Postgraduate Medical Education (PGME) regularly. Additionally, if a Competence Committee Executive formulates decisions around the need for a Formal Enhanced Learning Plan to help the resident achieve the desired competencies.

#### **Policy on the Evaluation Process**

For a resident to successfully complete the Program and have their name submitted to the College of Family Physicians of Canada (CFPC), all of the following documentation must be in order:

- An In-Training Assessment Report (ITAR) for each CLE successfully completed.
  - In our integrated sites, a Family Medicine ITAR will be completed every two months in the first four months of residency then every three months throughout residency. These ITARs are to be populated by data from field notes from core family medicine preceptors and the consultant

preceptors that provide longitudinal CLEs for the residents at these sites.

- For block-based sites, ITARs will be completed for each clinical learning experience. CLEs longer than four weeks in duration will have both a mid-point and final ITAR.
- Core Family Medicine clinical learning experiences will have a mid-point and final ITAR populated by data from field notes.
- Evaluation of Service (EOS), Learner Assessment of Family Medicine Preceptor as well as Resident Assessment of Consultant Faculty for all CLEs.
- The resident must demonstrate and document appropriate progress towards competence to enter unsupervised practice. This progress will be assessed by a detailed Periodic Review at a meeting between the resident and the Site Director (or the Site Director's designate), usually held twice per year. Field notes will be a key component of this process as they provide written documentation of performance and feedback in the clinical environment.

#### (For the complete Policy on the Evaluation Process see One45 Handouts and Links)

You will receive email notifications for all clinical learning experience assessments (mid-term, final and half-day back)

To log onto the electronic evaluation system, follow these steps:

- Go to: www.med.dal.ca
- Click on: One45 Web Eval (left side menu)
- You will receive an e-mail with your username and password and instructions on how to access the system once an evaluation has been sent out for you.

#### **Evaluation of Service and Evaluation of Preceptor**

According to University regulations your feedback on the Service and on your preceptor is mandatory for each Clinical Learning Experience (CLE) you complete. You will receive a notice and forms electronically through One45. We require **<u>both</u>** an evaluation of service and an evaluation of the supervisor(s).

# **TEMPLATE FOR IN-TRAINING ASSESSMENT PROCESS**

Dalhousie Family Medicine's						
In-Training Assessment Processes						
ITA Tasks/Steps Observe, document, and provide feedback during daily clinical activities (Formative)	<ul> <li>Description</li> <li>Field notes</li> <li>Clinical Feedback Forms</li> <li>Patient feedback forms</li> </ul>	Learner Roles The learner will: • seek opportunities to be observed • seek feedback • participate in a process of reflective learning with documentation	Faculty/Staff Roles Assessors in partnership with residents:     seek opportunities to     observe performances     provide feedback     participate in reflection of     the resident's clinical     practice with     documentation			
Collect and organize documentation within a framework	<ul> <li>Resident portfolio (file) – a collection of evidence about performance, including field notes, ITARs and other performance assessments</li> </ul>	The learners will organize documented observations according to: • learner's needs • objectives • program requirements	<ul> <li>Administrative staff compile and organize the resident's file with all relevant data for review minimum three times annually with the Site Director or designate (Periodic Review).</li> <li>For paper field notes, one copy of the field note is retained by faculty for use in completing ITARs and after given to Site administrative staff for placement on the permanent file.</li> <li>Electronic Field Notes are compiled through Narrly</li> </ul>			
Periodically review and reflect on progress based on all documents available	Periodic Review	<ul> <li>In order to systematically develop competence in comprehensive full scope family medicine, the resident will: <ul> <li>use the CFPC Assessment Objectives to seek guidance for their self-assessment.</li> <li>also participate in a process of guided self- assessment with the use of reflection during the periodic review process with their site director, program director or designate.</li> <li>review and discuss benchmarking with their primary preceptor to assess their level of independence three times annually prior to their periodic review.</li> </ul> </li> </ul>	<ul> <li>The assessor will:</li> <li>Be familiar with the competency requirements (CFPC Assessment Objectives) with which they are required to assess the learner.</li> <li>Site Director, Enhanced Skills Program Director or designate will review progress towards competence with the resident providing feedback and discussion with reflection to determine if the curriculum or learning plans require modification (three times annually).</li> <li>Primary preceptor will review benchmarks with the resident to assess their level of independence (three times annually).</li> </ul>			
ITA Tasks/Steps	Description	Learner Roles	Faculty/Staff Roles			
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Adjust and adapt learning activities	<ul> <li>Identifying resources, modify curriculum, Identify target goals</li> <li>Modifying/customizing assessment (formative and summative if needed)</li> <li>Determine frequency and/or type of guided review given modifications in training</li> </ul>	Become actively involved in implementing the adapted learning experiences needed to achieve the competencies required for their future practice. Collaborate with faculty: • to identify personal goals for development and/or remediation • to identify needed resources • to modify the curriculum • to customize the assessment	Primary Preceptor and/or the Site Director and/or the Program Director works with the resident to establish target goals. They will identify appropriate resources with the needed modification of the curriculum. As appropriate, the formative and summative assessments may be customized.			
Update learning plans	<ul> <li>Plan who takes action and what is required for the next phase of training.</li> <li>Discussion with the resident to clarify plan for daily activity and roles of clinical supervisors</li> </ul>	Actively participates in developing the learning plan Review competencies necessary for their future practice to develop an appropriate series of learning plans with their preceptor throughout their residency by periodically reflecting on their:	<ul> <li>Primary Preceptor meets with the resident minimum two times annually to review their progress specific to Family Medicine and establishes their learning objectives with a learning plan.</li> <li>The Site Director and/or designate meets with the resident minimum two times annually to review their overall progress and establishes their learning objectives with a learning plan.</li> </ul>			
Report	<ul> <li>Progress report to appropriate administrators</li> <li>Documentation for accreditation or certification requirements</li> </ul>	<ul> <li>Take ownership with reporting of the learning plan through:</li> <li>discussion and documentation for implementation with appropriate faculty</li> <li>Establish and document the necessary learning experiences to achieve the required competencies</li> </ul>	<ul> <li>The Primary Preceptor and/or the Site Director or their designate ensures: <ul> <li>both the resident and faculty have responded to the learning needs with appropriate documentation</li> <li>progress reports are placed in resident's file by administrators</li> <li>The Resident file will be a permanent record for review</li> </ul> </li> <li>The Program Director reports to CCFP that resident is ready to sit the exam and when training is completed.</li> </ul>			

# EASY TO FOLLOW INSTRUCTIONS FOR USING FIELD NOTES

This section explains the rationale for field notes as a method of evaluation, instructions for completing a field note and provides a sample field note.

# What the process should deliver:

- During daily clinical work, encourage the gathering and documentation of case-specific comments and feedback with reflection and coaching from preceptors to residents.
- Consistency across the program, with properly documented feedback to stimulate improvement in competence:
  - based on performance through a wide spectrum of skills
  - linked to the CFPC Evaluation Objectives (key features and observable behaviours)
- A guide to teachers and learners, with evidence that competence is developing by:
  - · helping inform ITARs, periodic reports, performance reviews, and resident's portfolio
  - acting as an aide memoire for periodic discussions on resident progress

# On the selected clinical sessions:

- Observe an encounter, part of an encounter or simply discuss the case with the resident as close to the time of the encounter as possible (preferably the same day).
- It is very important that both the preceptor and the resident are engaged in the discussion reflecting on the clinical situation. This requires face-to-face dialogue, with input from both parties during completion. Often it is helpful to have the resident do some or all of the writing of the field note, noting the demographic information, the problem/situation discussed, and the feedback given. This facilitates guided self-reflection.
- Indicate on the note if a direct observation has been involved. We encourage residents and faculty to use direct observation wherever possible as it can elicit more meaningful, directed feedback.
- Use the "Guide to the CFPC Evaluation Objectives" found on the field note pad to choose **one** phase of the encounter and **one** competency of **one** skill to be discussed. This encourages specific feedback to reinforce the take home message.
- The responsibility to initiate the discussion should be shared between faculty and resident.

# Important Background Information

Click here to go to the CFPC's Assessment Objectives for Certification in Family Medicine

Or go to <u>www.cfpc.ca</u> and look under "Home > Exams, Educations & CPD > Educational Frameworks and Reference Guides > Assessment Objectives for Certification in Family Medicine" for the Assessment Objectives for Certification in Family Medicine and other tools.

# Feedback: To Be Shared, Specific and Focused

- Ensure the resident starts the discussion with their impressions.
- Together develop positive statements "continue" with shared "suggestions for improvement".
- Common reflection is an important part of the process and facilitates deeper learning.
- On selected occasions explore with the resident the pertinent Key Feature or Observable Behaviour from the CFPC Evaluation Objectives.
- Reinforce the take home message/coaching point. It is recommended to stick with one pertinent and actionable point.

# Mid and End of Clinical Learning Experience

- Ensure direct observations/discussions have covered a variety of phases, skills and topics.
- Review your carbon copies of the field notes and electronic field notes prior to assessment discussions and ITAR completion with the resident. If you have carbon copies of field

notes, return them to the site administrator for storage in your resident file.

• The resident keeps the other copy for their file/portfolio to be used in discussion with their primary preceptor and/or Site Director for the ongoing demonstration of their progress towards competency.

### **Examples of Completed Field Notes:**

**Procedure:** IUD Insertion; **Skill Dimension:** Procedural Skills; **Competency:** Informed Consent & Preparation; **Domains:** Office/Women's Health Care

**Continue:** Preceptor: "What do you think went well there? Resident: "I think the patient appreciated that I explained what was going to happen during the whole procedure." **Suggestions for improvement:** Preceptor: "I usually try to plan for what I will need during the procedure and have it ready prior to starting."

**Follow up:** Preceptor: "Please always review our check list for IUD insertion while preparing for the procedure."

**Phase:** History; **Skill Dimension:** Communication; **Competency:** Non-Verbal; **Domain:** Office/Care of Adults

**Continue:** Resident: "As we discussed the last time I maintained good eye contact." **Suggestions for improvement:** Preceptor: "I noticed you appeared to invade her personal space. If you try to stand back a little further it may improve your patient's comfort."

Follow up: Preceptor: "Perhaps we could video you this afternoon so you could see for yourself."

**Problem:** Ectopic Pregnancy; **Phase:** Investigation; **Skill Dimension**: Selectivity; **Competency:** Establishes Priorities; **Domain:** Emergency/Women's Health Care

**Continue:** Resident: "I identified the GYN/OBS history and the possibility of an ectopic pregnancy." Preceptor: "Well done! It was great you used the key features for abdominal pain to help with this." **Suggestions for improvement:** Preceptor: "Perhaps the next step is to understand the urgency for immediate further investigation and treatment and how to arrange for that in our community." **Follow up:** Preceptor: "Tomorrow morning after rounds lets discuss how to best use the ER and X-ray in urgent situations."

**Problem**: Multiple Medical Problems; **Phase:** Management & Treatment; **Skill Dimension:** Clinical Reasoning; **Competency:** Set Goals/ Objectives; **Domain:** Office/Care of the Elderly **Continue:** Resident: "I dealt with most of the problems she presented to me getting her flow sheets for diabetes and hypertension done."

**Suggestions for improvement:** Preceptor: "Thanks for going back when I noticed your description about her frequent falls was more limited than some of the notes on other less critical problems. With a patient like this I try to identify all the presenting problems early then put aside the less important today to deal properly with the more critical."

**Follow up:** Preceptor: "I think the Key Features on Multiple Medical Problems may help, please review them for discussion with me tomorrow morning."

# FIELD NOTE SAMPLE

A - History D - Physical B - Diagnosis E - Procedur C - Referral F - Follow-U	e H - Investigation
Selectivity 1. Appropriately Focused 2. Appropriately Thorough 3. Establishes Priorities 4. Urgent vs. Non-Urgent Clinical Reasoning 5. Hypotheses / Diff. Dx 6. Gather Data (Hx & Px) 7. Interpret Data 8. Make Decisions 9. Set Goals/Objectives Professionalism 10. Responsible/Reliable/ Trustworthy 11. Knows Limits 12. Flexible / Resourceful 13. Evokes Confidence 14. Caring / Compassionate 15. Respect/Boundaries/ Availability 16. Collegial 17. Ethical / Honest 18. Evidence Influence 19. Community Responsive 20. Good Balance 21. Mindful Approach	Patient Centered Approach         22. Explores Disease and Illness         (Feelings, Ideas, Function &         Expectations)         23. Whole Person/Context         24. Common Ground         25. Builds Relationship         26. Health Promotion / Prevention         27. Being Realistic         Procedure Skills         28. Decision to Act         29. Informed Consent &         Preparation         30. During Procedure         (Comfort/Safety)         31. Technical Skills         32. If Problems: Reevaluate         33. After Care / Follow-Up         Communication with both         Colleagues and Patients         34. Listening Skills         Language Skills         35. Verbal         36. Written         37. Charting         Non-Verbal Skills         38. Expressive         39. Receptive         40. Culture and Age         Appropriateness         41. Attitudinal

Domains of Care		
Location of Care	Lifecycle	
a. Office	g. Palliative Care	
b. Emergency	h. Men's Health Care	
c. Hospital	i. Women's Health Care	
d. Home	j. Care of Adults	
e. Long Term Care	k. Care of the Elderly	
f. Community	I. Care of Children and Adolescents	
	m. Maternal and Newborn Care	

l – Dalhousie University	Field Note Department of Family	/ Medicine
Date: Lea	arner:	De
Supervisor:	Directly Observed	Yes No
Problem/Procedure:		- 12
Phase:		
Skill:		
Domains:		
Continue:		
Suggestions for Improvement:		
Follow Up:		
Learner's Initials	Supervisor's Initials	

# CHARTACTERISTICS OF A GOOD FIELD NOTE

# Purposes of a Field Note:

- a. For the Learner: support further development
- b. For the Clinical and Academic Coach: provide evidence to support assessment, judgement around competency development and a prescription for future growth
- c. For the Program: document the learners' path to support program summative decisions concerning program extension, enrichment, completion or termination

# Principles:

- a. Field Notes do not replace feedback\*, they only document it.
- b. In general terms, there are parts of clinical encounters that require thinking/problem solving (higher order skills<sup>\*\*</sup>) beyond basic knowledge. Focusing on these areas better support competency development and assessments.
- c. Not all Field Notes require direct observation of the patient encounter but all Field Notes do require direct involvement and reflective discussion with the resident. Think broadly for sources of feedback and Field Notes... i.e. a Field Note could be based on their clinical reasoning following a discussion and/or chart review, witnessing their collaboration with AHC, professional behaviours, leadership skills, etc. Having said this, we encourage as much direct observation as possible as it leads to more actionable feedback.
- d. Competency-based assessment requires looking for patterns of performance and trajectory. If there is a previously identified area needing improvement, follow up on this is essential to ensure that improvement/ growth has occurred.
- e. Field Notes alone are not sufficient to ascertain competence. They must be part of an assessment system that collates, summarizes and interprets the data to make decisions. As such they should cover a broad range of identified desired competencies, pick up on past performance to follow trajectory and be numerous enough to provide a high- resolution picture of competency. To this end, the Dalhousie Family Medicine approach to assessment requires adequate sampling and co-developed learning plans in general.

# **Characteristics of a Good Field Note:**

- Has a date (for trajectory)
- Identifies a topic and a competency
- · Is behaviourally specific and uses clear unambiguous language
- Is detailed enough to paint a picture of the performance being commented on
- Is focused on the individual (not a comparator to others)
- Is focused on a manageable amount of information
- Is focused on higher order skills
- Includes an application of the assessment standards\*\*\*
- Has a judgement about the performance
- Identifies things to continue doing, things for further growth
- Promotes reflection

\*The characteristics of good feedback include:

- a. Ensuring the discussion is timely (at least the same day)
- b. Ensuring it is frequent (at least daily)
- c. Being specific and commenting on behaviours, not intentions or personal attributes
- d. Having reflective discussions that focus on challenging/discerning case characteristics
- e. Stimulating learning through making a judgement and documenting and discussing pertinent coaching points with each case
- f. Focusing on one take-home message each for the behaviours to continue and the behaviours to modify
- g. Making judgements based on standards, not comparators to others
- h. Using the CFPC Evaluation Objectives to help identify key messages

\*\* Higher Order Skills: Consider focusing on:

- a. History vs Physical Exam
- b. Diagnosis vs Treatment (although higher order skills could go into treatment decisions if the focus is on patient centeredness and/or acuity rather than just knowledge)
- c. Data gathering vs Data interpretation

# IN-TRAINING ASSESSMENT REPORT (ITAR) for FAMILY MEDICINE



Dalhousie University Fam Med Postgrad Evaluated By : evaluator's nameEvaluating: person (role) or moment's name (if applicable)Dates: start date to end date

# \* indicates a mandatory response

# **Final**

# In-Training Assessment Report (ITAR) for Family Medicine

The purpose of this in-training assessment report is to provide clear documentation of the resident's progress towards competence in the six essential family medicine skills. Each skill is defined. Please add specific comments about resident performance to outline where the resident has achieved competence, where they are progressing satisfactorily, areas to focus on for future development and any concerns. Please provide examples from field notes that support your narrative.

In order to document satisfactory progress, all six skill dimensions should be assessed in a sampling of the following content of comprehensive family medicine.

### PGY1 - with readily available supervision PGY2 - independently with back up

- Care of Children
- o Newborn care
- o Evidence based health promotion and prevention from infant to child
- o Acute illness in infants
- o Acute illness in school age children
- o Chronic illness

### Care of Adolescents

- o Evidence based health promotion and prevention
- o Issues around sexuality and reproductive health
- o Assessment of substance use/abuse
- Social problems
- o Psychological/psychiatric problems
- o Suicide risk
- o Chronic illness (e.g. diabetes, asthma, IBD)

### Care of Adults

- o Evidence based health promotion and prevention
- o Chronic disease care (e.g. diabetes, CVD, arthritis, COPD etc)
- o Complex patients with multiple diseases
- o Benign self limited illnesses
- o Undifferentiated problems
- o Acute serious illness in ambulatory setting
- o Acute illness needing urgent care or hospitalization
- o Care of hospitalized patients
- o Behavioral Medicine
- o Life stages and transitions
- o Cancer care
- o Palliative care
- o Care of Women including Maternity Care
- o Care of Men
- o Emergency Medicine
- o Care of Underserved populations
- o Care of the Elderly

# Uncommon but serious and treatable conditions (red flags)

- Therapeutics
- Procedure Skills

In order to be competent for the independent practice of Family Medicine, the resident should demonstrate the ability to practice in all of the above areas at the completion of residency training.

### Professionalism

#### Definition

Professionalism means reliability, trustworthiness, respect and responsibility to patients, to colleagues, to oneself, to the profession, and to society at large; it deals with honesty, ethical issues, lifelong learning and the maintenance of the quality of care. Important attitudinal aspects such as caring and compassion fall under professionalism. It includes knowing and expanding one's limits of competence, dealing with uncertainty in a clinically appropriate and patient-centered manner and the ability to evoke confidence without arrogance. Professionalism implies attention to boundaries, commitment to patient well being, respect for patients' culture and values (e.g. appropriate personal appearance) and willingness to assess one's own performance. It includes a commitment to reflective practice, evidence based medicine and learning from colleagues and patients as well as a commitment to personal health and seeking balance between personal life and professional responsibilities. The ability to behave professionally and collegially in difficult situations is essential. Professionalism means doing the right thing even when no-one else may ever know.

Click here to view the CFPC themes with their observable behaviours for Professionalism.

\*Describe aspects of competence achieved in PROFESSIONALISM and developing competence including examples from field notes

\*Describe areas for focus and further development in PROFESSIONALISM including examples from field notes

	Significant concerns about progress - site level or program level remediation plan required. May need program support	Some concerns about progress. A plan has been established between the resident and the preceptor and will be implemented and assessed through ongoing clinical exposure	Progress as expected. No concerns.
*Rate:	O	Ó	0

### Selectivity

Definition

Residents who demonstrate selectivity are able to set priorities, focus on what is most important and avoid a routine or stereotypical approach (such as a medical student might use). They are selective and adapt to the situation and the patient. They gather the most useful information without losing time on less contributory data however they will explore a problem in detail when needed. They can distinguish urgent and non-urgent conditions and act appropriately for each.

Click here to view the CFPC priority topics and key features.

### Click here to view the CFPC description for Selectivity.

\*Describe aspects of competence achieved in SELECTIVITY and developing competence including examples from field notes

\*Describe areas for focus and further development in SELECTIVITY including examples from field notes

	Significant concerns about progress - site level or program level remediation plan required. May need program support	Some concerns about progress. A plan has been established between the resident and the preceptor and will be implemented and assessed through ongoing clinical exposure	Progress as expected. No concerns.
*Rate:	O	O	0

### **Clinical Reasoning**

### Definition

Residents who demonstrate good clinical reasoning gather **the right information at the right time and interpret and synthesize** the information systematically. They consistently consider common and red flag conditions and organize their thinking to come to a reasonable problem list with short and long term management plans. They make appropriate decisions and set appropriate goals.

Click here to view the CFPC priority topics and key features.

Click here to view the CFPC description for Clinical Reasoning.

#### \*Describe areas for focus and further development in CLINICAL REASONING including examples from field notes

	Significant concerns about progress - site level or program level remediation plan required. May need program support	Some concerns about progress. A plan has been established between the resident and the preceptor and will be implemented and assessed through ongoing clinical exposure	Progress as expected. No concerns.
*Rate:	C	0	0

### Patient-Centered Approach

### Definition

Residents who are patient centred demonstrate exploration of both the disease and the patient's personal experience of illness (e.g. FIFE). They show an active interest in their patients and over time are able to describe important details of their lives. They work to enhance the relationship and gather day to day contextual information that will help guide them in making appropriate decisions with their patients. They work with their patients to come to agreement on the problems, the priorities, the goals and approach to management. They regularly address prevention and health promotion in clinical encounters. They manage time and resources effectively.

### Click here to view the CFPC themes with their observable behaviours for Patient-Centred Approach.

\*Describe aspects of competence achieved in PATIENT CENTERED APPROACH and developing competence including examples from field notes

\*Describe areas for focus and further development in PATIENT CENTERED APPROACH including examples from field notes

	Significant concerns about	Some concerns about progress. A plan has been	Progress
	progress - site level or program	established between the resident and the	as
	level remediation plan required.	preceptor and will be implemented and	expected.
	May need program support	assessed through ongoing clinical exposure	No concerns.
*Rate:	0	0	O

### **Procedure Skills**

#### Definition

Residents who have an effective approach to procedures can decide if it is appropriate for **them** to do **this** procedure on **this** patient on **this** day. They prepare thoroughly for the procedure including patient consent. They attend to the patient's comfort and safety throughout the procedure. If difficulties arise they demonstrate the ability to reevaluate and stop or seek assistance. They organize appropriate after care and follow up. They demonstrate appropriate technical skills.

### Click here to view the CFPC general key features for Procedure Skills and a list of the core procedures.

\*Describe aspects of competence achieved in PROCEDURE SKILLS and developing competence including examples from field notes

\*Describe areas for focus and further development in PROCEDURE SKILLS including examples from field notes

	Significant concerns about progress - site level or program level remediation plan required. May need program support	Some concerns about progress. A plan has been established between the resident and the preceptor and will be implemented and assessed through ongoing clinical exposure	Progress as expected. No concerns.
*Rate:	O	O	0

### **Communication Skills**

### With members of the health care team (colleagues)

### Definition

Residents who communicate well with colleagues take enough time and demonstrate the ability to listen so they truly understand their colleague's point of view. They are able to communicate accurately and clearly, both verbally (face to face, over the phone, etc.) and in writing (e.g. chart notes, consult letters, orders, prescriptions etc.). They display effective non-verbal skills including attention to their own body language, responding to body language of a colleague, tone of voice, etc. They demonstrate respect for the opinions, values and ideas of their colleagues.

### Click here to view the CFPC themes with their observable behaviours for Effective Communication with Colleagues.

\*Describe aspects of competence achieved in COMMUNICATION SKILLS with colleagues and developing competence including examples from field notes

### \*Describe areas for focus and further development in COMMUNICATION SKILLS including examples from field notes

	Significant concerns about progress - site level or program level remediation plan required. May need program support	Some concerns about progress. A plan has been established between the resident and the preceptor and will be implemented and assessed through ongoing clinical exposure	Progress as expected. No concerns.
*Rate:	O	O	0

### **Communication Skills**

### With patients

### Definition

Residents who communicate well with patients demonstrate the ability to listen so that they truly understand the patient's needs. They are able to communicate clearly both verbally and in writing (e.g. letters, instructions). They display effective non-verbal skills including attention to their own body language, responding to the body language of a patient, use of silence, etc. Their communication is appropriate to the culture and age of the patient. They demonstrate a respectful, caring and compassionate attitude.

### Click here to view the CFPC themes with their observable behaviours for Effective Communication with Patients.

\*Describe aspects of competence achieved in COMMUNICATION SKILLS with patients and developing competence including examples from field notes

\*Describe areas for focus and further development in COMMUNICATION SKILLS including examples from field notes

	Significant concerns about progress - site level or program level remediation plan required. May need program support	Some concerns about progress. A plan has been established between the resident and the preceptor and will be implemented and assessed through ongoing clinical exposure	Progress as expected. No concerns.
*Rate:	O	O	0

### OVERALL PROGRESS TO DATE

	Significant concerns about progress - site	Some concerns about progress. A plan	Progress
	level or program level remediation plan	has been established between the	as
	required (must be brought to Residency	resident and the preceptor and will be	expected.
	Training Committee Executive meeting	implemented and assessed through	No
	for discussion).	ongoing clinical exposure	concerns.
*Rate:	O	O	0

# For the CFPC Evaluation Objectives, with the observable behaviours of Professionalism and Communication Skills and priority topics with their key features please see One45 Handouts and Links

Please download this onto your desktop for use in clinical teaching.

# Benchmarks for Family Medicine Residents

for the academic year 2022-2023

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# **Introduction & Background**

Graduates of Dalhousie's Family Medicine programme should have the skills necessary to work in any undifferentiated family medicine practice. To this end, the Dalhousie approach to curricular design and assessment revolves around competency based medical education (CBME). The College of Family Physicians of Canada (CFPC) with its Triple-C curriculum utilizes a number of objectives to delineate the domain of competence. Currently Dalhousie Family Medicine uses data gathered from field notes and in-training assessment reports (ITARs) to determine success in a particular rotation. Periodic review, conducted twice per year, serves as a way to ensure the resident is meeting the overarching objectives of the programme and has a co-created learning plan.

A number of family medicine programmes across Canada have undertaken initiatives aimed to help residents benchmark their progress through their residency programme in light of local and national goals and objectives. Dalhousie has undertaken a similar approach using the Skill Dimensions framework. Residents, during their periodic reviews or at times designated by their Site, will be assessed using the benchmarks below to ascertain progress towards independent practice.

Each item is grouped by the Skill Dimensions. Residents are assessed on a scale from 1 to 5 delineating a range from needing close supervision to independent. It is expected that residents in the Dalhousie Family Medicine training programme will attain all benchmarks at the independent level by the time of completion of their residency training.

Residents and preceptors will assess attainment of benchmarks individually twice per year. However, this data will then be collated, and differences will be highlighted as a source of possible discussion. The purpose is to help inform an individualized learning plan, either as part of a rotation or more longitudinally at the periodic review.

		Close Supervision	Distant Supervision	Independent
	1. Sets appropriate priorities during patient encounters	Does not prioritize patient problems during encounter. Focuses on physician agenda for appointment.	With appropriate coaching, can set priorities during patient encounters. Needs ongoing coaching to reach a balance between patient and physician priorities.	Actively balances patient and physician priorities, reaching common ground in shared decision- making.
	2. Performs an appropriate, focused physical examination	Performs a physical examination in a thorough but stereotypical fashion; is unfocused, or sometimes not reproducible, may use incorrect or inappropriate technique. Does not interact with the patients during the examination.	Performs a thorough but relatively focused and reproducible physical examination. Common examination techniques performed correctly. Interacts with the patient during the examination.	Performs a focused and reliable physical examination, including specialized examination techniques when relevant. Comfortably interacts with the patient during the examination.
	3. Distinguishes the sick from the not sick	Fails to recognize serious urgent/emergent conditions encountered in family medicine.	With appropriate coaching, recognizes and manages common urgent/emergent conditions.	Spontaneously anticipates, recognizes and appropriately manages common urgent /emergent conditions
SELECTIVITY	4. Selects investigations and modifies treatment to fit patient need	Chooses inappropriate or generic/stereotyped investigations and treatments rather than tailoring them to patient's situation.	For common primary care complaints, identifies, with appropriate coaching, investigations and treatments tailored to the patient's situation.	For common primary care complaints, spontaneously identifies investigations and treatments tailored to the patient's situation.

		Close Supervision	Distant Supervision	Independent
	1. Practices	Shows little	With some coaching,	Practices cradle-to-
	generalist medicine	understanding in the	practices full-scope	grave medicine
	-	breadth of family	family medicine	through the
		practice. Rarely	including trying to	spectrum of health
		incorporates health	promote health and	promotion and
		promotion and	disease prevention	disease prevention,
		disease prevention	in patient visits.	recognizing the
		in patient visits.		complexity,
		Fails to recognize		uncertainty, and
		the complexity of		ambiguity inherent
		medical practice.		in medical practice.
	2. Performs patient-	Assesses patients in	Performs more or	Selectively adjusts
	centered clinical	an exhaustive but	less focused patient	patient assessment
	assessments	stereotyped way.	assessment, defines	by focusing on
		May seem	problem well, but	relevant
		disorganized or	spends excessive	information.
		unfocused, and may	time assessing less	Performs a focused
		incompletely assess	relevant	and reliable physical
		the problems.	information.	examination,
		Misses key features.	Performs a thorough	including specialized
		Does not adjust to	but relatively	examination
		cues arising during	focused and	techniques when
		the interview.	reproducible	relevant.
		Performs physical	physical	Comfortably
		examination lacking	examination.	interacts with the
		focus and	Common	patient during the
		reproducibility. May	examination	examination.
		use incorrect or	techniques	examination.
		inappropriate	performed correctly.	
		technique. Interacts	Interacts with the	
		poorly with the	patient during the	
		patients during the	examination.	
		examination.	examination.	
	3. Establishes	Management plans	With coaching, able	Develops organized
	management plans	often lack detail and	to develop a	and comprehensive
	management plans	can be unfocused or	comprehensive	management plans
		disorganized.		for all clinicial
		Unable to prioritize	management plan and prioritize urgent	situations.
		urgent issues in	issues.	Prioritizes urgent
		management plans.	issues.	issues first in
		management plans.		
				management plans.
פ	4. Manages	Shows a marked	Manages clinical	Manages clinical
	uncertainty	insecurity when	problems in a	problems in a
201		facing uncertainty,	context of	context of
L L		or does not	uncertainty mainly	uncertainty not only
r L		recognize a situation	by consulting	by consulting
Ч СР		in which he/she	preceptors.	preceptors, but also
CLINICAL KEASUNING		should feel		consulting other
		uncertain.		appropriate sources

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			of information such as colleagues and by encouraging shared decision making with the patient.
5. Uses appropriate clinical judgment	Makes clinical decisions where the proposed diagnosis and management are inconsistent with the symptoms and signs of the patient. Does not prioritize assessment or management in light of the urgency of a clinical situation.	With appropriate coaching, makes logical decisions linking the identified clinical signs and symptoms, the diagnosis and the proposed management. With supervisor's help, prioritizes work-up or management in light of the urgency of a clinical situation.	Makes logical decisions linking the identified clinical signs and symptoms, the diagnosis and the proposed management. Spontaneously prioritizes work-up or management in light of the urgency of a clinical situation.
6. Has an evidence- informed practice	Rarely considers available evidence in the use of diagnostic and therapeutic tools.	With appropriate coaching, considers available evidence in the use of diagnostic and therapeutic tools. Tends to directly apply conclusions from critical appraisal without ensuring applicability to the patient on an individual basis.	Spontaneously considers available evidence in the use of diagnostic and therapeutic tools. Adjusts conclusions from critical appraisal to ensure applicability to the patient on an individual basis.
7. Engages in the stewardship of health care resources	Minimally considers the consequences of his/her investigations / management decisions and associated costs for the health system.	With appropriate coaching, generally considers the consequences of his/her work-up / management decisions and associated costs for the health system.	Spontaneously considers the consequences of his/her work-up / management decisions and associated costs for the health system.

	Close Supervision	Distant Supervision	Independent
1. Demonstrates a commitment to patients through clinical excellence and high ethical standards	Explains little or does not explain the benefits and risks of proposed interventions and the consequences of not intervening; reveals personal information against the expressed will of the patient or speaks of patients in public environment; does not respect patient decisions and autonomy.	Stereotypically explains the benefits and risks of proposed interventions and the consequences of not intervening; respects patient privacy, respects patient autonomy in their decision making.	Explains in a manner appropriate to the patient the benefits and risks of proposed interventions and the consequences of not intervening to allow a free and informed decision; respects the privacy of patients; respects and promotes patient autonomy in their decision making. Manages conflicts of interest and maintains professional boundaries.
2. Demonstrates a commitment to society by recognizing and responding to societal needs in health care	Does not recognize their role in the context of society at large. Shows little insight into the recognition of societal needs. Does not consider patients' social context within encounters. Does not respond to societal needs when identified.	Recognises their role in the context of society at large. At times considers patients' social context within encounters. With appropriate coaching, can come up with a plan to respond to identified societal needs.	Demonstrates accountability to patients and society by regularly considering elements of the patients' social context within encounters. Is able to identify societal needs independently and respond appropriately.
3. Demonstrates a commitment to the profession by adhering to standards and participating in physician-led regulation	Demonstrates a lack of knowledge of codes of conduct and laws regarding the profession. Shows little insight into unprofessional and unethical behaviours of physicians and other practitioners and/or does not stay up to date with physician regulation documentation.	With appropriate coaching, recognizes the need for codes of conduct and recognizes unprofessional/unethical behaviours in physicians and other practitioners. Stays up to date with physician regulation documentation.	Adheres to professional ethical codes of conduct and laws governing practice resulting in a culture of respect and collegiality. Responds to unprofessional and unethical behaviours in physicians and other practitioners. Stays up to date with physician regulation documentation.
4. Demonstrates a commitment to physician health and well-being to foster optimal patient care	Presents difficulty in prioritizing various professional obligations when facing multiple requirements. Takes too much or not enough time to meet his/her personal needs. When a conflict between professional and personal activities is brought to his/her attention, does not take it into account nor adjust accordingly.	With appropriate coaching, prioritizes various professional obligations when facing multiple requirements. Usually protects a suitable time to meet his/her personal needs. When a conflict between professional and personal activities is brought to his/her attention, discusses it on demand and adjusts accordingly.	Spontaneously prioritizes various professional obligations when facing multiple requirements. Protects a suitable time to meet his/her personal needs. When a conflict between professional and personal activities is brought to his/her attention, spontaneously discusses it and adjusts accordingly.

5. Demonstrates a commitment to reflective practice	Does not recognize the factors that could have an impact on consultations. Does not take time to reflect on events and actions in clinical practice.	Recognizes the factors that could have an impact on consultations, but does not consider the implications for patient or self. With coaching, reflects on the events occurring in his/her practice, especially critical incidents, to refine knowledge of him/herself.	Recognizes the factors that could have an impact on consultations and works to resolve them before meeting with patients. Able to spontaneously reflect on the events occurring in his/her practice, especially critical incidents, to refine knowledge of him/herself.
6. Cultivates and maintains positive working environments through promoting understanding, managing differences, minimizing misunderstandings, and mitigating conflicts	Is not consistently respectful of others in the team environment. May be confrontational with colleagues. Lacks skill in mitigating conflict.	With appropriate coaching, understands their role and the roles of their colleagues in shared decision-making. Requires some coaching to reflect on their own limitations and that of team function. Has some skill in mitigating conflict, may require coaching at times.	Actively maintains a respectful attitude towards others and engages in shared decision-making, minimizing conflict. Is able to mitigate conflicts in a professional manner when they occur. Reflects and recognizes one's own limitations and how this impacts team function.
7. Seeks feedback regarding performance	Does not seek feedback. May be resistant to feedback given or does not respond to feedback.	Generally actively seeks feedback. Is able to make some appropriate changes or improvements based on feedback given/received.	Appropriately self reflects and self-evaluates. Makes appropriate changes based on self-reflection. Seeks feedback on appropriateness and accuracy of self-assessment.
8. Teaches students, residents, the public, and other health care professionals	Teaches or supervises learners intuitively based on his/her past learning experience, without adjusting to learners' needs.	Incorporates some teaching strategies in small group teaching or clinical supervision in order to vary approaches, occasionally adjusting to learners' needs.	Uses varied teaching strategies in small group teaching or clinical supervision to encourage active learning most often adjusted with learners' needs.

		Close Supervision	Distant Supervision	Independent
	1. Establishes plans for ongoing care and timely consultation when appropriate	Adopts a rather unilateral and paternalistic discourse. Is rarely inclined to give patients and their families information about the problem and associated management.	Must be coached to encourage discussion, questions and feedback from patient. Teaches patients and their families generic information regarding the patient problem and associated management. When reminded, involves the patient to find common ground about management (shared decision making).	Utilizes consistently the patient-centered method to determine the plan of care including appropriate referral to other providers. Spontaneously encourages discussion, questions and feedback from patient. Sensitively adapts teaching to patients and their families. Usually involves patient spontaneously to find common ground about management (shared decision making).
	<ol> <li>2. Develops rapport, trust, and ethical therapeutic relationships with patients and their families</li> <li>3. Engages patients and their families in developing plans that reflect the patient's health care needs,</li> </ol>	Struggles with developing rapport with patients and families. Does not recognize the importance of respecting confidentiality, privacy and autonomy. Rarely consults with patients, family members and / or caregivers (when relevant) to guide interventions.	Requires ongoing feedback on developing rapport with patients. Respects confidentiality, privacy and autonomy. When prompted, consults with patients, family members and / or caregivers (when relevant) to guide	Uses understanding, trust, respect, honesty, and compassion in establishing positive therapeutic relationships while respecting confidentiality, privacy and autonomy. Spontaneously seeks and incorporates patient and family perspectives in developing care plans based on needs, values and goals.
	values and goals 4. Responds to an individual patient's needs by advocating with the patient within and beyond the clinical environment	Rarely discusses health promotion and disease prevention strategies with patients, or suggests inappropriate strategies not tailored to patient's need.	interventions. When prompted, discusses health promotion and disease prevention strategies with patients.	Spontaneously implements health promotion and disease prevention strategies suitably adapted to patient needs.
PATIENT-CENTERED	5. As a resource to their community, assesses and responds to the needs of the communities or populations served by advocating with them as active partners for system- level change in a socially accountable manner	Rarely identifies or, declines to take care of some vulnerable (elderly, mental health, chronic illness, etc.) or marginalized (immigrant, homeless, indigenous, etc.) populations.	With appropriate coaching, responds appropriately to the needs of vulnerable (elderly, mental health, chronic illness, etc.) or marginalized (immigrant, homeless, indigenous, etc.) populations.	Responds appropriately to the needs of vulnerable (elderly, mental health, chronic illness, etc.) or marginalized (immigrant, homeless, indigenous, etc.) populations.

		Close Supervision	<b>Distant Supervision</b>	Independent
	1. Plans and	Selects inappropriate	Selects appropriate	Selects appropriate
	performs	intervention, does not	intervention, obtains	patient-centered
	procedures and	obtain consent or	consent based on	intervention, obtains
	therapies for	obtains incomplete	correct information;	patient-centered consent;
	assessment	consent, improperly	prepares properly with	prepares properly;
	and/or	prepares for	appropriate coaching;	spontaneously
	management	intervention, applies	demonstrates correct	demonstrates correct
		incorrect technical	technical skills with	technical skills while
		skills; unsafely	appropriate coaching;	paying attention to patient
		discards hazardous	safely discards	comfort; safely discards
		materials; plans	hazardous materials;	hazardous materials;
		inappropriate follow-	plans for appropriate	tailors follow-up to patient
		up.	follow-up.	needs.
	2. Develops plans	Develops	With appropriate	Spontaneously reaches
	for after-care and	inappropriate after-	coaching, is able to	common ground with
	follow-up	care plans and follow-	develop a plan for	patients regarding
		up. Fails to	after-care to give to the	appropriate after-care
		recognize need for	patient and arranges	treatment and arranges
		timely follow-up.	follow-up.	follow-up as appropriate.
	3. Recognizes and	Does not recognize	Recognizes some	Spontaneously reviews
ST	addresses	limitations when	limitations but still may	potential knowledge gaps.
SKILLS	limitations	performing	miss significant ones.	Actively seeks feedback to
		procedures and may	Seeks some feedback	address any limitations in
UR		be unsafe. Rarely	to correct deficiencies.	knowledge and skill in
CEL		seeks feedback to		procedures.
PROCEDURE		remediate		
Р		deficiencies.		

		Close Supervision	Distant Supervision	Independent
	1. Elicits and synthesizes accurate and relevant information from, and perspectives of, patients and their families	Inattentive or distracted when taking a patient history; misses nonverbal cues provided by the patient.	Listens properly to patient answers and grasps nonverbal cues, without adjusting data collection and analysis accordingly.	Actively listens to patient answers and grasps nonverbal cues to adjust data collection and analysis accordingly.
COMMUNICATION SKILLS	2. Uses verbal communication skills effectively	Seems to be misunderstood by the patient; often holds a conversation not well adapted to the patient; pays little attention to interview techniques. Does not use accepted approach to induce a change in behavior,	Sometimes, seems misunderstood by the patient; occasionally holds a conversation not well adapted to the patient; demonstrates appropriate use of some interview techniques. When prompted, uses accepted strategies / communication models	Seems well understood by the patient; holds a conversation well adapted to the patient; demonstrates appropriate interview techniques. Spontaneously uses accepted strategies / communication models to induce a change in behavior, break bad news

	break bad news or manage a difficult patient.	to induce a change in behavior, break bad news or manage a difficult patient.	or manage a difficult patient.
3. Structures the interview	Does not list patient chief complaints, or ignores them; does not contract with patient at the beginning of the interview, struggles to control the interview, or rigidly controls the interview.	With appropriate coaching, explores patient chief complaints early in the interview; when prompted, balances the agenda with that of the patient; needs some guidance to control the interview effectively.	Explores all patient chief complaints early in the interview and spontaneously balances the agenda with that of the patient; controls the interview with appropriate fluency.
4. Shares health care information and plans with patients and their families	Shares little information with patient. Does not seek feedback to ensure patients and their families understand.	With appropriate coaching, provides patients with information that is accurate and timely. Sometimes seeks feedback from patients to ensure understanding.	Is able to share information with patients and families that is clear, accurate and timely, seeking feedback and addressing concerns as appropriate.
5. Documents and shares written and electronic information about the medical encounter to optimize clinical decision making, patient safety, confidentiality, and privacy	Maintains unclear, inaccurate records, incompletely reflecting consultation, or inconsistent with professional regulations. Does not complete records in a timely manner.	With appropriate coaching, maintains clear and accurate records, consistent with professional regulations.	Spontaneously maintains clear and accurate records, consistent with professional regulations. Documents are focused.
6. Facilitates necessary transitions in care with other colleagues in the health professions, including but not limited to shared care, transfer of care, and/or handover of care to enable continuity and safety	Communicates inappropriate consultation requests with a nonspecific question, insufficient or non- targeted clinical information, or uses confusing language.	With some coaching, communicates appropriate consultation requests and transitions in care with a clear question, relevant and targeted clinical information and appropriate language.	Communicates appropriate consultation requests and transitions in care with a clear question, relevant and targeted clinical information and appropriate language.

# Expected Timeline to Achieve "Independent" Entrustment of Competencies

Skill Dimension Competency

	1. Sets appropriate priorities during patient encounters				
Selectivity	2. Performs an appropriate focused examination				
Sciectivity	3. Distinguishes the sick from the not sick				
	4. Selects investigations and modifies treatment				
	1. Practices generalist medicine				
	2. Performs patient-centered clinical assessment				
	3. Establishes management plans				
Clinical Reasoning	4. Manages uncertainty				
Reasoning	5. Uses appropriate clinical judgment				
	6. Has an evidence-informed practice				
	7. Engages in the stewardship of health care resources				
	1. Demonstrates clinical and ethical excellence				
	2. Recognizes and responds to societal needs				
	3. Adheres to professional standards				
Duefeesieneliene	4. Fosters physician health and well-being				
Professionalism	5. Demonstrates commitment to reflective practice				
	6. Cultivates and maintains a positive work environment				
	7. Seeks feedback				
	8. Teaches students, residents and others				
	1. Establishes plans for ongoing care and consultations				
	2. Develops rapport, trust and ethical relationships				
Patient- Centered	3. Engages patients and families in developing plans				
Centereu	4. Responds to an individual patient's needs				
	5. Assesses and responds to community needs				
	1. Plans and performs procedures				
Procedure Skills	2. Develops plans for after-care and follow-up				
	3. Recognizes and addresses limitations				
	1. Elicits and synthesizes accurate information				
	2. Uses verbal communication skills effectively				
Communication	3. Structures the interview				
Skills	4. Shares health care information with patients/families				
	5. Documents and shares information appropriately				
	6. Recognizes and facilitates transitions of care				

# Legend



Competency achieved at the expected timing

Limit timing for achievement of competency

Delay in competency achievement

# PERIODIC REVIEW RESIDENT PERFORMANCE REVIEW WORKSHEET

- The sections assigned to the resident MUST be completed and submitted three weeks prior to meeting with the Site Director or designate.
- The sections assigned to the administrator are expected to be completed upon receipt of the resident's submission and prior to the scheduled meeting between the resident and the Site Director or designate.
- The sections assigned to the Site Director or designate are expected to be completed at the time of the scheduled meeting with the resident.
- The periodic reviews are a great opportunity for you to define your short- and long- term personal learning objectives. The more thought you put into the process, the more you stand to gain from it! Please note that we have streamlined this process and that the following data points may change during your residency (although the timelines will remain the same)
- Additionally, you will also use the "benchmarks" during your periodic review process (or just prior to). These benchmarks are used to ensure that you are meeting certain broad competencies at the right point in your training. You will be receiving more information on this process and rubric in the ensuing months.



Resident:

# Introduction

The periodic review is an opportunity for you to 'check-in' regarding your progress through your residency. Guided self-reflection on your progress is key in helping you formulate a learning plan that meets your needs and ensures alignment with the College's learning requirements. The periodic review tends to be about 0.5-1h long. You should review your progress to date and come prepared to discuss various aspects of your progress as reflected on and outlined below.

(https://www.cfpc.ca/CFPC/media/Resources/Communications/GIFT-2017\_Onepager\_ENG\_RevMay18\_Final\_Web.pdf)

Please be thoughtful in your responses: this is not simply a 'hoop' to pass through rather an opportunity for you to chart the course of your learning in the remaining months of your residency. In addition to wanting to ensure your skillset meets the requirement of the College, we want to ensure that you are meeting your own individual goals for learning and have a personal career path and wellness in mind. Be prepared to lead the review as it is for your personal growth!

In terms of timelines, you will need to complete and submit this document at least a week in advance of your periodic review. Be sure to complete each section.

# 1. YOUR PRACTICE SITUATION

Comment on how you have had the opportunity to develop a panel of patients with whom you experience continuity. Are there specific areas of strength that you have noted and any areas that may need more exposure (e.g. children, adolescent, adult, elderly, palliative patients)?

# 2. PROGRESS TOWARDS INDEPENDENT PRACTICE

Consider the six skill dimensions under which you are progressing and assessed. Do you feel that you are progressing adequately in each? Do you feel that there are areas that you discovered gaps and that you may need more experience? Please use the space below to capture your self-assessed proficiency in each area (backing up your reflection with field notes, benchmarks and/or ITAR comments as appropriate) and any areas that may need some work. This should include any areas that may require additional learning experiences. You will likely want to use these thoughts to generate your own learning plan in section 4.

# Periodic Review Part A – Resident Reflection

# 2.1. SELECTIVITY

# Number of Field Notes: \_\_\_\_\_

(https://www.cfpc.ca/CFPC/media/Resources/Examinations/Assessment-Objectives-for-Certification-in-FM-full-document.pdf#page=58)

# **2.2. PATIENT-CENTERED APPROACH**

Number of Field Notes: \_\_\_\_\_

(https://www.cfpc.ca/CFPC/media/Resources/Examinations/Assessment-Objectives-for-Certification-in-FM-full-document.pdf#page=35)

# 2.3. COMMUNICATION SKILLS (with patients and colleagues/team) Number of Field Notes: \_\_\_\_\_\_\_ (https://www.cfpc.ca/CFPC/media/Resources/Examinations/Assessment-Objectives-for-\_\_\_\_\_\_ Certification-in-FM-full-document.pdf#page=37)

# 2.4. CLINICAL REASONING

Number of Field Notes: \_\_\_\_\_

(https://www.cfpc.ca/CFPC/media/Resources/Examinations/Assessment-Objectives-for-Certification-in-FM-full-document.pdf#page=56)

# 2.5. PROCEDURES

Number of Field Notes: \_\_\_\_\_\_ Number of Procedures: \_\_\_\_\_\_ Number of Deliveries: \_\_\_\_\_\_

Number of Field Notes:

(https://www.cfpc.ca/CFPC/media/Resources/Examinations/Assessment-Objectives-for-Certification-in-FM-full-document.pdf#page=59)

# 2.6. PROFESSIONALISM

(https://www.cfpc.ca/CFPC/media/Resources/Examinations/Assessment-Objectives-for-Certification-in-FM-full-document.pdf#page=46\_

# 2.7. LOCATION OF CARE

Do you feel that you have had adequate exposure to the following environments: office, emergency, hospital, home, long-term care and community?

# 2.8. LIFECYCLES

Do you feel that you have had adequate exposure to the following lifecycles: palliative care, men's health care, women's health care, care of adults, care of the elderly, care of children and adolescents, maternal and newborn care?

# 3. OTHER ASPECTS

# **3.1. CAREER PLANNING**

Consider your future goals as a family physician: what aspects of your residency have led you to shape your future career? Are there areas that you may need to prepare to help you transition to practice?

# **3.2. WELLNESS AND BALANCE**

Reflect and comment on how you are trying to promote and maintain your own wellness in the programme.

# **3.3. SOCIAL ACCOUNTABILITY**

Have you been involved with any committees or done community volunteer work?

# **3.4. EXAM PREPARATION**

What efforts have you made to prepare for the CFPC Certification Examination (including whether you are part of a study group)? Have you completed practice SOOs or SAMPs?

# 3.5. CONTINUING PRACTICE DEVELOPMENT/COURSES

Please list any courses you have taken (e.g. ACLS, NRP, ALARM).

Course	Completion Date

# 3.6. PRESENTATIONS

Please list any presentations you have made.

Presentation	Date

# **3.7. RESIDENT PROJECT**

Title	
Co-Authors	
Supervisor	

Please comment on your progression towards completion of your project and any challenges you have had or anticipate.

# 4. YOUR LEARNING PLAN

If this is not your first learning plan, please reflect on your last one(s) and indicate progress made.

Taking into account your answers to the above, please indicate below areas that you want to work on in the upcoming months. Your primary preceptor will receive a copy of your individualized learning plan (that you may want to modify at your periodic review after your discussion with your site director/evaluation coordinator) to help you attain your goals.

**Resident Comments:** 

*Evaluation Coordinator/Site Director Comments:* 

Date Completed: \_\_\_\_\_

Resident Name: \_\_\_\_\_

Resident Signature: \_\_\_\_\_

Evaluation Coordinator/Site Director Signature:

Program Director Signature: \_\_\_\_\_



Resident: \_\_\_\_\_

Please include completed benchmark worksheet(s), ITARs, procedure logs, leave request(s)/history.

# **Periodic Review Completion Dates and Comments**

Timing		Date	Comments/Follow-Up
Year 1	First		
	Second		
Year 2	First		
	Second		
(Year 3)	First		
	Second		

# 1. ADEQUATE SAMPLING (with evidence from field notes, ITARs etc)

1.1. Is there adequate evidence that the resident had appropriate sampling across all skill dimensions (Selectivity, Clinical Reasoning, Professionalism, Patient Centered Approach, Procedure Skills, Communication Skills)?

Yes	No – Comments below
-----	---------------------

1.2. Is there adequate evidence that the resident had appropriate sampling across all **locations of care** (office, emergency, hospital, home, long-term care and community)?

Yes	No – Comments below

1.3. Is there adequate evidence that the resident had appropriate sampling across all **lifecycles** (palliative care, men's health care, women's health care, care of adults, care of the elderly, care of children and adolescents, maternal and newborn care)?

Yes	No – Comments below

1.4. Is there adequate evidence that the resident had appropriate sampling for primary care procedures?

Yes	No – Comments below	

# 1.5. Is there adequate evidence that the resident had appropriate feedback from patients?

(Target:	10	per	year)	
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	Yes		No – Comments below
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# 2. CLINICAL LEARNING EXPERIENCES

Completion of Clinical Learning Experiences (include electives/selectives)

ITARs in PGY1 Year	ITAR YES/NO	Satisfactory YES/NO

ITARs in PGY2 Year	ITAR YES/NO	Satisfactory YES/NO

Elective ITARs	ITAR YES/NO	Satisfactory YES/NO

Selective ITARs	ITAR YES/NO	Satisfactory YES/NO

2.1. Are all ITARs complete and satisfactory for each Clinical Learning Experiences since last review?

Yes No – Comments below

2.2. Are the Evaluations of Educational activities and Faculty up to date?

Yes	No – Comments below	
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2.3. Has the resident shown appropriate progress with the family medicine benchmarks?

🗌 Yes	No – Comments below

# 3. ADMINISTRATIVE

3.1. Has there been adequate vacation leave or other wellness activities?

_	Yes	No – Comments below
_		

3.2

3.2. Has the resid	dent had other leave for any reason? (e.g. sick leave, conferences, etc)
🗌 Yes	No – Comments below
	lent had adequate attendance at academic curriculum? (Target: 70+%)
Yes	No – Comments below
3.4. Has the resid	dent made adequate progress on their project? (e.g. have they defined their topic,
met deadline	es, etc)
Yes	No – Comments below
	lent completed their practice audit?
Yes	No – Comments below
3.6. Has the resid	lent met with their Faculty Advisor since last review?
☐ Yes	No – Comments below
s.7. Has the prim	ary preceptor log been completed since last review?
Yes	No – Comments below

# 3.8. CanMeds Modules

Module	Done	Module	Done
Aboriginal Health (FM)		Infection Control	
Apology (FM)		Patient Safety	
Critical Thinking		Resident Safety and Wellness	
Death Certificates (FM)		Residents as Teachers (PGME)	
Handover (FM)		Safe Opioid Prescribing (PGME)	
Health Law (FM)		NS Prescription Monitoring (FM)	

\* indicates mandatory module

# 4. OVERALL PROGRESS

OVERALL PROGRESS					
Progress as Expected	Some concerns about progress	Not progressing as expected			
Comments:					

Date Completed: \_\_\_\_\_

Resident Signature: \_\_\_\_\_\_

Evaluation Coordinator/Site Director Signature:

Program Director Signature: \_\_\_\_\_



Resident: \_\_\_\_\_

Please include completed benchmark worksheet(s), ITARs, procedure logs, leave request(s)/history.

# **Periodic Review Completion Dates and Comments**

Timing		Date	Comments/Follow-Up
Year 1	First		
	Second		
Year 2	First		
	Second		
(Year 3)	First		
	Second		

# 1. ADEQUATE SAMPLING (with evidence from field notes, ITARs etc)

1.1. Is there adequate evidence that the resident had appropriate sampling across all **skill dimensions** (Selectivity, Clinical Reasoning, Professionalism, Patient Centered Approach, Procedure Skills, Communication Skills)?

Timing		Comments
Year 1	First	
	Second	
Year 2	First	
	Second	
(Year 3)	First	
	Second	

1.2. Is there adequate evidence that the resident had appropriate sampling across all **locations of care** (office, emergency, hospital, home, long-term care and community)?

Timing		Comments
Year 1	First	
	Second	
Year 2	First	
	Second	

(Year 3)	First	
	Second	

1.3. Is there adequate evidence that the resident had appropriate sampling across all **lifecycles** (palliative care, men's health care, women's health care, care of adults, care of the elderly, care of children and adolescents, maternal and newborn care)?

Timing		Comments
Year 1	First	
	Second	
Year 2	First	
	Second	
(Year 3)	First	
	Second	

1.4. Is there adequate evidence that the resident had appropriate sampling for primary care procedures?

Timing		Comments
Year 1	First	
	Second	
Year 2	First	
	Second	
(Year 3)	First	
	Second	

1.5. Is there adequate evidence that the resident had appropriate feedback from patients? (Target: 10 per year)

Timing		Comments
Year 1	First	
	Second	
Year 2	First	
	Second	

(Year 3)	First	
	Second	

# 2. CLINICAL LEARNING EXPERIENCES

Completion of Clinical Learning Experiences (include electives/selectives)

ITARs in PGY1 Year	ITAR YES/NO	Satisfactory YES/NO

ITARs in PGY2 Year	ITAR YES/NO	Satisfactory YES/NO

Elective ITARs	ITAR YES/NO	Satisfactory YES/NO

Selective ITARs	ITAR YES/NO	Satisfactory YES/NO

# 2.1. Are all ITARs complete and satisfactory for each Clinical Learning Experiences?

Timing		Comments
Year 1	First	
	Second	
Year 2	First	
	Second	
(Year 3)	First	
	Second	

# 2.2. Are the Evaluations of Educational activities and Faculty up to date?

Timing		Comments
Year 1	First	
	Second	
Year 2	First	
----------	--------	--
	Second	
(Year 3)	First	
	Second	

#### 2.3. Has the resident shown appropriate progress with the family medicine benchmarks?

Timing		Comments
Year 1	First	
	Second	
Year 2	First	
	Second	
(Year 3)	First	
	Second	

#### 3. ADMINISTRATIVE

3.1. Has there been adequate vacation leave or other wellness activities?

Timing		Comments
Year 1	First	
	Second	
Year 2	First	
	Second	
(Year 3)	First	
	Second	

#### 3.2. Has the resident had other leave for any reason? (e.g. sick leave, conferences, etc.)

Timing		Comments
Year 1	First	
	Second	
Year 2	First	
	Second	
(Year 3)	First	
	Second	

Timing		Comments
Year 1	First	
	Second	
Year 2	First	
	Second	
(Year 3)	First	
	Second	

3.3. Has the resident had adequate attendance at academic curriculum? (Target: 70+%)

3.4. Has the resident made adequate progress on their project? (e.g. have they defined their topic, met deadlines, etc)

Timing		Comments
Year 1	First	
	Second	
Year 2	First	
	Second	
(Year 3)	First	
	Second	

#### 3.5. Has the resident completed their practice audit?

Date Complete	Comments

#### 3.6. Has the resident met with their Faculty Advisor?

Timing		Comments
Year 1	First	
	Second	
Year 2	First	
	Second	
(Year 3)	First	
	Second	

3.7. Has the primary preceptor log been completed?

Timing		Comments
Year 1	First	
	Second	
Year 2	First	
	Second	
(Year 3)	First	
	Second	

#### 3.8. CanMeds Modules

Module	Done	Module	Done
Aboriginal Health (FM)		Infection Control	
Apology (FM)		Patient Safety	
Critical Thinking		Resident Safety and Wellness	
Death Certificates (FM)		Residents as Teachers (PGME)	
Handover (FM)		Safe Opioid Prescribing (PGME)	
Health Law (FM)		NS Prescription Monitoring (FM)	

\* indicates mandatory module

#### 4. OVERALL PROGRESS

Timing		Progress	Comments
Year 1	First	<ul> <li>Progress as Expected</li> <li>Some concerns about progress</li> <li>Not progressing as expected</li> </ul>	
	Second	<ul> <li>Progress as Expected</li> <li>Some concerns about progress</li> <li>Not progressing as expected</li> </ul>	
Year 2	First	<ul> <li>Progress as Expected</li> <li>Some concerns about progress</li> <li>Not progressing as expected</li> </ul>	
	Second	<ul> <li>Progress as Expected</li> <li>Some concerns about progress</li> <li>Not progressing as expected</li> </ul>	
(Year 3)	First	<ul> <li>Progress as Expected</li> <li>Some concerns about progress</li> <li>Not progressing as expected</li> </ul>	
	Second	<ul> <li>Progress as Expected</li> <li>Some concerns about progress</li> <li>Not progressing as expected</li> </ul>	

#### SIGNATURES

Timing		Resident Signature	Evaluation Coordinator/ Site Director Signature
Year 1	First		
	Second		
Year 2	First		
	Second		
(Year 3)	First		
	Second		

Date Completed: \_\_\_\_\_

Program Director Signature: \_\_\_\_\_

# Dalhousie Family Medicine Resident Project Guide

July 2022

family.medicine.dal.ca

Dalhousie Family Medicine Resident Objective Book 2022-2023 Page 78 of 117

# Resident Project Guide Department of Family Medicine

#### Introduction

Family Medicine requires compassionate practice based on sound, reproducible evidence and critical thinking. Scholarly work in Family Medicine is promoted by the College of Family Physicians of Canada. The Dalhousie Family Medicine resident project program promotes the attainment of the four CanMeds roles: health advocate, medical expert, scholar and communicator.

The objectives for scholarly activity in Family Medicine are detailed by the College of Family Physicians of Canada. The project promotes the attainment of the four CanMeds roles: health advocate, medical expert, scholar and communicator.

All residents are required to complete a resident project as part of their residency program requirements. The resident project is an academic/scholarly one that must meet the standards described in this guide and must be completed successfully in order to fulfill the requirements of the residency training program.

The purpose of the resident project is to provide an opportunity for the resident to explore an area of personal interest in a scholarly manner. With guidance provided by their supervisor, the process involves finding answers to questions commonly encountered in primary care by critically reviewing the available literature. Where such answers are found lacking, the resident may choose to employ an appropriate methodology to design a study using proper scientific rigor to answer that question. By contributing to this scholarly activity there is an opportunity for residents to positively impact primary care and the wider community.

There is no requirement to conduct a research study; however, it is hoped that the resident project will provide the resident with the opportunity to develop or practice primary care research skills. For those with more in- depth research interests, primary care research electives are available and inquiries should go to the Site Director.

Goal:

• To contribute to the understanding and/or effectiveness of family practice.

Purpose:

- To develop skills that the resident can use to be a resource to a family practice;
- To provide an evaluation of these skills for the resident transcript.

Objectives:

- To ask a question relevant to Family Medicine
- To develop a way of answering the question using appropriate resources and timelines;
- To write up the project and present it orally prior to completion of the residency.

Project Goals:

- To develop skills in asking and answering questions that are important and relevant to the discipline of Family Medicine;
- To stimulate creative and original thought based on questions encountered in practice;
- To practice the fundamental of evidence-based care or other critical inquiry;
- To be able to communicate the results clearly to colleagues;
- To promote an interest in Family Medicine research.

#### How to Use the Resident Project Guide

The Resident Project Guide has been developed as a resource for residents, project supervisors and project/research coordinators. The guide contains information regarding project and project form deadlines, format requirements, tips and tricks, assessments, etc. The Resident Project Guide is reviewed by the Resident Project Sub-Committee on an annual basis and updated accordingly. Residents may choose to follow the version of the Resident Project Guide released in their PGY1 year, or they may opt to follow the version released in the year in which they submit their project.

In order to ensure fairness in marking, residents are required to indicate on their project title/cover page which year's version of the Resident Project Guide they followed at the time when they submitted their final project.

#### **Expectations**

The resident project must be aimed at answering a question in the field of Family Medicine. It can be in the form of a research project, a practice quality improvement project, a position paper, clinical educational tool, medical educational tool, literature appraisal or a health humanities project. The resident is expected to choose an area of interest to Family Medicine, propose a question, review the literature, and design a method of answering that question.

Family Medicine and Family Practice includes enhanced areas of expertise achieved and maintained by some family physicians, such as those recognized by the College of Family Physicians of Canada as Certificates of Added Competence (CACs). Approved CAC domains of care in Family Medicine include Care of the Elderly, Emergency Medicine, Family Practice Anesthesia, Palliative Care, Sport and Exercise Medicine, Addiction Medicine and Enhanced Surgical Skills.

PGY2 residents are expected to submit a written paper and give an oral presentation of their findings to their colleagues and faculty members at the Resident Project Presentation Day held at their Site Project Presentation event. The written documents will be graded and may be considered for various resident project awards. PGY1 residents may be asked to give a 10-minute presentation discussing the progress of their projects. Residents are welcome to submit their completed resident project in their PGY1 year; however, they are not required to do so until their PGY2 year.

Completed resident projects will be stored and available to review for internal use by residents and faculty.

#### **Ethics Issues**

All residents who engage in research involving human beings require a full or an expedited ethics review by a research ethics board (REB). This applies also to research considered "minimal risk", for example the examination of patient charts, patient/resident/physician surveys, etc. The resident should discuss this with their Project/Research Coordinator. If possible, it is advised that residents should consult with the Chair of the local Research Ethics Board (REB) regarding requirements for REB applications. If REB approval is necessary, it must be ensured that all requirements of the local REB are met for the resident project. If REB approval is not required, residents are required to provide the appropriate REB documentation around that decision.

#### Projects with More than One Author

Residents are encouraged to collaborate when planning and completing Family Medicine projects. Collaboration with others must be acknowledged and explained in the manuscript. In most circumstances, residents will collaborate on a topic but their project will ask a separate question; therefore individual manuscripts and project forms will be submitted by the primary author.

In the event residents wish to co-author a project, we ask that this collaboration be approved by their site Project Coordinator(s) to ensure each author's contribution is substantial. Each author must outline, in a section entitled "Author Contribution", their individual contribution to the project. Each resident will be required to submit individual forms, project outline and final reports. There will be one assessment of the project. The project presentation may be collaborative if possible.

When collaborating as co-authors, it is important to recognize the four measures of authorship from the ICMJE:

- Substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data for the work; AND
- Drafting the work or revising it critically for important intellectual content; AND
- Final approval of the version to be published; AND
- Agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

Further advice on authorship can be found at <u>http://www.icmje.org/recommendations/browse/roles-and-responsibilities/defining-the-role-of-authors-and-contributors.html</u>

#### **Types of Projects**

Because different marking rubrics are used for different project types, residents are asked to submit their project as a single project type.

Projects may be submitted as one of the following with the project type clearly indicated on the cover page:

#### 1. Research

This involves the posing of a question, reviewing the literature, selecting the methods needed to answer the research question, collecting original data, conducting the data analysis, and reporting the findings Residents are encouraged to engage in original research. It is important for residents to be aware that research projects require more steps to complete than other types of projects and therefore may take longer to complete. Most research projects require approval by the local Research Ethics Board (REB). Residents are advised to speak with their Project Coordinator about the need for ethical approval for their project. If REB approval is not required, residents are required to provide the appropriate REB documentation around that decision.

#### 2. Practice Quality Improvement Project

This involves identifying a practice-based question (aim statement), constructing a method for measuring change, developing that change by finding evidence-based guidelines/recommendations to guide the approach to clinical care with respect to the question, reporting the results and recommendations to target population, along with reassessments after change has been initiated (PDSA cycle; Plan, Do, Study, Act). Ideally this will involve multiple PDSA cycles.

Please note, residents are not permitted to use the same question or data used in their QI curriculum exercise at their site.

#### 3. Position Paper/Essay

This involves an extensive treatise on a topic of importance to Family Medicine. Topics can also relate to a broad range of pertinent issues such as the history of medicine, medical philosophy, medical education, politics, etc. The report must include critically appraised evidence to support the argument being presented.

#### 4. Clinical Education Tool

This involves developing a tool or resource useful for the education of physicians, other health care workers, patients or the public. The educational tool needs to be accompanied by a description of how the topic was selected, a literature review and the reason for the need of the tool.

#### 5. Medical Education Tool

This involves developing a tool or resource useful for undergraduate or postgraduate medical education, with accompanied reason for tool and literature review to support the tool. Examples include Problem Based Learning Cases, OSCE development, online curriculum modules etc.

#### 6. Literature Appraisal

This involves a detailed review of the literature on a specific topic pertinent to Family Medicine. Original research papers\* should be reviewed and appraised using critical appraisal skills.

(\* primary sources, no systematic reviews)

#### 7. Medical/Health Humanities

This stream requires residents to ask an important question relevant to Family Medicine. The resident will conduct a review of the evidence on the topic and the final project may include an arts-based piece, or use of art in the scholarly project, both clinical and humanities. This may take the form of writing, visual art, performance (e.g. dance, theatre), production or a musical composition. While the health humanities may be considered a category of its own, it could also be a component of any of the above categories. For example, the resident may choose to conduct a literature review on the effect of the use of writing as a tool to prevent burnout among medical students. The final piece could be published or even incorporated into the medical school curriculum if appropriate.

#### **Project Coordinator**

Each site has a Project Coordinator, whose role it is to discuss the project format and requirements with the resident on a regular basis and encourage the resident to adhere to the deadlines. In some cases the Project Coordinator may also be the Project Supervisor.

#### **Project Supervisor**

Each resident must choose a Project Supervisor (or Project Supervisors) to counsel them on the content of their project. The Project Supervisor(s) may be a clinical supervisor, another family physician, a consultant or another individual with qualifications appropriate for the selected resident's project topic.

Each project requires a Project Supervisor with a faculty appointment in the Dalhousie University Department of Family Medicine. If the primary project supervisor is not a DFM faculty member, the resident is responsible to find a co-supervisor who has a faculty appointment with the Dalhousie University Department of Family Medicine. Once the Project Supervisor has been identified, the resident is responsible to provide them with the Project Supervisor Information Kit. This can be found on Brightspace.

#### Budget

There are funds in each site's budget to cover some resident project expenses at that site. Each resident is allowed \$50 for minor expenses, but it is also possible to apply for more funding. This issue should be discussed with the Project Coordinator at the appropriate site. For amounts over \$50, a written budget must be submitted to the Project Coordinator at the appropriate site. All receipts must be submitted in order for expenses to be reimbursed. If funds are needed in advance, a written request can be submitted with receipts submitted at a later date.

#### **Minimum Time Commitment**

Residents should expect to commit at least 40 hours of work to their project, although the actual amount of time spent on the project will depend of a number of factors. The program may allow the resident to use some independent learning time to work on their project, however; the amount of time permitted depends largely on the nature and scope of the project and therefore residents will need to discuss this with either their Project Coordinator or Project Supervisor. Time away from half-days back and academic half-days is not generally permitted.

#### Plagiarism

Plagiarism is a serious academic offence and can lead to expulsion. Please see the Dalhousie University website on plagiarism.

http://www.dal.ca/dept/university\_secretariat/academic-integrity/plagiarism-cheating.html

To fulfill the competencies of resident projects, residents must conduct their own literature search (no third- party searches). However, residents are encouraged to seek assistance from hospital or university librarians.

#### **Project Format**

Although projects can be presented in different formats (art-work/handbooks/DVD, etc.) the project paper should be a minimum of 2500 words and a maximum of 4000 words, excluding tables and references. The project must be submitted as a single PDF. It is to be double spaced, 12 font, and cannot exceed 10MB. Alternatives for the word count and format will be considered for special circumstances and must be approved by the Project Coordinator.

The format of the written work should follow a scientific lay-out, including: Abstract, Introduction, Background, Study Design/Method, Results, Discussion, Conclusion/Limitations, References.

Abstracts should be structured to include the following layout as described by the CMAJ (excluding Trial Registration) (<u>https://www.cmaj.ca/submission-guidelines#resarch</u>): Background, Methods, Results, Interpretation.

At least fifteen (15) references are recommended.

Please note that a full academic literature review is only required for the Literature Appraisal project type. Other project types are required to have a Background section with an abbreviated literature review relevant to project type.

Projects may only be submitted as a single project type. For example, a project may be submitted as a research project or a clinical education tool, not both.

#### **Project Cover Page**

Make sure that you include a cover page (title page) with your project.

The title page must include each contributing resident's name and site. For non-Dalhousie Family Medicine resident co-authors, there must be some sort of identification of who they are (e.g. physician from (name of clinic, hospital, etc.); pharmacist from (name of pharmacy, hospital, etc.), nurse practitioner from (name of clinic, etc.); PGY# resident from (name of program and institution)).

The cover page must include the following:

- Name(s)
- Title of project
- Site(s)
- Name of project supervisor(s)
- Type of project (research, literature appraisal, etc.) (NOTE: use only the heading used under "Type of Projects")
- Date
- Which year's version of the Resident Project Guide was followed during project development

#### **Project Assessment**

Completed resident projects should be forwarded by the site's designate (identified by each site) to the Department of Family Medicine Education Committee Secretary (<u>fmcommittees@dal.ca</u>) as a single PDF file by the 2nd Monday in February. The PDF document must be no larger than 10MB and formatted in such a way as can be easily emailed to and opened by project reviewers.

The Medical Education Committee Secretary will forward the completed resident projects to appropriate reviewers. Project reviewers are expected to complete their review within 4 to 6 weeks of accepting a project for review.

A resident project must be deemed "Acceptable" or higher for the resident to successfully complete the residency program requirements.

If a project is assessed as "Requiring Revisions," the resident and the Project Supervisor and/or Project/Research Coordinator will be informed by the Education Committee Secretary. Once the resident has completed the required revisions, the revised project will be sent back to the Education Committee Secretary in a single PDF document that is no larger than 10MB and that has been formatted in such a way as can easily be emailed and opened by the project reviewer. The Education Committee Secretary will then forward the revised project to the original project reviewer. If, after a second revision the project is still deemed as "Requiring Revisions" by the original reviewer, a second reviewer may be invited to review the project.

#### Late Projects

Residents who miss the final project submission date may face a delay in receiving their letter of program completion. Residents are encouraged to submit their final project by the appropriate deadline.

#### **Non-Compliance**

Non-compliance with the program requirements without approval and just cause may result in the inclusion of a professional misconduct note in the resident file.

#### **Awards/Presentations**

Projects submitted by the February deadline (according to project guidelines) that receive marks in the "Outstanding" range will be considered for award nominations. Select projects receiving a score in the 'Highly Acceptable' range may also be considered. Additionally, Project Supervisors and site Project/Research Coordinators may nominate for consideration any resident projects they consider to be exceptional. Award nominations include the following:

- 1. Dalhousie University Family Medicine: The *Dr. Doug Mulholland Award* for the best scholarly non-research project. The projects are judged on originality, relevance to family medicine and critical thinking.
- 2. Dalhousie University Family Medicine: The *Dr. R. Wayne Putnam Award* for the best research project.
- 3. Award competitions:
  - a. Faculty of Medicine Research Award Competition: Up to three projects (traditionally) are nominated from

the Department of Family Medicine.

- b. College of Family Physicians of Canada *research awards* for Family Medicine Residents: Up to one project is nominated from the Dalhousie University Department of Family Medicine
- c. The College of Family Physicians of Canada *scholarly activity* award. Up to one project is nominated from the Dalhousie University Department of Family Medicine. This award aims to recognize outstanding family medicine scholarship performed by a resident.
- d. Nominee(s) for the PBSG Family Medicine Residency Scholarship Award.

#### **Resident Project Repository**

A selection of completed and acceptable resident projects may be posted on Dalhousie University's Postgraduate Family Medicine Brightspace Page (under Resident Resources) for 2 years. This is to provide ideas and to serve as project examples for current Family Medicine Residents.

#### Questions

Questions regarding resident projects may be directed to:

Dr. Laura Sadler (Chair, Resident Project Sub-Committee) Phone: 902-473-4700; Fax 902-473-8548 Email: LSadler@dal.ca

#### Timelines

#### PGY1 year:

- The resident must discuss the project topic with the Project Coordinator.
- The resident will select and discuss the content of the project with their Project Coordinator (and Project Supervisor if applicable) by the end of the three-month PGY1 Family Medicine clinical learning experience, but no later than the 1<sup>st</sup> Tuesday in November.
- The resident will complete Form 1 that they will submit to their Project Supervisor and their Project Coordinator. This proposal will state their research question/objective, a brief background literature review, the type of project and the methodology they will use to answer the research question.
- Residents must have their PGY1 Resident Project Proposal Form (Form I) initiated and submitted via One45 by the 1<sup>st</sup> Tuesday in November for their Project Coordinator to review/approve.
- Residents are required to distribute via One45 a Project Supervisor Agreement Form (Form II), which must be completed/signed by their Project Supervisor and submitted via One45 by the 1<sup>st</sup> Tuesday in December for their Project Coordinator to review.
- Residents whose projects are research projects, must apply for approval through their local Research Ethics Board (REB). It should be noted that this can at times be a lengthy process, and residents must plan accordingly in order to allow sufficient time for punctual project completion.
- If necessary, the resident should write out a budget, and submit it to their Project Coordinator. (see below for budget guidelines)
- At some sites, PGY1 residents are required to present their proposal in a 10-minute oral format during their site's Resident Project Presentation Day (usually held in May), or at another venue, as determined by their site. PGY1 residents are to confirm details with their Project Coordinator.

#### PGY2 year:

- The resident will review their project progress and distribute the Project Progress Report (Form III) via One45 to their Project Supervisor. This form is to be submitted by their supervisor via One45 no later than the 1<sup>st</sup> Tuesday in September. The progress report will be reviewed by the Project Coordinator.
- Once the project is complete, the resident will distribute the Resident Project Final Approval for Assessment Form (Form IV) to their supervisor via One45 no later than the 1<sup>st</sup> Tuesday in January. It will be approved by their Project Supervisor as being ready to be sent out for assessment. Project Coordinators will review these forms.
- The Final Project must be submitted to the resident's site designate (named by each site), and from there forwarded to the Education Committee Secretary (<u>fmcommittees@dal.ca</u>) as a single PDF document by the 2<sup>nd</sup> Monday in February. The PDF document must not exceed a file size of 10MB and must be formatted in such a way as can easily be emailed and opened by project reviewers. The Education Committee Secretary will send the project to a project reviewer for assessment.
- A PowerPoint slide presentation (or appropriate alternative medium of presentation) of the project must be completed and submitted to the residents' site designate by the 1<sup>st</sup> Monday in May of their PGY2 year.
- PGY2 residents will present their projects orally during their Site Project Presentation event.
- If a resident is concluding the program four months or more beyond the usual program end-date, submission of the written project can be deferred to 2 months before their concluding date, and an oral presentation will be arranged separately.

See the attached worksheet for timeline summaries. Please note that these deadlines may be modified if the nature of the project is such that data collection or analysis cannot be completed by the required dates. In such case, the resident must discuss the new timelines in advance with their Project/Research Coordinator and new timelines will be formally established.

Residents in the three-year integrated FM/EM program may, with permission from their Project/Research Coordinator and Project Supervisor, extend their project timeline into the third year of their residency program.

	Worksheet and Dates for Completion of Resident Project						
	PG	iY1					
Form	Task	Timeline	Dates	Task Complete			
	Meet with Project/Research Coordinator to begin formulating a type of project	July – September	Suggest by early September				
	Select Project Supervisor	July – October	Suggest complete by early October				
	Begin conducting literature review	September – December					
Project Proposal (Form I)	Residents must initiate and complete Form I (Resident Project Proposal) for Project Supervisors and Coordinators to review. Residents are responsible for ensuring the form is completed in a		1 <sup>st</sup> Tuesday in November of the resident's PGY1 year				
	timely manner, in compliance with deadlines. Once the Project Supervisor has been named, the resident is responsible to provide them with the Project Supervisor Kit						
Project Supervisor Agreement Form (Form II)	Residents are responsible for initiating Form II (Project Supervisor Agreement Form), to be completed and submitted by their Project Supervisor. Residents are responsible for ensuring the form is completed in a timely manner, in compliance with		1 <sup>st</sup> Tuesday in December of the resident's PGY1 year				
	deadlines If the resident project is a research project, the resident must apply to their local Research Ethics Board (REB) for approval. ( <b>NOTE:</b> <i>This may</i> <i>be a lengthy process and residents</i> <i>must plan accordingly.</i> ) At some sites, Proposal Presentation Day (10-minute presentation)	September - February	Usually in May (date to be determined by each site)				

	Worksheet and Dates for Completion of Resident Project						
	PG	i <b>Y2</b>					
Form	Task	Timeline	Dates	Task Complete			
Resident Project Progress Report (Form III)	Resident must initiate Form III (Resident Project Progress Report) for their project supervisor to review and submit. Residents are responsible for ensuring the form is completed in a timely manner, in compliance with deadlines.		1 <sup>st</sup> Tuesday in September in PGY2 year				
Project Draft and Project Final Approval Form (Form IV)	Completed draft of project given to Project Supervisor for feedback. Residents must initiate Form IV (Project Final Approval for Assessment) for their Project Supervisor to review and submit. Residents are responsible for ensuring the form is completed in a timely manner, in compliance with deadlines		1 <sup>st</sup> Tuesday in January of PGY2 year				
Final Project	Completed FINAL project to be submitted by the designated person(s) at each site to the Education Committee Secretary ( <u>fmcommittees@dal.ca</u> ) Education Committee Secretary will	As received	2 <sup>nd</sup> Monday in February of PGY2 year				
	distribute projects for assessment Residents will present their projects orally during their Site Project Presentation event.		Usually in May (date to be determined by each site)				

# Dalhousie Family Medicine Resident Project Forms I-IV (one45 Tasks)

Beginning in the 2018/2019 academic year, resident Project Forms I-IV will now be completed via one45 Forms. The table below provides a description of how the Forms are to be completed and by whom. Please contact your site administrator if you have any further questions.

Form:	Due:	<u>Resident's tasks:</u>	Project Supervisor's tasks:	Project Coordinator's tasks:
<b>Form I</b> : Resident Project	<b>PGY1 year</b> : 1 <sup>st</sup> Tuesday in Nov.	The resident <b>initiates</b> and <b>completes</b> Project Form I. The submitted Form is automatically sent directly to the Project	No responsibility for Form I – an approved Project Supervisor may not be identified, yet.	<b>Blank</b> Project Forms will be listed in the Project Coordinator's one45 ToDos.
Proposal.		Coordinator for review. The Project Coordinator's comments and approval are automatically sent directly to the resident who is required to <b>review</b> and <b>sign-off</b> .		As Project Forms are completed, a <b>blue check marked box</b> will appear next to the residents' Forms. Visual cues will appear under the Contributors' column to indicate that
Form II: Project Supervisor Agreement.	<b>PGY1 year</b> : 1 <sup>st</sup> Tuesday in Dec.	Resident <b>distributes</b> (i.e. forwards) blank Project Form II, III, and IV to an approved Project Supervisor(s) who will complete it for the resident.	Project Supervisors <b>receive</b> blank Project Forms II, III, and IV from the resident. Project Supervisor <b>completes</b> those	the Form is completed. The Project Coordinator is to: 1. <b>Check</b> one45 regularly for
Form III: Project Progress Report.	<b>PGY2 year</b> : 1 <sup>st</sup> Tuesday in Sep.	The Project Supervisor's completed Forms are automatically sent directly to the Project Coordinator for approval/acceptance and response.	Forms based on communication(s) from the resident and submits them before the Forms' due dates. Completed Project Forms are	<ul> <li>completed Project Forms;</li> <li>2. review completed Forms when indicated by a blue check marked box;</li> <li>3. provide comments directed to</li> </ul>
Form IV: Project Final Approval for Assessment.	<b>PGY2 year</b> : 1 <sup>st</sup> Tuesday in Jan.	The Project Coordinator's comments and approval are automatically sent directly to the resident who is required to <b>review</b> and <b>sign-off</b> .	automatically sent directly to the Project Coordinator for review. Residents will also review and sign-off on Project Supervisor's and Project Coordinator's comments.	<ul> <li>4. approve/accept or decline the Form.</li> </ul>

#### **Reminders for Project Coordinators**

- Project Coordinators should check their one45 account regularly under the **Summary Evaluations** section for Project Forms that have been completed (indicated by a blue check marked box).
- Form IV is to be reviewed and only accepted after final edits have been completed. This confirms that the Project is ready to be sent out for marking.

#### **Reminders for Residents**

- The one45 Forms I-IV are designed to keep you on task. Please ensure you have ongoing communication with your Project Supervisor and Project Coordinator regarding the details surrounding the Forms.
- Once Form IV is approved and accepted by the Project Coordinator, the resident is to send the final written Project to the site designate for marking.

Academic\Medical Education\Resident Projects\Project Supervisor Information Kit\DFM Forms Summary (May 17, 2022).docx



#### Form-I: Resident Project Proposal.

All family medicine residents are required to complete a resident project as part of their residency program requirements. The purpose of the resident project is to introduce the resident to the process of finding answers to questions commonly encountered in primary care.

Residents are expected to submit a written paper and give an oral presentation at their site's project presentation event in their final year of residency.

Types of Projects:

- Clinical Education Tool
- Literature Appraisal
- Medical Health / Humanities
- Medical Education Tool
- Position Paper / Essay
- Research Project
- Quality Improvement / Patient Safety

#### Please submit this one45 form no later than the first Tuesday in November of your PGY1 year.

\*Proposed project supervisor's full name:

\*Project supervisor's email address:

Proposed co-supervisor(s) full name:

Proposed co-supervisor(s) email address:

Once the project supervisor has been named, the resident is responsible to provide them with the Project Supervisor Information Kit.

#### \*Working Title of Resident Project:

#### \*Type of project:

- C Clinical Education Tool
- C Literature Appraisal
- O Medical / Health Humanities
- C Medical Education Tool
- C Position Paper / Essay
- O Quality Improvement / Patient Safety
- O Research

#### Research Question/Objective

Brief background literature review

Methodology

\*Brief timeline:

Resident's comments for project coordinator(s):

#### Research Ethics Board (REB) Application Status:

	n/a	No	Yes
*Will this project require REB approval?	0	0	0

If "No," please explain why:



#### Form-2: Project Supervisor Agreement.

\*Please submit this one45 form no later than the first Tuesday in December of the PGY1 year.

#### **Project Supervisor:**

All residents should have a Project Supervisor and a Project Coordinator.

The Project Supervisor will counsel the resident on the content of the project. The Project Supervisor may be a clinical supervisor in the home base Family Medicine Unit, another family physician, a consultant or another appropriate individual. If someone other than a family physician is selected, it is important to obtain advice on the relevance of the project to Family Medicine from the Project Coordinator.

The Project Coordinator will discuss the project format and requirements with the resident on a regular basis and encourage the resident to adhere to the deadlines. In some cases the Project Coordinator may also be the Project Supervisor.

Click here to access our Project Supervisor Information Kit

Please submit this one45 form no later than the first Tuesday in December of the PGY1 year.

I have agreed to be the Project Supervisor for this resident's project:

O No O Yes

....

\*Project Supervisor's full name:

Proposed co-supervisor(s) full name, if applicable:

\*Are you, or one of the committee members for this resident project, a faculty member of Dalhousie's Department of Family Medicine? © No

O Yes

#### \*Type of project:

O Clinical Education Tool

C Literature Appraisal

C Medical / Health Humanities

C Medical Education Tool

C Position Paper / Essay

O Quality Improvement / Patient Safety

 $\mathbf{O}$  Research

#### Research Ethics Board (REB) Application Status:

	n/a	No	Yes
*Will this project require REB approval?	0	0	0

If "No," please explain why:



#### Form-3: Project Progress Report

#### Please submit this one45 form no later than the first Tuesday in September of the PGY2 year.

\*Project title:

#### \*Type of project:

- C Clinical Education Tool
- C Literature Appraisal
- C Medical / Health Humanities
- € Medical Education Tool
- C Position Paper / Essay
- O Quality Improvement / Patient Safety
- ${f O}$  Research

#### Comments:

\*As the Project Supervisor, I have reviewed the progress of the resident project.

O No

O Yes

As the Project Co-Supervisor (if applicable), I have reviewed the progress of the resident project.

 $\mathbf{O}\;\mathsf{No}$ 

 ${\rm O}$  Yes

#### Research Ethics Board (REB) Application Status:

	n/a	No	Yes
*Will this project require REB approval?	0	0	0

\*Why, or why not?

	n/a	No	Yes
*If "Yes", has REB been obtained?	0	0	0

If "No", what is the status/plan?



#### Form 4: Project Final Approval for Assessment.

Please submit this one45 form no later than the first Tuesday in January of the PGY2 year.

\*Project Title:

\*As the Project Supervisor, I have reviewed and approved the final draft copy of the resident project for assessment:

O No

O Yes

As the Project Co-supervisor (if applicable), I have reviewed and approved the final draft copy of the resident project for assessment: O No

**O** Yes

Comments:

#### Research Ethics Board (REB) Application Status:

		NO	103
*Did this project require REB approval?	0	0	0
*If yes, was REB obtained?	0	0	0

Dalhousie Family Medicine Resident Project Assessment Rubric (check one): □ Pra ctice Quality Improvement Assessor:

**Resident:** 

# Date:

	Outstanding	Highly Acceptable	Acceptable	<b>Requires Revisions</b>	
Define research question	<ul> <li>Clear rationale for study question</li> <li>Clearly stated objectives</li> <li>Innovative nature of project</li> </ul>	<ul> <li>Clear rationale for study question only</li> <li>Clearly stated objective</li> <li>Study was somewhat innovative (question previously asked but interesting aspects of author's approach to the question)</li> </ul>	<ul> <li>Research question defined but not innovative</li> <li>Objectives stated</li> </ul>	<ul> <li>Research question not defined</li> <li>Objectives not stated</li> </ul>	/10
Relevance to Family Medicine across domains of care (including domain specific competencies required for awarding Certificates of Added Competence (CAC) by the CFPC	YES: • Study question appeal to the Fa • Relevance to Family Medicine is • The project may be linked to the	-	omains of care	<ul> <li>NO:</li> <li>Study question is of no interest to the Family Medicine community</li> <li>Relevance to Family Medicine is not identified or approved</li> </ul>	YES/NO If "NO", return project to resident for revisions. Do NOT grade until satisfactory
Background literature review	<ul> <li>Comprehensive literature review</li> <li>Recent evidence reviewed</li> <li>Critical evaluation of strength of evidence and certainty of conclusions</li> </ul>	<ul> <li>Adequate literature review</li> <li>Recent evidence reviewed</li> <li>Limited assessment of strength of evidence and certainty of conclusions</li> </ul>	<ul> <li>Brief/short literature review</li> <li>Limited but adequate sources used</li> <li>Minimal statement about strength of evidence and certainty of conclusions</li> </ul>	<ul> <li>Incomplete literature review</li> <li>Does not include recent evidence</li> <li>No mention of strength of evidence and certainty of conclusions</li> </ul>	/15
Appropriateness of study design (to answer the research question)	<ul> <li>Study design is scientifically sound and answers study question</li> <li>Methods are clearly described with appropriate citation</li> </ul>	<ul> <li>Study design answers study question</li> <li>Methods are clearly described</li> </ul>	<ul> <li>Study design answers the question, but more appropriate design exists</li> <li>Methods would benefit from further explanation</li> </ul>	<ul> <li>Study design does not adequately answer the study research question</li> </ul>	/15
Appropriateness of data analysis	<ul> <li>The analysis answers the study question appropriately</li> <li>Well described statistical analysis and rational for the approach chosen</li> </ul>	<ul> <li>The analysis answers the study question</li> <li>The rationale is explained</li> </ul>	<ul> <li>The analysis somewhat answers the study question but another statistical approach would be more appropriate</li> </ul>	<ul> <li>The analysis is not able to answer the study question</li> <li>Inappropriate statistical tests chosen</li> </ul>	/15



Dalhousie Family Medicine Resident Project Assessment Rubric (	check one):  Research or  Practice Quality Improvement
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	Outstanding	Highly Acceptable	Acceptable	Requires Revisions	
Results	<ul> <li>Results included and clearly presented</li> <li>Tables/graphs were of high standard and appropriate for the type of project</li> </ul>	<ul> <li>Results included and clearly presented</li> <li>Tables/graphs appropriate for the type of project</li> </ul>	<ul> <li>Minimum level of results presented</li> <li>Basic tables/graphs presented</li> </ul>	<ul> <li>Results inadequately presented</li> </ul>	/15
Discussion/ Conclusions	<ul> <li>Proper discussion of key findings, including strengths and limitations</li> <li>Comparison to similar studies in the literature</li> <li>Conclusions drawn reflect the results</li> <li>Discussion of next research steps</li> </ul>	<ul> <li>Discussion of key findings included</li> <li>Some discussion of strengths/limitations</li> <li>Comparison to similar studies in the literature</li> <li>Conclusions drawn reflect the results</li> </ul>	<ul> <li>Brief discussion of key findings</li> <li>Less thorough understanding of strengths/limitations</li> <li>Less thorough comparison to similar studies in the literature</li> <li>Conclusions generally reflect the results</li> </ul>	<ul> <li>Lack of summary of key findings, strengths/ limitations</li> <li>Lack of comparison to similar studies in the literature</li> <li>Conclusions go beyond the limitation of the research conducted</li> </ul>	/20
Quality of Language	YES: • Clear and accurate word choice • Selected appropriate academic vocabulary • Well structured sentences • Minimal spelling mistakes and sentence structure concerns • Proofread adequately			<ul> <li>NO:</li> <li>Word choices invite misunderstanding or may give offence</li> <li>Use consistently poor grammar and spelling</li> </ul>	YES / NO If "NO", return project to resident for revisions. Do NOT grade until satisfactory
Organization	<ul> <li>Organized thoughts</li> <li>Smooth transitions</li> <li>Appropriate research project components</li> </ul>	<ul> <li>Organized thoughts</li> <li>Appropriate research project components</li> </ul>	<ul> <li>Fairly organized thoughts</li> <li>Appropriate research project components</li> </ul>	<ul> <li>Missing key elements of research project components</li> </ul>	/10
Proper citation and quality of	<ul> <li>Excellent citations</li> <li>Adequate number of references</li> </ul>	<ul> <li>Very good citation</li> <li>Adequate number of references</li> </ul>	<ul> <li>Good citation</li> <li>Adequate number of references</li> </ul>	<ul> <li>Improper citation</li> </ul>	YES / NC
references	TCTCTCTCC				



Dalhousie Family Medicine Resident Project Assessment Rubric (check one): 🗆 Literature Appraisal or 🛛 Position Paper

**Resident:** 

# Assessor: Date:

	Outstanding	Highly Acceptable	Acceptable	<b>Requires Revisions</b>	
Identification of the need for a clinical educational tool	<ul> <li>Original question/thesis position presented</li> <li>Demonstrates the significance of the question with strong rationale</li> <li>Uses rich detail and identifies perceptively what is at issue</li> </ul>	<ul> <li>Clear question/thesis position presented</li> <li>Demonstrates judgement in the rationale for the importance of the question</li> <li>Identifies some significant points</li> </ul>	<ul> <li>Less clear definition of the topic and question</li> <li>Further discussion needed regarding the rationale for the importance of the topic</li> </ul>	<ul> <li>Vague topic presented</li> <li>Poorly thought-out rationale</li> <li>Does not match the project that was carried out</li> </ul>	/20
Relevance to Family Medicine across domains of care (including domain specific competencies required for awarding Certificates of Added Competence (CAC) by the CFPC	<ul> <li>YES:</li> <li>Question/problem appeals to or domains of care</li> <li>Relevance to Family Medicine is</li> <li>The project may be linked to the</li> </ul>		nily Medicine community across	<ul> <li>NO:</li> <li>Question/problem is of no interest to the Family Medicine community</li> <li>Relevance to Family Medicine is not identified or approved</li> </ul>	YES/NO If "NO", return project to resident for revisions. Do NOT grade until satisfactory
Researching/ Information Gathering	<ul> <li>Conducted a comprehensive and recent review of the literature</li> <li>Clear and structured approach; inclusion/exclusion criteria identified</li> <li>Judiciously selected important sources to focus on; rejected or qualified less reliable sources</li> </ul>	<ul> <li>Variety of sources used</li> <li>Inclusion/exclusion criteria identified</li> <li>Well-chosen sources according to clear criteria as appropriate</li> <li>Balanced in perspectives; took into account strengths and limitations of sources</li> </ul>	<ul> <li>Did not present the most relevant sources</li> <li>Could be more balanced in the sources used</li> <li>Takes account of pitfalls in some sources</li> </ul>	<ul> <li>Fails to make use of appropriate literature</li> <li>Makes use of unreliable sources</li> </ul>	/20
Presenting and evaluating sources/other perspectives	<ul> <li>Summarized diverse literature views accurately and fairly</li> <li>Consistently focuses on the most central and significant ideas</li> <li>Critical evaluation of strength of evidence and certainty of conclusions using an established procedure or grading system</li> </ul>	<ul> <li>Summarized views of others fairly, with few errors</li> <li>Critical evaluation of strength of evidence and certainty of conclusions using less rigorous application of established procedures.</li> <li>Balanced detail with focus in summary and/or critique</li> </ul>	<ul> <li>Needs to be more fair in criticisms and summarizing the views of others</li> <li>Should be more judicious in honing in on what is important</li> <li>Minimal evaluation of strength of evidence and certainty of conclusions</li> </ul>	<ul> <li>Presented views of others in inaccurate or unfair ways</li> <li>No or too little discussion of strength of evidence and certainty of conclusions</li> </ul>	/25



#### Dalhousie Family Medicine Resident Project Assessment Rubric (check one): 🗆 Literature Appraisal or 🔅 Position Paper

	Outstanding	Highly Acceptable	Acceptable	Requires Revisions	
Applying sources; reaching conclusions, resolving case, proving thesis	<ul> <li>Successfully synthesized and weighed diverse kinds of evidence</li> <li>Provided a compelling argument/evidence for conclusion, and/or a conclusion that is appropriately qualified given the argument/evidence</li> </ul>	<ul> <li>Drew plausible conclusion from the evidence and arguments</li> <li>Demonstrated some ability to synthesize and/or evaluate diverse evidence</li> </ul>	<ul> <li>Should improve the argument(s) provided</li> <li>Recommend getting more comfortable in evaluating and synthesizing information/ reaching clear conclusion</li> </ul>	<ul> <li>Project fails to support views with evidence and arguments</li> <li>Poor synthesizing of information and reaching conclusions</li> </ul>	/25
Quality of Language	YES:		I	NO:	<b>YES / NO</b> <i>If "NO",</i>
	<ul> <li>Clear and accurate word choice</li> <li>Selected appropriate academic v</li> <li>Well structured sentences</li> <li>Minimal spelling mistakes and s</li> <li>Proofread adequately</li> </ul>			<ul> <li>Word choices invite misunderstanding or may give offence</li> <li>Use consistently poor grammar and spelling</li> </ul>	return project to resident for revisions. Do NOT grade until satisfactory
Organization	<ul> <li>Organized thoughts</li> <li>Smooth transitions</li> <li>Appropriate literature/ position paper project components</li> </ul>	<ul> <li>Organized thoughts</li> <li>Appropriate literature/ position paper project components</li> </ul>	<ul> <li>Fairly organized thoughts</li> <li>Appropriate literature review/ position paper project components</li> </ul>	<ul> <li>Missing key elements of literature review/position paper project components</li> </ul>	/10
Proper citation and quality of references	<ul> <li>Excellent citations</li> <li>Adequate number of references</li> </ul>	<ul> <li>Very good citation</li> <li>Adequate number of references</li> </ul>	<ul> <li>Good citation</li> <li>Adequate number of references</li> </ul>	<ul> <li>Improper citation</li> </ul>	YES / NO
RESULTS	Outstanding (90-100)	Highly Acceptable (75-89)	Acceptable (60-74)	Requires Revisions (<59)	
			ome descriptors for guidance or praise		
	riptors and comments to help the re iive grades to projects requiring rev		l grade for those in the Outstanding, H been satisfactorily completed.	ighly Acceptable and	/100



Resident:		Assessor:	Date:		
	Outstanding	Highly Acceptable	Acceptable	Requires Revisions	
Identification of the need for a clinical educational tool	<ul> <li>Problem/topic clearly identified</li> <li>Objectives for development of the Tool are richly stated</li> </ul>	<ul> <li>Problem/topic clearly stated</li> <li>Objectives less richly stated</li> </ul>	Objectives not fully stated	<ul> <li>Problem not identified</li> <li>Objectives not stated</li> </ul>	/20
Relevance to Family Medicine across domains of	YES:			NO:	YES/NO
care (including domain specific competencies required for awarding Certificates of Added Competence (CAC) by the CFPC	Relevance to Family Medicine i		ne community across domains of care	<ul> <li>Question/problem is of no interest to the Family Medicine community</li> <li>Relevance to Family Medicine is not identified or approved</li> </ul>	If "NO", return project to resident for revisions. Do NOT grade until satisfactory
Information Gathering: Literature review of the identified problem	<ul> <li>Rich description of the literature on the identified problem/topic</li> </ul>	<ul> <li>Clear description of the literature on the identified problem/topic</li> </ul>	<ul> <li>Literature review is basic, should include other sources</li> </ul>	<ul> <li>Incomplete literature review to support the identified problem/topic</li> </ul>	/15
Information Gathering: researching existing tools	<ul> <li>Complete description of the literature on the value of existing tools</li> <li>Clearly described existing tools</li> <li>Critical evaluation of strength of evidence and certainty of conclusions</li> </ul>	<ul> <li>Some review of the literature on the value of existing tools</li> <li>Less clearly described existing tools</li> <li>Limited assessment of strength of evidence and certainty of conclusions</li> </ul>	<ul> <li>Sparse/basic literature description on existing tools</li> <li>Minimal statement on strength of evidence and certainty of conclusions</li> </ul>	<ul> <li>Absent description of literature of existing tools</li> <li>No mention of strength of evidence and certainty of conclusions</li> </ul>	/15
Methodology	<ul> <li>Development of the tool clearly incorporates literature findings</li> <li>Includes thorough consideration of the applicability in practice of the tool in Family Medicine education</li> </ul>	<ul> <li>Development of the tool incorporates literature findings</li> <li>Includes consideration to the applicability in practice of the tool in Family Medicine education</li> </ul>	<ul> <li>Partial incorporation of the literature findings</li> <li>Some consideration to the applicability in practice of the tool in Family Medicine education</li> </ul>	<ul> <li>Inadequate incorporation of the literature findings</li> <li>Inadequate consideration to the applicability in the practice of the tool</li> </ul>	/20



Discussion: The Completed Tool Discuss realis practice is st well explain Discuss realis practice and practical apprevaluating t proposed to The practical practice and practical apprevaluating t proposed to Clear and a Selected a	al application into	The tool is of high quality Practical application into practice is explained Suggests some implications for practice and basic approach to evaluating the utility of the proposed tool	<ul> <li>Tool is of average quality</li> <li>Some explanation of application into practice</li> <li>Mentions at least one implication for practice and mentions need to evaluate the utility of the proposed tool</li> </ul>	<ul> <li>Poor quality tool</li> <li>Minimal discussion of the practical application and impact of the tool</li> <li>No or too little discussion of implications</li> </ul>	/20
Language Clear and a Selected a	accurate word choice		1		
	ppropriate word choice ppropriate academic voca tured sentences pelling mistakes and sente adequately			<ul> <li>NO:</li> <li>Word choices invite misunderstanding or may give offence</li> <li>Use consistently poor grammar and spelling</li> </ul>	YES / NO If "NO", return project to resident for revisions. Do NOT grade until satisfactory
	ayout of tool	Organized thoughts Appropriate educational tool project components	<ul> <li>Fairly organized thoughts</li> <li>Appropriate educational tool project components</li> </ul>	<ul> <li>Missing key elements of educational tool project components</li> </ul>	/10
Proper citation and quality of□Excellent of Adequatereferencesreferences	number of	Very good citation Adequate number of references	<ul> <li>Good citation</li> <li>Adequate number of references</li> </ul>	Improper citation	YES / NO
RESULTS Outstar	100,000	Highly Acceptable (75-89)	Acceptable (60-74)	Requires Revisions (<59)	



Resident:		Assessor:	Date:		
	Outstanding	Highly Acceptable	Acceptable	Requires Revisions	
Identification of the need for a clinical educational tool	<ul> <li>Problem/topic clearly identified</li> <li>Objectives for development of the project are richly stated</li> <li>Complete description of the need for this project and/or a description of existing/similar projects</li> </ul>	<ul> <li>Problem/topic clearly stated, originally, creativity</li> <li>Objectives less richly stated</li> <li>Clear description of the need for the tool and/or the value of existing/similar projects</li> </ul>	<ul> <li>Problem/topic stated</li> <li>Objectives not fully stated</li> <li>Brief description of the need for the project and/or the value of existing/similar projects</li> </ul>	<ul> <li>Problem/topic not defined</li> <li>Objectives not stated</li> <li>Need for the tool and/or the value of existing similar not stated</li> </ul>	/20
Relevance to Family Medicine	YES: • Question appeals to or is of inte • Relevance to Family Medicine is • The project may be linked to the		nity across domains of care	<ul> <li>NO:</li> <li>Question/problem is of no interest to the Family Medicine community</li> <li>Relevance to Family Medicine is not identified or approved</li> </ul>	YES/NO If "NO", return project to resident for revisions. Do NOT grade until satisfactory
Information Gathering: Literature review of the identified problem	<ul> <li>Complete description of the literature on the value of existing tools</li> <li>Clear description of existing tools</li> <li>Critical evaluation of strength of evidence and certainty of conclusions</li> </ul>	<ul> <li>Some review of the literature</li> <li>Less clearly described existing tools</li> <li>Limited assessment of strength of evidence and certainty of conclusions</li> </ul>	<ul> <li>Sparse/basic literature description</li> <li>Minimal statement about strength of evidence and certainty of conclusions</li> </ul>	<ul> <li>Incomplete literature review to support the identified problem/topic</li> <li>No mention of strength of evidence and certainty of conclusions</li> </ul>	/15
Methodology	<ul> <li>Development of the tool clearly incorporates literature findings</li> <li>Includes a thorough consideration of the applicability of the tool to the defined medical education setting to be utilized</li> </ul>	<ul> <li>Development of the tool incorporates literature findings</li> <li>Includes consideration to the applicability of the tool to the defined medical education setting to be utilized</li> </ul>	<ul> <li>Partial incorporation of the literature findings</li> <li>Some consideration to the applicability of the tool to the medical education setting to be utilized</li> </ul>	<ul> <li>Inadequate incorporation of the literature findings</li> <li>Inadequate consideration to the applicability of the tool to the defined medical education setting to be utilized</li> </ul>	/20
Achievement of Goals/Objectives	<ul> <li>The tool is exceptional in meeting the stated objectives for the defined medical education setting</li> </ul>	<ul> <li>The tool highly achieves the stated objectives for the defined medical education setting</li> </ul>	<ul> <li>The tool meets the stated objectives for the defined medical education setting</li> </ul>	<ul> <li>The tool does not meet the stated objectives for the defined medical education setting</li> </ul>	/10



	Outstanding	Highly Acceptable	Acceptable	<b>Requires Revisions</b>	
Results and Discussion: The Completed Tool	<ul> <li>The tool is of outstanding quality</li> <li>The practical application into practice is straightforward and well explained</li> <li>Discusses realistic implications for practice</li> <li>Suggests practical approach to evaluating the utility of the proposed tool</li> </ul>	<ul> <li>The tool is of high quality</li> <li>Practical application is explained</li> <li>Suggests some implications for practice and basic approach to evaluating the utility of the proposed tool</li> </ul>	<ul> <li>Tool is of average quality</li> <li>Some explanation of application into practice</li> <li>Mentions at least one implication for practice and mentions need to evaluate the utility of the proposed tool</li> </ul>	<ul> <li>Poor quality tool</li> <li>Minimal discussion of the practical application and impact of the tool</li> <li>No or too little discussion of implications</li> </ul>	/25
Quality of Language	YES:			NO:	YES / NO
	<ul> <li>Clear and accurate word choice</li> <li>Selected appropriate academic v</li> <li>Well structured sentences</li> <li>Minimal spelling mistakes and se</li> <li>Proofread adequately</li> </ul>			<ul> <li>Word choices invite misunderstanding or may give offence</li> <li>Consistently poor grammar and spelling</li> </ul>	return project to resident for revisions. Do NOT grade until satisfactory
Organization	<ul> <li>Organized thoughts</li> <li>Excellent layout of tool</li> <li>Appropriate educational tool project components</li> </ul>	<ul> <li>Organized thoughts</li> <li>Appropriate educational tool project components</li> </ul>	<ul> <li>Fairly organized thoughts</li> <li>Appropriate educational tool project components</li> </ul>	<ul> <li>Missing key elements of educational tool project components</li> </ul>	/10
Proper citation and quality of references	<ul> <li>Excellent citations</li> <li>Adequate number of references</li> </ul>	<ul> <li>Very good citation</li> <li>Adequate number of references</li> </ul>	<ul> <li>Good citation</li> <li>Adequate number of references</li> </ul>	• Improper citation	YES / NO
RESULTS	Outstanding (90-100)	Highly Acceptable (75-89)	Acceptable (60-74)	Requires Revisions (<59)	
	-	-	ome descriptors for guidance or praise	-	
	riptors and comments to help the res <b>iive grades to projects requiring rev</b>		l grade for those in the Outstanding, H e been satisfactorily completed.	ighly Acceptable and	/100



Resident:		Assessor:	Date:		
	Outstanding	Highly Acceptable	Acceptable	Requires Revisions	
Identification of the need for a clinical educational tool	<ul> <li>Problem/topic clearly identified</li> <li>Objectives for development of the project are richly stated</li> <li>Complete description of the need for this project and/or a description of existing/similar projects</li> </ul>	<ul> <li>Problem/topic clearly stated, originally, creativity</li> <li>Objectives less richly stated</li> <li>Clear description of the need for the tool and/or the value of existing/similar projects</li> </ul>	<ul> <li>Problem/topic stated</li> <li>Objectives not fully stated</li> <li>Brief description of the need for the project and/or the value of existing/similar projects</li> </ul>	<ul> <li>Problem/topic not defined</li> <li>Objectives not stated</li> <li>Need for the tool and/or the value of existing similar not stated</li> </ul>	/20
Relevance to Family Medicine	YES:		-	NO:	YES/NO
		interest to the Family Medicine con dependent worker, took initiative Principles of Family Medicine	nmunity, student learned from	<ul> <li>Problem/topic is of no interest to the Family Medicine community</li> <li>Relevance to Family Medicine is not identified or approved</li> </ul>	If "NO", return project to resident for revisions. Do NOT grade until satisfactory
Information Gathering: Literature review of the identified problem	<ul> <li>Thorough description of the literature review on the value of existing humanities projects</li> <li>Clear description of existing projects</li> <li>Critical evaluation of evidence and certainty of conclusions</li> </ul>	<ul> <li>Some review of the literature</li> <li>Less clearly described existing projects</li> <li>Limited assessment of strength of evidence and certainty of conclusions</li> </ul>	<ul> <li>Sparse/basic literature description</li> <li>Minimal statement about strength of evidence and certainty of conclusions</li> </ul>	<ul> <li>Incomplete literature review to support the identified problem/topic</li> <li>No mention of strength of evidence and certainty of conclusions</li> </ul>	(45
Achievement of Goals/Objectives	<ul> <li>The project is exceptional in meeting the stated objectives for the defined health setting</li> </ul>	<ul> <li>The project highly achieves the stated objectives for the defined health setting</li> </ul>	<ul> <li>The project meets the stated objectives for the defined health setting</li> </ul>	<ul> <li>The project does not meet the stated objectives for the defined health setting</li> </ul>	/15
Organization	<ul> <li>Organized thoughts and high level of clarity</li> <li>Excellent layout</li> <li>Includes appropriate components</li> </ul>	<ul> <li>Organized thoughts</li> <li>Appropriate components</li> </ul>	<ul> <li>Fairly organized thoughts</li> <li>Appropriate components but lacking in clarity</li> </ul>	<ul> <li>Missing key elements of project components</li> </ul>	/10
Proper citation and quality of references	<ul> <li>Excellent citations</li> <li>Adequate number of references</li> </ul>	<ul> <li>Very good citation</li> <li>Adequate number of references</li> </ul>	<ul> <li>Good citation</li> <li>Adequate number of references</li> </ul>	<ul> <li>Improper citation</li> </ul>	YES / NO

DALHOUSIE | Family UNIVERSITY | Medicine Community. Learning. Research.

#### Dalhousie Family Medicine Resident Project Assessment Rubric: Health Humanities

	Outstanding	Highly Acceptable	Acceptable	Requires Revisions	
Results and Discussion	RESULTS • The results were extremely well presented and of high quality	<ul> <li><b>RESULTS</b> <ul> <li>The results were well presented and of good quality</li> </ul> </li> </ul>	RESULTS • The results were adequately presented and of adequate quality	<b>RESULTS</b> • The results were inadequately presented and not of quality	/2!
	<ul> <li>DISCUSSION <ul> <li>Insightful, very detailed</li> <li>Rich discussion of how the project connects to the literature</li> <li>Identifies strengths and limitations</li> <li>A rigorous discussion of implications for practice and further development</li> </ul> </li> </ul>	<ul> <li>DISCUSSION <ul> <li>Insightful, less detailed</li> <li>Some discussion of how the project connects to the literature</li> <li>Identifies strengths and limitations</li> <li>Some discussion of implications for practice and further development</li> </ul> </li> </ul>	<ul> <li>DISCUSSION <ul> <li>Minimal insights and detail</li> <li>Limited discussion of how the project connects to the literature</li> <li>limited discussion of strengths and limitations</li> <li>limited discussion of implications for practice and further development</li> </ul> </li> </ul>	<ul> <li>DISCUSSION         <ul> <li>Insufficient insights and detail</li> <li>Insufficient discussion of how the project connects to the literature</li> <li>Insufficient discussion of strengths and limitations</li> <li>Insufficient discussion of implications for practice and further development</li> </ul> </li> </ul>	/20
Quality of Language	YES: • Clear and accurate word choice • Selected appropriate academic • Well structured sentences • Minimal spelling mistakes and s • Proofread adequately • Cultural and identity sensitivity	vocabulary sentence structure concerns		<ul> <li>NO:</li> <li>Word choices invite misunderstanding or may give offence</li> <li>Consistently poor grammar and spelling</li> <li>Insensitive to culture and/or identity</li> </ul>	YES / NC If "NO", return project to resident for revisions. Do NOT grade until satisfactory
RESULTS	Outstanding (90-100)	Highly Acceptable (75-89)	Acceptable (60-74)	Requires Revisions (<59)	
	Judge level of achievement based on de	•		•	
-	descriptors and comments to help the re			lighly Acceptable and	/100
Acceptable rallg	e. Give grades to projects requiring re-	visions only after the revisions lidve	e been satisfactorily completed.		/100

# Guide on How to Organize Resident Projects Based on Type of Project

	Research	Practice Quality Improvement/Audit	Position Paper / Essay	Educational Tool	Literature Appraisal	Heath Humanities
Cover Page: 1 page	Must include project title,	author's name, name(s) of co	o-author(s) (if applicable), sit	e, name(s) of Project Superviso	r(s), type of project, and date.	
Abstract: ½ page	Summary of all the section	ns using the headings in the le	eft column			
Introduction: ½ to 1 page	Summary of background literature and state research question. State objective(s) or hypothesis(es)	Summary of background literature and state research question. State objective(s).	Summary of background literature and the position that will be taken. State objective(s).	Summary of background literature and provide evidence for relevance and indicate gaps. State objective(s).	Summary of background to topic for literature appraisal and state research question. State objective(s).	Summary of background literature and provide evidence for relevance and gaps. State objective(s).
Study Design / Method: 1 to 2 pages	Describestudy methods.	Describe study methods, inclusion and exclusion criteria.	Provide brief description of evidence development to support position (literature review).	Provide methodology for educational too development, audience focus, visuals, language level, tool choice (paper, video), etc.	Describe how review was conducted, data- bases searched, terms used for searches and inclusion/ exclusion criteria used. Method applied for appraisal.	Provide methodology for project development, audience focus, visuals, language level, medium choice (paper, video) etc. Describing the art form that was chosen and why.
Results: 3 to 5 pages	Present findings from data.	Present findings from data and describe the strength of the findings.	Detail position in relation to literature/ evidence and, if appropriate, make	Statements need to be grounded in the literature. Describe the tool	Summarize findings including evidence strength.	Inclusion of the humanities piece with a description.
Discussion: 2 to 3 pages	Synthesize/interpret findings, link back to literature, identify implications for practice and research.	Synthesize the data and identify implications for practice and research.	recommendations or describe the meaning of the position and identify implications for practice and	and how to implement it. Provide the tool in appendix. Identify implications for research.	Synthesize the literature, create meaning, and identify implications for practice and research.	Synthesize/reflect on the piece, link back to literature, identify implication for practice and research.
Strengths/ Limitations: <sup>1</sup> / <sub>2</sub> page	Share limitations and high	light advantages and disadva	ntages of the data/literature	2	·	
Conclusion: <sup>1</sup> / <sub>2</sub> page	Summarize the results					
References	References should be appr	opriate, relevant, and the sty	le should be consistent.			

### Tips and Tricks When Doing a Family Medicine Resident Research Project

Conducting research for your resident project can be rewarding and challenging. The following is intended to provide guidance and suggest resources to help with the research endeavor so you can competently complete your project with the time and resources you are prepared to expend. This guide is divided into 5 Steps:

- Step 1: Select a topic, identify the research problem, and state a clear research question.
- Step 2: Choose a research method.
- **Step 3:** Find an appropriate supervisor.
- **Step 4:** Write a research proposal.
- Step 5: Ask the expert.

#### Step 1: Select a topic, identify the research problem, and state a clear research question.

Topic requirement are:

- If needs a strong relationship to Family Medicine;
- You need to be curious/passionate about it;
- It needs to address a gap in the literature research;
- It needs to be doable within the allotted time and your skill set.

#### Identifying your research problem/research question

Selecting your research question can be one of the most agonizing and critical steps in developing a solid research study. It defines your whole process, from what background literature you need to read, guiding what method you should use, analysis required, and the findings to report in order to answer the question. Your question should be clear, focused, concise, complex and arguable. This will take time. Step away from your computer; consider what drew you to your topic. What about it animates and matters to you? Listen to yourself and start formulating your question by following your own interests. Remember, you will spend a lot of time researching and writing about the proposed project. If it does not interest you in the beginning, it will certainly become very difficult to write about in the end.

Next, extensively research your topic. What have experts published in peer reviewed journals? How have they framed their research? What gaps, contradictions or concerns arise for you as you read, talk to people, and visit places? Would doing a local project using existing studies enhance knowledge? Consult the literature! If you aren't sure how to do this, consult a subject librarian:

#### Formulating your research question

- Conduct a preliminary literature review of the topic area to help frame the research question.
- The question needs to be specific answerable within your time frame.
- Is your question adding something new to what is already known? Is it addressing local relevance?
- Formulate two or three research objectives that will answer the question.

#### Think, consider, and estimate

• Be sure of the feasibility of your study.

#### Edit your writing

- Choose your words carefully.
- Rewrite, rewrite, rewrite!
- Keep your sentences short.

#### **Too broad:** How are doctors addressing diabetes in Canada?

# Appropriately specific: What are common traits of those suffering from diabetes in Canada, and how can these commonalities be used to aid the medical community in prevention of the disease?

The simple version of this question can be looked up online and answered in a few factual sentences, and leaves no room for analysis. The more complex version is written in two parts; it is thought provoking and requires both significant investigation and evaluation from the writer. As a general rule of thumb, if a quick Google search can answer a research question, it's not very likely effective.

#### Step 2: Choose a research method

There are several methods to choose from for conducting research. They broadly group into qualitative studies, quantitative studies and evidence review. Mixed methods studies draw on both qualitative and quantitative methodologies because they are complementary.

#### Qualitative Research

- Qualitative research focuses on the interpretation of a situation, a set of behaviors, or a setting.
- Collects large amount of data from a small number of individuals, usually through interviews, analyzed to identify themes.
- Used to understand people's experiences in much greater depth than is possible with quantitative research.
- Qualitative data is analyzed using thematic techniques.
- Methodology examples include: ethnography, narrative, phenomenological, grounded theory and case studies.
- Examples include: interviewing patients to understand how they experience a disorder or health system approach, or interviewing health care providers to understand how they view a clinical tool or their experience of medical education, or describing a series of cases with a similar type of health issue.

#### Quantitative Research

- Quantitative research measures characteristics of a population or phenomenon of interest.
- Collects data from larger number of individuals through surveys or existing or prospectively collected data sets.
- Quantitative data is analyzed using statistical analyses with tests of statistical significance.
- Methodology examples include: population surveys to measure prevalence of a disorder or implementation of a clinical tool, observational studies using clinical or administrative data sets, or randomized controlled trials of the efficacy and safety of treatments.
- Examples include: identifying correlates of suicide, evaluating measures to prevent suicide, or determining the benefit/risk of a medication to treat a disorder.

#### Step 3: Find an appropriate supervisor

A supervisor should be interested in your project and be available to guide you. If you are having trouble finding one, talk to your site's Project/Research Coordinator.

#### Step 4: Write a research proposal. This will also be required for REB approval.

A research proposal is a study plan that is to be followed in the course of a research study. It is important for you to understand how your objectives, method, analysis plan, and any budgetary requirements, as well as how prepared you are to do the work required and if you have the needed skills. From this, you can identify where you will need assistance.

Research proposal sections:

- 1. **One paragraph introduction** to your research question/problem, including why this is important to study, and relevance to Family Medicine. A good first line of a research proposal begins, "The research objective of this proposal is..."
- 2. Write a more in-depth introduction. After you have identified a pertinent problem and framed a purpose statement, then you need to craft an introduction. Among other things, the introduction to the proposal will include:
  - a. The problem statement
  - b. A brief summary of the literature
  - c. A brief description of any gaps in the literature
  - d. A Purpose statement as to why you are proposing the study and why others should care about the subject matter of your research proposal

- 3. Background/literature review. Frame your project around the work of others. Remember that research builds on the extant knowledge base, that is, upon the peer reviewed published work of others. Be sure to frame your project appropriately, acknowledging the current limits of knowledge and making clear your contribution to the extension of these limits. Be sure that you include references to the work of others. Also frame your study in terms of its broader impact to the field and to society. (e.g., "If successful, the benefits of this research will be...")
- 4. **Methods**. Determine the Method of Investigation. The method section is the second of the two main parts of the research proposal. In good academic writing it is important to include a method section that outlines the procedures you will follow to complete your proposed study. Many scholars have written about the different types of research methods in articles and textbooks. It is a good idea to site the method and provide a reference. The method section generally includes sections on the following:
  - a. Research design
  - b. Sample size and characteristics of the proposed sample
  - c. Data collection and data analysis procedures

#### 5. Determine the research design.

- a. The next step in good academic writing is to outline the research design of the research proposal. For each part of the design, it is highly advised that you describe two or three possible alternatives and then tell why you propose the particular design you chose. For instance, you might describe the differences between experimental, quasi-experimental, and non-experimental designs before you elaborate on why you propose a non-experimental design.
- b. Determine the Sample Size and the Characteristics of the Sample. There are several free online sample size calculators, though you will need a basic understanding of statistics to know how to use and interpret them. Some sites include: <u>http://www.stat.ubc.ca/~rollin/stats/ssize/</u>

http://www.raosoft.com/samplesize.html http://homepage.stat.uiowa.edu/~rlenth/Power/

c. In this section of your research proposal, you will describe the sample size and the characteristics of the participants in the sample size. Describe how you determined how many people to include in the study and what attributed they have which make them uniquely suitable for the study.

#### 6. Determine the data collection and the data analysis procedures.

- a. In this section you will describe how you propose to collect your data (e.g. through a questionnaire survey if you are performing a quantitative analysis or through one-on-one interviews if you are performing a qualitative or mixed methods study).
- b. After you collect the data, you also need to follow a scheme as to how to analyze the data and report the results. In a quantitative study you might run the data through Mintab, Excel, or better yet, SPSS, and if you are proposing a qualitative study you might use a certain computer program like ATLAS to perform your analysis using a specific qualitative approach such as the narrative study, grounded theory study, or framework analysis, that exposed the main themes from the proposed interviews (see Tips and Tricks on Statistics).
- 7. Software and analysis. There are several options for creating a database, cleaning your data and conducting your analysis.

Free analysis software is available through Dalhousie. Minitab and SPSS for quantitative analyses and NVivo is used for qualitative analyses. They are found here: <u>https://software.library.dal.ca/index.php</u>. User guides and tutorials can be found here: <u>http://www.minitab.com/en-CA/training/</u>. Additionally, students familiar with conducting statistics in Excel can download the free add-on package to a windows suite. However, reviews demonstrate that Excel has many issues handling data correctly for analysis and is not as user-friendly as Minitab.

#### Ethics

you will need to address any ethical considerations and how they will be dealt with, including confidentiality, data storage, etc. If Research Ethics Board (REB) approval is required for your study, you should check the website for relevant REB review. Each site has its own REB process.

#### Step 5: Ask the experts

Review your proposal with your Project Supervisor and site Project/Research Coordinator. Depending on your research needs, you may also consult with the Research Methods Unit (RU) at Dalhousie University. An initial consultation is free, although there may be a fee if further assistance is required. Early consultation can help you avoid costly mistakes.

Consider using the ARECCI tool when determining whether REB approval is required. <u>http://www.aihealthsolutions.ca/arecci/screening/454024/c70dc912039757098791042568d e7c6e</u>

## Tips and Tricks When Applying to a Research Ethics Board (REB) for a Family Medicine Resident Project

When collecting data for a resident (research) project involving human beings, an ethics review from a recognized **Research Ethics Board (REB)** is required.

This application requires a proposal with a brief background, methods and data analysis section. In addition, the REB is particularly interested in the **consent process** regarding research participants. It is paramount that research participants are volunteers, who are fully aware to what they consenting.

The Tri-Council - Canadian Institutes for Health Research (CIHR), Social Science and Humanities (SSHRC) and National Science and Engineering Research Council (NSERC) – has developed a joint research ethics policy. See this link for the entire policy:

#### http://www.pre.ethics.gc.ca/pdf/eng/tcps2/TCPS 2 FINAL W eb.pdf

The Tri-Council states:

REBs shall consider whether information is identifiable or non- identifiable. Information is identifiable if it, alone or when combined with other available information, may reasonably be expected to identify an individual. The term "personal information" generally denotes identifiable information about an individual.

However, there are some exceptions. The Tri-Council states:

Research that relies exclusively on publicly available information does not require an REB review when: (a) the information is legally accessible to the public and appropriately protected by law; or (b) the information is publicly accessible and there is no reasonable expectation of privacy.

Chart reviews, or chart audits, usually require REB approval when the resident is planning to discuss the results publicly (Resident Project Day).

Many resident projects are considered "minimally invasive" and they may qualify for an "expedited review". An expedited review usually takes between 3 to 4 weeks, while a full review may take up to 2 months.

After REB approval has been obtained, no changes to the research instruments or recruitment strategy can be made. If that is required, the REB needs to be informed.

Each family medicine resident who requires REB approval needs to obtain it in the province or hospital of their residency.

Please consult with your site Project/Research Coordinator regarding the need for an REB application and how to go about it.

Typically, residents and Project Supervisors will be required to provide a statement around data management and storage requirements

Here are some links for REB websites in various provinces that residents can access for a specific REB application information and forms (each institute has a different process).

#### **New Brunswick**

https://en.horizonnb.ca/home/research/research-ethics-board.aspx

http://www.mta.ca/reb/Vitalite%20Guide%20Feb%202011%20English.pdf

#### **Prince Edward Island**

http://www.healthpei.ca/reb

#### Nova Scotia

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www.cdha.nshealth.ca/discovery-innovation-29

https://www.cdha.nshealth.ca/discovery-innovation/ethics

https://www.dal.ca/dept/research-services/responsible-conduct-/research-ethics-.html

## Tips and Tricks When Doing Statistics Family Medicine Resident Project

If you want to do a resident project that involves collecting data and requires statistical analysis, here are some tips of how you can go about that. Keep in mind that you are responsible for doing the work, and should be prepared to know how to collect data, enter data, run your own analysis and interpret your findings, though some resources are available to assist you.

#### **Assistance Resources**

BEFORE you start collecting data, find somebody you can discuss your plan and statistical needs with. It could be your project supervisor, your resident project site coordinator and/or somebody else who can help you who is experienced with statistics. Resident project site coordinators can help you find someone to assist you. Also, the Dalhousie University Research Methods Unit (see below) can be consulted. There will likely be a cost associated with receiving assistance, and these should be appropriately budgeted. Each resident has access to \$50 towards their resident project. Additional funds would require an application with proposal and budget to your resident project site coordinator. Funding is at the discretion of the Department.

#### Dalhousie Research Methods Unit

If you need more sophisticated help you can consult with the Dalhousie Research Methods Unit <u>http://www.cdha.nshealth.ca/discovery-innovation/research-methods-unit</u>. The initial consultation with them is free.

#### Software resources

Several software packages are available to assist with statistical analysis and they often have helpful tutorials. Here are some examples:

#### MINITAB

data in Minitab or import from excel. This program is free of charge from the Dalhousie website; <u>http://its.dal.ca/helpdesk/licences.html (not for MAC users</u>). Minitab is useful for basic statistics, regression, ANOVA, reliability and survival analysis.

Here is a YouTube getting started video: http://www.youtube.com/watch?v=Ql88ytNBNgw Or tutorials from Minitab: http://www.minitab.com/en-GB/training/tutorials/default.aspx

#### SPSS

Statistical Package for Social Sciences (SPSS) is a popular statistical analysis program that is fairly easy to learn with several resources available. All Dalhousie University faculty and learners can download SPSS programs. Resident project site coordinators can sometimes assist in finding access to a computer with SPSS.

#### Microsoft Excel

Microsoft Excel is included in most MS office suites and can be used to conduct some basic statistics and creates attractive charts and graphs. However, a quick Google search will provide concerns as the reliability of its statistical analysis accuracy, so use with caution. You can use Microsoft Excel sheets to enter data. These Excel sheets can be easily imported to the statistical package Minitab. In theory you can also import the Excel data sheet in SPSS but it has caused some problems in the past.

There are several videos and other supports found online.

#### Statistical Analysis Software (SAS)

If you require more advanced statistical techniques than the above options provide, you may want to use SAS or STATA, and unless you have advanced training and experience, you will likely need to hire assistance. It is recommended you consult with your supervisor, resident project site coordinator and/or the Research Methods Unit.

#### R

R is free software for statistical computing and graphics. It compiles and runs on a wide variety of platforms such as Windows and MacOS. You can download it from <a href="http://www.r-project.org/">http://www.r-project.org/</a>

## Tips and Tricks When Creating an Educational Tool Family Medicine Resident Project

Before you start thinking about developing an educational tool, you need to consult the literature to find out the following:

- Does a tool already exist?
- Could you revise an existing tool?
- Could you adopt an existing tool to local conditions?

If no educational tool exists for what you want to do, go back to the literature. Remember, an educational tool's information has to be grounded in the scientific literature.

Also, if you select an educational tool as your resident project, it needs to be accompanied by a literature review paper. The purpose of this is that the reviewer can assess that the information in the educational tool is scientifically sound.

Once you have determined that you want to create your own educational tool, you need to consider the following:

- Who is your audience?
- What is the message you want to provide?
- What is the medium you want to use for the educational tool?
  - Paper, Internet, Video etc.
    - Do you have easy access to such mediums?
  - What reading level should you aim for? (readability)
- Should the tool be interactive, passive?
- Consider the cost of an educational tool?
  - o Do you need professionals to help with the design and what is the cost?
  - Are you going to distribute the tool and how many copies and what is the cost?

Also, you need to consider if you will test your tool on the target audience. Even a small pilot test may inform you about the readability and validity of the educational tool.

An educational tool should be:

• Fun

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- Visually compelling
- Use images
- Limit text
- Make your material easy to understand
- Create a "story" plot

Some references that may be of interest:

http://www.ncbi.nlm.nih.gov/pubmed/23044857

http://www.ncbi.nlm.nih.gov/pubmed/22720382

http://www.ncbi.nlm.nih.gov/pubmed/21070533

## Tips and Tricks When Doing a Health Humanities Family Medicine Resident Project

This stream involves two main components:

- 1. **A paper:** including a Cover Page, Abstract, Introduction, Methods, Results and Discussion, Strength and Limitations, and Conclusion.
- 2. The artistic piece: included in the results section

The health humanities are a burgeoning stream of scholarship that involves areas connected to, but not limited to, the field of medicine. Your project may explore themes such as compassion, ethics, or lived experience. It will involve the creation of an original piece of work, which may take the form of writing, audio, film, visual art, or music, for example. In the Introduction, you may choose to describe your inspiration for the project. This is optional

Examples:

- Exploring the social determinants of health using photography
- Podcast about understanding patient values in diagnosis and recommending therapy
- The use of the visual arts to affect public health policy
- A multimedia project (e.g. video or blog) about women's health
- Create a musical composition based on prior published evidence for using therapy in the treatment of children with autism spectrum disorder
- The use of visual art in understanding the patient experience with mental illness, then creating a visual art piece reflecting their understanding

These are just a few examples to launch your creativity.

For the methodology section, be sure to include the steps taken in creation of your final piece. If, for example, you are making a podcast, describe the steps involved in the production process (e.g. arranging interviews, construction of interview questions, recording technique, use of editing software). For music, the process of song writing and what influenced your choice of musical style and lyrics could be explained. For a piece of visual art, you could explain the art-making process, your choice of media and colour, and what they hope to portray by making these choices.

Sharing humanities projects publicly would be encouraged, whether as an art installation, publication in the Humanities section of a medical journal, or live reading of a short story.

Your Methodology section also needs to explain the rationale for your choice of medium of expression.

**Ethics and Confidentiality.** Humanities projects are not exempt from ethics review. If your scholarship involves human subjects, you must propose your project to the appropriate Research Ethics Board for your site.

As within clinical practice, protecting confidentiality is paramount. It is key when considering a humanities- related project. If writing a story based on an actual patient experience, for example, you would change the name, gender and clinical scenario so that the patient cannot be identified. If pursuing a photography-based project, capturing identifying images without an individual's consent is not permitted.

The following websites may help you learn more about the health humanities:

Art for the Sake of Medicine (an article by Dr. Sarah Fraser about why the health humanities are important) <u>https://www.cfp.ca/content/64/10/760</u>

Canadian Association of Health Humanities: https://www.cahh.ca/

## Tips and Tricks When Doing a Literature Review Family Medicine Resident Project

Literature reviews are used to systematically and critically evaluate available evidence as a basis for practice or further research. Examples include reviewing evidence for the effectiveness of a drug, the causes of a physical or mental health problem, or barriers and facilitators that patients experience in accessing health care. When doing a literature review project, you need to adhere to some conventions. Before you start you may find it helpful to consult with a university/hospital librarian or a subject matter expert on how best to access resources for the literature review.

- 1. Research question must be relevant to family medicine.
- 2. Search for original primary papers (not reviews) published in peer-reviewed journals. If you include other types of evidence, provide a rationale. Obtain and review whole papers, not just abstracts.
- 3. Assess the strength of evidence of the studies you are reviewing, using an approach appropriate to the type of research question (see Basic Evidence Levels for Treatments).
- 4. Create a table to summarize your findings with respect to the research question and objectives (see Sample Table).
- 5. Do not repeat word for word in the text what you have in the tables: they should be complementary
- 6. Use the same outline as a regular scientific study.
  - a. Introduction: why did you want to do this project
  - b. Background: set up the research question by reviewing what has been published on the topic and explain the rationale for your review.
    - i. Finish the section with a clear research question and 1-3 objectives designed to answer the question.
  - c. Methods need to include the following:
    - i. Search terms
    - ii. Inclusion and exclusion criteria.
    - iii. Citation databases searched e.g. PubMed. List other sources if used.
    - iv. Number of articles pulled and ultimately reviewed.
    - v. Method of analyzing the literature collected. Examples include narrative review pointing out findings, level of evidence and basic strengths and limitations for each study; or systematic review using formal procedures to categorize strength of evidence and certainty of conclusions (e.g. GRADE); or statistical meta-analyses of data obtained from published studies combined with formal assessment of strength of evidence and certainty of conclusions.
  - d. In the discussion, describe the strengths and limitations of each article and synthesize the data in the context of published literature. Use subtitles to help the reader. Answer the objectives to answer the research question.
  - e. In the conclusion pull it all together. No new information should be added. Draw conclusions and point out implications for practice and further research. Make an overall statement regarding strength of evidence and certainty of conclusions.
  - f. Acknowledgments: supervisor and others that may have helped you.
  - g. Use a standard bibliography format and do not mix bibliography styles.

# LEVELS OF EVIDENCE

Level of	Study Design	Definition	How does sleeping with a bottle of juice versus a
Evidence	Study Design	Demition	bottle of water affect children's dental hygiene?
1	Randomized Control Trials (RCTs)	RCTs are considered the most reliable form of scientific evidence. They involve the random assignment of participants to interventions and controls.	A group of children are randomly selected from the general population (each child has the same likelihood of being selected as all the others). This group is then randomly divided into two groups (A and B). Again, each child has an equal chance of being placed in either group. Group A is given a bottle of juice to sleep with at night. Group B is given a bottle of water to sleep with at night. The effect on the children's teeth is monitored for a set amount of time.
2	Cohort Studies	A Cohort Study is a study in which participants who presently have a certain condition and/or receive a particular treatment are followed over time. They are then compared with another group who are not affected by the condition.	A group of children who have poor dental health are followed across time. The habit of sleeping with a bottle of juice or water of the poor dental health group is compared to the sleep habits of a control group.
	Ecological/Epidemiol ogical Studies	Ecological studies look for associations between the occurrence of disease and exposure to known or suspected causes. The unit of observation is the population or community and may be defined in various ways.	Children with poor dental health are identified. Then correlations are made between (a) sleeping with a bottle of juice and dental health and (b) sleeping with a bottle of water and dental health.
3	Case-Controlled Studies	Case-control studies are a frequently used in epidemiological studies. Case-control studies compare participants who have a specific condition with participants who do not have the condition. Otherwise similar in order to identify factors that may contribute to the condition of interest.	Comparing children with poor dental health, with those who have good dental health who are the same age, ethnicity, socio-economic background, number of dental check-ups, etc.
	Non-Randomized Control Trials	The participants and interventions are not randomly assigned.	The first 50 to volunteer are instructed to have their child sleep with a bottle of juice, with the last 50 volunteers are instructed to have their child sleep with a bottle of water.
4	Case-Series	A number of individual cases of a particular condition are identified and followed individually over time.	Ten cases of poor dental hygiene in children are identified and intensely followed for a set amount of time.
5	Expert Opinion	The opinion of a professional who is considered an expert in their field.	The advice/opinion of a dentist who specializes in children's oral health and who has worked in the field for a long period of time.

### SAMPLE PAPER OUTLINE

A review of evidence in support of school-based health promotion programs<sup>1</sup>

Introduction (1/2 – 1 page) Background (1 page) Obesity Why school-based programs?

Research Question What are the features of a successful school-based health program?

Methods (1/2 - 1 page)

Results (4 – 5 pages)

Features of successful programs Peer-led Collaborative – community Dedicated school health coordinators Incorporates national/provincial/regional guidelines Parents as integral part of program and source of support for children Role of family doctors in the school-based health program model Gender and other subgroup analysis

Discussion (4-5 pages)

Conclusion (1 page) Acknowledgement Bibliography

Tables

The table becomes the central piece of your review. Do not repeat what is in the table in the text; rather, describe it in general terms.

<sup>&</sup>lt;sup>1</sup> Dr. Kappagantula provided permission to use her resident project as a sample project outline and literature review table

Author	Design	c	Variables	Results	Limitations
Bjelland et al.	RCT	14 65	Sugared beverage intake, sedentary behaviour	Preventive initiatives more effective in girls, need to study gender subgroups	Crude estimates of sedentary behaviours, sampling bias, social desirability in data
Brown T, Summerbell C.	Literature Review	38	Weight outcome	School based interventions may have benefit but inconsistent, may be short-term, girls/younger children have more benefit, physical activity must be combined with diet interventions	Heterogeneity of studies evaluated, therefore difficult to generalize any findings.
Bryn Austin S et al.	Qualitative	6	Effectiveness of <i>School Health Index</i> , Role of external facilitator	Presence of external facilitator influenced effectiveness of <i>SHI</i> and ability of schools to implement health promotion initiatives	Most schools in one geographical location (New England), reliance on self- reported data, did not include an objective data source
Card A, Doyle E.	Qualitative	40	Effectiveness of School Health Coordinator in implementing health promotion strategies in Nfld.	School health coordinator can change the approach of health promotion in schools to involve social, environmental as well as physiological health determinants	Vague descriptors regarding effectiveness of school health coordinators, results very preliminary in nature
Crawford PB et al.	Position paper	n/ a	n/a	Using a bioethics framework further justifies the promotion of nutritional health through schools	n/a

# Sample Table for a Literature Review