



DEMONSTRATING SELECTIVITY THROUGH PRIORITY TOPICS AND KEY FEATURES

Selectivity

Selectivity describes a set of skills that characterize the competent family physician as a physician who is adaptable in their approach, modifying it to suit both the situation and the patient. A competent family physician:

- ✓ Sets priorities and focuses on the most important
- ✓ Knows when to say something and when not to
- ✓ Gathers the most useful information without losing time on less contributory data
- ✓ Does something extra when it will likely be helpful
- ✓ Distinguishes the emergent from the elective and intervenes in a timely fashion
- ✓ Acts when necessary, even though information may be incomplete
- ✓ Determines the likelihoods, pertinence, and priorities in their differential diagnoses
- ✓ Distinguishes the sick from the not sick
- ✓ Selects and modifies a treatment to fit the particular needs of the patient and the situation

Selectivity is an essential skill in 172 key features and in 63 priority topics. This booklet includes a collection of those key features that most clearly help assess and coach for these elements of selectivity. The key features that are particularly strong representations are presented first, in alphabetic priority topic order. A smaller, second representative group is also included, organized along the nine behaviours listed above and chosen to emphasize priority topics not included in the first group.

This booklet also provides a number of suggestions for using this material, depending on your role within residency training.

As always, the Working Group on the Certification Process thanks you for your interest and support, and appreciates any comments or feedback you might have on this material and booklet. Please e-mail your comments to kd@cfpc.ca.

Using this booklet

Residents: This can serve as a specific guide to monitor your progress and to ask for coaching/ feedback. Selectivity is a skill that is honed throughout your residency and beyond. Think of the way you review a case with your preceptor—how you included everything as a medical student, and are now moving to a more nuanced version where you focus on what is most important (in your history gathering, hypothesis generation, investigations, and more) as you relate this efficiently to your preceptor.

Preceptors: This booklet may help you focus observations/feedback to assess and coach your learners. For assessment purposes, specifically defining problems in performance in this skill dimension, the previously-described elements could be characterized as behavioural indicators associated with difficulties in selectivity.

- X Does not set priorities and does not focus on the most important
- X Does not know when to say something and when not to
- \boldsymbol{x} Does not gather the most useful information, loses time on less contributory data
- **✗** Avoids doing something extra even when it will likely be helpful
- X Does not distinguish the emergent from the elective and does not intervene in a timely fashion
- X Does not act when necessary, even if information is incomplete
- Does not determine the likelihoods, pertinence, and priorities in their differential diagnosis
- X Does not distinguish the sick from the not sick
- Does not select and modify a treatment to fit the particular needs of the patient and the situation

Competency coaches/faculty or academic advisors (those working with residents to articulate learning plans during periodic reviews): During a periodic review, pay attention to the resident's documented selectivity skills. If they are lacking or identified as a concern, this document may help to create a plan to incorporate more focused feedback on selectivity using these examples. Generate a list for the resident to take to upcoming clinical experiences with the intent of gathering more deliberate feedback from preceptors in those settings.

Assessment, site, and program directors: Keeping the key features in mind when planning curriculum and the behaviours in mind when designing assessment tools will ensure that residents are given opportunities to develop skills in, and receive feedback about, selectivity. Ensure that residents have documented feedback about this skill dimension.

Remediation coaches (or those working with a resident in difficulty): Where skills in selectivity need concentrated attention, make a list of the above behaviours and key features pertinent to an upcoming supplementary learning experience as part of a focused assessment tool for that experience. Focus discussions about how to further develop competency in selectivity on the above descriptors, perhaps using one or more of the following key features to ground the discussion in a clinical setting. Supplement this with a list of reading/audiovisual resources related to selectivity. The Fundamental Teaching Activities repository on the CFPC website has resources that help address diagnosing and coaching for selectivity.

Abdominal Pain

Given a patient with a life-threatening cause of acute abdominal pain (e.g., a ruptured abdominal aortic aneurysm or a ruptured ectopic pregnancy):

- a) Recognize the life-threatening situation.
- b) Stabilize the patient.
- c) Promptly refer the patient for definitive treatment.

Allergy

In a patient presenting with an anaphylactic reaction:

- a) Recognize the symptoms and signs.
- b) Treat immediately and aggressively.

Antihiotics

Use a selective approach in ordering cultures before initiating antibiotic therapy (usually not in uncomplicated cellulitis, pneumonia, urinary tract infections, and abscesses; usually for assessing community resistance patterns, in patients with systemic symptoms, and in immunocompromised patients).

In urgent situations (e.g., cases of meningitis, septic shock, febrile neutropenia), do not delay administration of antibiotic therapy (i.e., do not wait for confirmation of the diagnosis).

Anxiety

Do not attribute acute symptoms of panic (e.g., shortness of breath, palpitations, hyperventilation) to anxiety without first excluding serious medical pathology (e.g., pulmonary embolism, myocardial infarction) from the differential diagnosis (especially in patients with established anxiety disorder).

When working up a patient with symptoms of anxiety, and before making the diagnosis of an anxiety disorder, exclude serious medical pathology.

Asthma

In a known asthmatic with an acute exacerbation, rule out comorbid disease (e.g., complications, congestive heart failure, chronic obstructive pulmonary disease).

In a known asthmatic with an acute exacerbation, determine the need for hospitalization or discharge (basing the decision on the risk of recurrence or complications, and on the patient's expectations and resources).

Breast Lump

Given a woman presenting with a breast lump (i.e., clinical features), use the history, features of the lump, and the patient's age to determine (interpret) if aggressive workup or watchful waiting is indicated.

Chest Pain

Given a clinical scenario suggestive of life-threatening conditions (e.g., pulmonary embolism, tamponade, dissection, pneumothorax), begin timely treatment (before the diagnosis is confirmed, while doing an appropriate workup).

Given a suspected diagnosis of pulmonary embolism, begin appropriate treatment immediately.

Croup

In patients with croup, Identify the need for respiratory assistance (e.g., assess ABCs, fatigue, somnolence, paradoxical breathing, in drawing)

Deep Venous Thrombosis

Identify patients likely to benefit from DVT prophylaxis.

Difficult Patient

With difficult patients remain vigilant for new symptoms and physical findings to be sure they receive adequate attention (e.g., psychiatric patients, patients with chronic pain).

Dizziness

Investigate further those patients complaining of dizziness who have:

- ✓ signs or symptoms of central vertigo.
- ✓ a history of trauma.
- ✓ signs, symptoms, or other reasons (e.g., anticoagulation) to suspect a possible serious underlying cause.

Domestic Violence

In a patient in a suspected or confirmed situation of domestic violence, assess the level of risk and the safety of children (i.e., the need for youth protection).

Earache

In the treatment of otitis media, explore the possibility of not giving antibiotics, thereby limiting their use (e.g., through proper patient selection and patient education because most otitis Media is of viral origin), and by ensuring good follow-up (e.g., reassessment in 48 hours).

Make rational drug choices when selecting antibiotic therapy for the treatment of otitis media. (Use first-line agents unless given a specific indication not to.)

Elderly

In older patients with diseases prone to atypical presentation, do not exclude these diseases without a thorough assessment (e.g., pneumonia, appendicitis, depression).

Fatigue

Avoid early, routine investigations in patients with fatigue unless specific indications for such investigations are present.

Fever

In febrile patients, consider life-threatening infectious causes (e.g., endocarditis, meningitis).

Aggressively and immediately treat patients who have fever resulting from serious causes before confirming the diagnosis, whether these are infectious (e.g., febrile neutropenia, septic shock, meningitis) or non-infectious (e.g., heat stroke, drug reaction, malignant neuroleptic syndrome).

Fractures

Identify and manage limb injuries that require urgent immobilization and/or reduction in a timely manner.

Headache

Given a patient with a new-onset headache, differentiate benign from serious pathology through history and physical examination.

Given a patient with worrisome headache suggestive of serious pathology (e.g., meningitis, tumour, temporal arteritis, subarachnoid bleed):

- a) Do the appropriate workup (e.g., biopsy, computed tomography [CT], lumbar puncture [LP], erythrocyte sedimentation rate).
- b) Make the diagnosis.
- Begin timely appropriate treatment (i.e., treat before a diagnosis of temporal arteritis
 or meningitis is confirmed).

In a patient with a history of suspected subarachnoid bleed and a negative CT scan, do a lumbar puncture.

Hypertension

In appropriate patients with hypertension (e.g., young patients requiring multiple medications, patients with an abdominal bruit, patients with hypokalemia in the absence of diuretics), suspect secondary hypertension.

Given a patient with the signs and symptoms of hypertensive urgency or crisis, make the diagnosis and treat promptly.

Ischemic Heart Disease

In a patient presenting with symptoms suggestive of ischemic heart disease but in whom the diagnosis may not be obvious, do not eliminate the diagnosis solely because of tests with limited specificity and sensitivity (e.g., electrocardiography, exercise stress testing, normal enzyme results).

In a person with diagnosed acute coronary syndrome (e.g., cardiogenic shock, arrhythmia, pulmonary edema, acute myocardial infarction, unstable angina), manage the condition in an appropriate and timely manner.

Joint Disorder

In a patient presenting with joint pain, distinguish benign from serious pathology (e.g., sarcoma, septic joint), by taking pertinent history.

In a patient presenting with a monoarthropathy, rule out infectious causes. (e.g., sexually transmitted diseases).

Low-back Pain

In a patient with undefined acute low-back pain (LBP), rule out serious causes (e.g., cauda equina syndrome, pyelonephritis, ruptured abdominal aortic aneurysm, cancer) through appropriate history and physical examination.

Meningitis

When meningitis is suspected, ensure a timely lumbar puncture.

For suspected bacterial meningitis, initiate urgent empiric IV antibiotic therapy (i.e., even before investigations are complete).

Menopause

In a patient with atypical symptoms of menopause (e.g., weight loss, blood in stools), rule out serious pathology through the history and selective use of tests, before diagnosing menopause.

Multiple Medical Problems

In all patients presenting with multiple medical concerns (e.g., complaints, problems, diagnoses), take an appropriate history to determine the primary reason for the consultation.

Osteoporosis

Use bone mineral density testing judiciously (e.g., don't test everybody, follow a guideline).

Periodic Health Assessment/Screening

In any given patient, selectively adapt the periodic health examination to that patient's specific circumstances (i.e., adhere to inclusion and exclusion criteria of each maneuver/intervention, such as the criteria for mammography and prostate-specific antigen [PSA] testing).

Pneumonia

Identify patients, through history-taking, physical examination, and testing, who are at high risk for a complicated course of pneumonia and would benefit from hospitalization, even though clinically they may appear stable.

Pregnancy

In at-risk pregnant patients (e.g., women with human immunodeficiency virus infection, intravenous drug users, and diabetic or epileptic women), modify antenatal care appropriately.

In pregnant or postpartum patients, identify postpartum depression by screening for risk factors, monitoring patients at risk, and distinguishing postpartum depression from the "blues."

Prostate

Appropriately identify patients requiring prostate cancer screening.

In a patient suitable for prostate cancer screening, use and interpret tests (e.g., prostate-specific antigen testing, digital rectal examination [DRE], ultrasonography) in an individualized/sequential manner to identify potential cases.

Sex

Screen high-risk patients (e.g., post-myocardial infarction patients, diabetic patients, patients with chronic disease) for sexual dysfunction, and screen other patients when appropriate (e.g., during the periodic health examination).

Sexually Transmitted Infections

In a patient with symptoms that are atypical or non-specific for STIs (e.g., dysuria, recurrent vaginal infections), consider STIs in the differential diagnosis.

Given a clinical scenario that is strongly suspicious for an STIs and a negative test result, do not exclude the diagnosis of an STI (i.e., because of sensitivity and specificity problems or other test limitations).

Skin Disorder

In a patient presenting with a skin lesion, distinguish benign from serious pathology (e.g., melanoma, pemphigus, cutaneous T-cell lymphoma) by physical examination and appropriate investigations (e.g., biopsy or excision).

Diagnose and promptly treat suspected life-threatening dermatologic emergencies (e.g., Stevens-Johnson syndrome, invasive cellulitis, chemical or non-chemical burns).

Stroke

Assess patients presenting with neurologic deficits in a timely fashion, to determine their eligibility for thrombolysis.

Substance Abuse

Consider and look for substance use or abuse as a possible factor in problems not responding to appropriate intervention (e.g., alcohol abuse in patients with hypertriglyceridemia, inhalational drug abuse in asthmatic patients).



Trauma

Suspect, identify, and immediately begin treating life-threatening complications (e.g., tension pneumothorax, tamponade).

When faced with several trauma patients, triage according to resources and treatment priorities.

Determine when patient transfer is necessary (e.g., central nervous system bleeds, when no specialty support is available).

Upper Respiratory Tract Infection

Given an appropriate history and/or physical examination, differentiate life-threatening conditions (epiglottitis, retropharyngeal abscess) from benign conditions.

In high-risk groups, take preventive measures (e.g., use flu and pneumococcal vaccines).

Urinary Tract Infection

In a patient with a diagnosed urinary tract infection, modify the choice and duration of treatment according to risk factors (e.g., pregnancy, immunocompromise, male extremes of age); and treat before confirmation of culture results in some cases (e.g., pregnancy, sepsis, pyelonephritis).

Vaginal Bleeding

In pregnant patients with vaginal bleeding diagnose (and treat) hemodynamic instability.



Key features that demonstrate selectivity by behavioural indicator

Sets priorities and focuses on the most important

Loss of Consciousness

Assess and treat unconscious patients urgently for reversible conditions (e.g., shock, hypoxia, hypoglycemia, hyperglycemia, and narcotic overdose).

Learning (Patients/Self-learning)

Effectively address your learning needs.

Diabetes

Given a patient with diabetic ketoacidosis, manage the problem appropriately and advise about preventing future episodes.

Fractures

Use clinical decision rules (e.g., Ottawa ankle rules, C-spine rules, and knee rules) to guide the use of X-ray examinations.

Knows when to say something and when not to

Obesity

In patients diagnosed with obesity who have confirmed normal thyroid function, avoid repeated thyroid-stimulating hormone testing.

Osteoporosis

Use bone mineral density testing judiciously (e.g., don't test everybody, follow a guideline).

Gathers the most useful information without losing time on less contributory data

Stroke

Assess patients presenting with neurologic deficits in a timely fashion, to determine their eligibility for thrombolysis.

Hypertension

Given a patient with the signs and symptoms of hypertensive urgency or crisis, make the diagnosis and treat promptly.

Croup

In a child presenting with a clear history and physical examination compatible with mild to moderate croup, make the clinical diagnosis without further testing (e.g., do not routinely X-ray).

Dysuria

In a patient presenting with dysuria, use history and dipstick urinalysis to determine if the patient has an uncomplicated urinary tract infection.

Does something extra when it will likely be helpful

Pneumonia

Identify patients (e.g., the elderly, nursing home residents, debilitated patients) who would benefit from immunization or other treatments (e.g., flu vaccine, Pneumovax, ribavarine) to reduce the incidence of pneumonia.

Mental Competency

In a patient with a diagnosis that may predict cognitive impairment, (e.g., dementia, recent stroke, severe mental illness) identify those who require more careful assessment of decision-making capability.

Skin Disorder

In high-risk patients (diabetics, bed or chair bound, peripheral vascular disease), examine the skin even when no specific skin complaint is present.

Infections

In patients with a suspected infection, culture when appropriate (e.g., throat swabs/sore throat guidelines).

Travel Medicine

Use patient visits for travel advice as an opportunity to update routine vaccinations.

Distinguishes the emergent from the elective and intervenes in a timely fashion

Vaginal Bleeding

In a non-pregnant patient with vaginal bleeding, diagnose (and treat) hemodynamic instability.

Depression

In a patient with a diagnosis of depression, assess the patient for the risk of suicide.

Gastrointestinal Bleed

In a patient with obvious GI bleeding, identify patients who may require timely treatment even though they are not yet in shock.

Ischemic Heart Disease

In a patient presenting with symptoms suggestive of ischemic heart disease but in whom the diagnosis may not be obvious, do not eliminate the diagnosis solely because of tests with limited specificity and sensitivity (e.g., electrocardiography, exercise stress testing, normal enzyme results).

Acts when necessary, even though information may be incomplete

Advanced Cardiac Life Support

Ensure adequate ventilation (i.e., with a bag valve mask), and secure the airway in a timely manner.

Suspect and promptly treat reversible causes of arrhythmias (e.g., hyperkalemia, digoxin toxicity, cocaine intoxication) before confirmation of the diagnosis.

Loss of Consciousness

In an unconscious patient, assess ABCs and resuscitate as needed.

Infections

Treat infections empirically when appropriate (e.g., in life threatening sepsis without culture report or confirmed diagnosis, candida vaginitis post-antibiotic use).



Determines the likelihoods, pertinence, and priorities in their differential diagnoses

Seizures

In a patient having a seizure: Rule out reversible metabolic causes in a timely fashion (e.g., hypoglycemia, hypoxia, heat stroke, electrolytes abnormalities).

Depression

In a patient with depression, differentiate major depression from adjustment disorder, dysthymia, and a grief reaction.

Pneumonia

In a patient with signs and symptoms of pneumonia, do not rule out the diagnosis on the basis of a normal chest X-ray film (e.g., consider dehydration, neutropenia, human immunodeficiency virus [HIV] infection).

Immigrants

In immigrants presenting with a new or ongoing medical condition, consider in the differential diagnosis infectious diseases acquired before immigration (e.g., malaria, parasitic disease, tuberculosis).

Immunization

In patients presenting with a suspected infectious disease, do not assume that a history of vaccination has provided protection against disease (e.g., pertussis, rubella, diseases acquired while travelling).

Key features that demonstrate selectivity by behavioural indicator

Distinguishes the sick from the not sick

Newborn

In a newborn, where a concern has been raised by a caregiver (parent, nurse), look for signs of sepsis, as the presentation can be subtle (i.e. not the same as in adults, non-specific, feeding difficulties, respiratory changes)

Atrial Fibrillation

In a patient presenting with atrial fibrillation, look for hemodynamic instability.

Cough

In patients presenting with an acute cough, include serious causes (e.g., pneumothorax, pulmonary embolism [PE]) in the differential diagnosis.

Anemia

When a patient is discovered to have a slightly low hemoglobin level, look carefully for a cause (e.g., hemoglobinopathies, menorrhagia, occult bleeding, previously undiagnosed chronic disease), as one cannot assume that this is normal for them.



Selects and modifies a treatment to fit the particular needs of a patient and a situation

Depression

In a patient with a diagnosis of depression, decide on appropriate management (i.e., hospitalization or close follow-up, which will depend, for example, on severity of symptoms, psychotic features, and suicide risk).

Thyroid

Limit testing for thyroid disease to appropriate patients, namely those with a significant pretest probability of abnormal results, such as:

- ✓ Those with classic signs or symptoms of thyroid disease.
- ✓ Those whose symptoms or signs are not classic, but who are at a higher risk for disease (e.g., the elderly, postpartum women, those with a history of atrial fibrillation, those with other endocrine disorders).

Well-baby Care

Modify the routine immunization schedule in those patients who require it (e.g., those who are immunocompromised, those who have allergies).

Infections

When considering treatment of an infection with an antibiotic, do so judiciously (e.g., delayed treatment in otitis media with comorbid illness in acute bronchitis).

Lacerations

When managing a laceration, identify those that are more complicated and may require special skills for repair (e.g., a second- versus third-degree perineal tear, lip or eyelid lacerations involving margins, arterial lacerations).

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