1. In a patient with a diagnosed chronic disease who presents with acute symptoms, diagnose:

- acute complications of the chronic disease (e.g., diabetic ketoacidosis)

- acute exacerbations of the disease (e.g., asthma exacerbation, acute arthritis)

- a new, unrelated condition

2. Regularly reassess adherence (compliance) to the treatment plan (including medications).

3. In patients with chronic disease:

a) Actively inquire about pain.

b) Treat appropriately by:

- titrating medication to the patient’s pain

- taking into account other treatments and conditions (e.g., watching for interactions)

- considering non-pharmacologic treatment and adjuvant therapies

 Massage, physio, exercise, CBT, counselling, mindful meditation, reframing, OT home assessment (accommodate needs within limitations of pain/Dx)

4. In patients with chronic disease, actively inquire about: - the psychological impact of diagnosis and treatment.

- functional impairment

- underlying depression or risk of suicide

- underlying substance abuse

5. Given a non-compliant patient, explore the reasons why, with a view to improving future adherence to the treatment plan.

Chronic Disease Risk Factors: What are the Primary Risk Factors?

According to the World Health Report 2002, the major risk factors include:

■tobacco

■alcohol

■blood pressure

■physical inactivity

■cholesterol

■overweight

■unhealthy diet

**Smoking**

* Leading preventable cause of premature death in Canada.
* Prevalence of smoking among adult men and women (>20 yo) is ↑ in northern/rural regions, and ↓ in British Columbia and most major urban centres.
* Prevalence decreased from 1994 to 2005.
* Highest among people aged 20-24.

**Alcohol**

* High-risk alcohol use associated with ↑ risks of > 60 chronic conditions including cancer, GI d/o, neuro d/o, & cardiovascular disease (especially stroke).
* ↑ 1995 – 2005, 17% consume alcohol in hazardous manner. 28% youth aged 12-19 and 30% men & 12% women > 20 years reported drinking heavily.
* 20-24 yo highest prevalence of heavy drinking (consuming >5 drinks/occasion) - 56% among men and 33% of women. The prevalence ↓ with ↑’ing age.

**Nutrition**

* Diet influences risk of developing cancer, coronary heart disease, stroke, HTN, DM and obesity → related to the risk of other chronic diseases.
* Low consumption of fruits and vegetables (< 5 servings/day) was associated with lower income, and other unhealthy behaviours such as cigarette smoking.

**Physical Inactivity**

* Physical inactivity impacts physical and mental health and well-being and is considered to be a primary risk factor for obesity.
* Less than half of the Canadian population participates in the minimal amount of leisure time physical activity required to obtain the health benefits, including a lower risk of developing chronic disease, of a physically active lifestyle.
* Levels of physical inactivity increase with age, particularly for ages >75. Women are more physically inactive (50%) than men (45%)

**Obesity**

* Obesity contributes to the development and exacerbation of major chronic diseases in Canada, including heart disease, type 2 diabetes, some cancers (e.g., colon cancer) and osteoarthritis. The self-reported prevalence of obesity in 2005 for Canada was 17% for men and 15% for women. The longer one is obese, the greater the health risks and the greater the likelihood of premature death.
* The prevalence of obesity has nearly doubled in adults and tripled in children and youth over the past 25 years.

In individuals, we can classify the risks factors as follows:

■Background risk factors, such as age, sex, level of education and genetic composition;

■Behavioural risk factors, such as smoking, unhealthy diet and physical inactivity; and

■Intermediate risk factors, such as serum cholesterol levels, diabetes, hypertension and obesity/overweight

In Communities, the main factors that can impact health include:

■Social and economic conditions, such as poverty, employment, family composition;

■Environment, such as climate, air pollution;

■Culture, such as practices, norms and values; and

■Urbanization, which influences housing, access to products and services.

As Primary Care Physicians Responsible for:

* Annual review of chronic disease progression
	+ Identify any target organ damage including: cerebrovascular disease, coronary heart disease (CHD), left ventricular hypertrophy (LVH), chronic kidney disease (CKD), peripheral vascular disease, neuropathy, and retinopathy.
* Monitoring BW and investigations
* Ensuring annual follow-up referrals are tracked and booked appropriately
* Annual CPX and immunizations are up to date (flu, pneumovax, shingles, Hep A/B, tetnus)

Resources:

Public Health Agency of Canada: Chronic Disease Prevention and Control Guidelines

<http://www.phac-aspc.gc.ca/dpg-eng.php#chronic>

Public Health Agency of Canada: The Canadian Guide to Clinical Preventive Health Care

<http://www.phac-aspc.gc.ca/publicat/clinic-clinique/index-eng.php>