

# Social Insurance Module

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## SECTION 1: MODULE OVERVIEW

### Introduction

This module describes social insurance programs and how they operate. Most of the content reflects the Social Security and Medicare programs in the United States and Canada. However, we include readings on social insurance programs in other countries and discuss the similar demographic and economic pressures faced by most social insurance programs.

It is important for candidates in Canada and the United States to have a working knowledge of social insurance programs in both countries for several reasons. First, many large employers have operations in both the United States and Canada and the actuaries for those employers must design benefit plans that fit both sets of social insurance programs. Second, the two social insurance systems differ in many important respects and it is useful for the candidate to understand the historical and political reasons for those differences.

The Fundamentals of Actuarial Practice (FAP) course explained how to design and price employer-provided retirement and health insurance benefits. Employer-provided benefits should be designed to coordinate with social insurance programs. As you will learn, the social insurance programs vary widely in their coverage, cost and benefits in different countries. It is critical that you be prepared to coordinate the employer-provided plans with the social insurance programs in your country. FAP provided general information on social insurance programs. The Social Insurance module goes into the much greater detail that you need to practice as an actuary in the United States or Canada.

It is also very important for you to know the issues facing the social insurance programs today so that you can help your employer, clients and the public understand the issues and the potential solutions to the issues.

You are not expected to complete this module with an ability to independently determine the Social Security or Medicare benefits. But, you should be able to quickly go to the sources that you would need to determine the benefits.

### Module Objectives

After you complete this module, you will be able to:

- Describe the considerations that lead to a social insurance program.

- Describe the general features of four social insurance programs:
  - o U.S. Social Security.
  - o Canada Social Security.
  - o U.S. Medicare.
  - o Canada Medicare.
- Analyze how the above programs coordinate with employer-provided benefits in the United States and Canada.
- Describe the issues facing the above programs.

### **Module Sections**

This Social Insurance module consists of four sections:

- Section 1: Module Overview (You are here, now).
- Section 2: Social Insurance Programs/Fundamentals.
- Section 3: Social Insurance and the Private Sector.
- Section 4: Issues Facing Social Insurance Programs.

In addition, this module also has an End-of-Module Test and an End-of-Module Exercise.

## SECTION 2: SOCIAL INSURANCE PROGRAMS/FUNDAMENTALS

### Introduction

Social insurance programs generally are intended to provide a safety net for workers who become ill or have no other sources of income after retirement. The level and extent of protection varies widely by country. The variation depends on factors such as the financial ability of the country to support the programs and the political history of the country.

In this section, we will focus on the fundamentals of social insurance programs.

### Objectives

After completing Section 2, you should be able to:

- Describe the role and purpose of social insurance programs in different countries.
- Describe the design of social insurance programs in the United States and Canada.
- Explain the role of actuaries in the design and pricing of social insurance programs in the United States and Canada.

## SECTION 3: SOCIAL INSURANCE AND THE PRIVATE SECTOR

### Introduction

Private sector employers in the United States and Canada, as in most countries, often provide pension plans and health insurance to their employees. Private sector plans should “integrate” with the social insurance programs to avoid gaps and overlaps in coverage. Thus, the more the governmental social insurance provides, the smaller the role of the private sector employers. For example, employers have little role in providing health insurance in Canada, but they provide a major share of health insurance in the United States. This section describes and contrasts the basis for funding private sector and social insurance plans.

The goal of Section 3 is to demonstrate how private sector plans work with the social insurance plans in the United States and Canada. Actuaries are called on to design plans that work best with the social insurance programs. The different funding methods and objectives of the private sector and social insurance programs are also discussed.

### Objectives

By completing this section you should be able to:

- Explain how employer-provided plans coordinate with social insurance plans in the United States and Canada.
- Determine the aggregate benefit to the employee from an employer-provided and social insurance plan.

## SECTION 4: ISSUES FACING SOCIAL INSURANCE PROGRAMS

### Introduction

This section considers the issues facing social insurance programs. There are many possible solutions to each issue and these are invariably controversial. We have tried to present all sides of the controversies in this section. If the material appears to be leaning toward one side of an argument, the opinions presented are those of the authors of the Social Insurance module. You should consider the opinions as such and keep an open mind as you consider these and similar issues in the future.

A common issue for most social insurance programs is that the cost of the programs is projected to rise in the future — sometimes the increase over current program costs is very large. This is often referred to as the gap between the future cost of the program and current funding. The direct solution to the gap is usually to either (1) cut benefits or (2) increase taxes. However, many countries are looking for other solutions that would narrow the gap.

Benefit redesign can have two effects. First, the change in benefit itself will directly reduce or increase expenditures. Second, the redesign will often encourage a change in behavior that will result in additional changes in expenditures. For instance, the increase in the U.S. Social Security retirement age from 65 to 67 resulted in reduced payments for those who began to draw benefits before age 67. As a result, employees began to delay their retirement, or application for Social Security, which resulted in additional changes to expenditures.

In the United States, possible solutions to the current issues include privatization of part or all of the social insurance programs. In Canada the 1997 Reform Act introduced a balanced approach to restoring the financial sustainability of the Canada Pension Plan (CPP). The changes made the CPP affordable and fairer to future generations by:

- Moving to fuller funding by accelerating the legislated contribution rate increases.
- Improving the rate of return on the CPP fund by adopting a new investment policy.
- Slowing the growth in costs by tightening the administration of benefits and changing the way some benefits are calculated.

This section describes the causes of the gap between income and expenditure, the size of the gap and potential solutions. As with previous sections, the focus is on the social insurance programs in the United States and Canada, while the issues and possible solutions in other countries are also presented.

### Objectives

The goal of Section 4 is to describe the issues facing social insurance programs today and the possible solutions to those issues.

After completing this section you should be able to:

- Analyze the challenges facing social insurance programs in the United States and Canada.
- Evaluate alternative proposals for facing those challenges.

## END-OF-MODULE TEST

## END-OF-MODULE EXERCISE