Flutool plus

WHO Seasonal Influenza Immunization Costing Tool (SIICT)

DEPARTMENT OF IMMUNIZATION, VACCINES AND BIOLOGICALS

Family, Womens's and Children's Health (FWC)

World Health Organization

Flutool plus: WHO Seasonal Influenza Immunization Costing Tool (SIICT). Pilot version 1.0

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Preface

This manual was previously issued under the title "WHO Flutool for planning and costing maternal influenza vaccination, pilot version 1.0" (WHO/IVB/16.07), which was restricted to costing influenza immunization specifically for the influenza risk group of pregnant women. Following validation through pilots, the *Flutool* was updated to the *Flutool Plus* which allows for cost estimation for influenza target groups.

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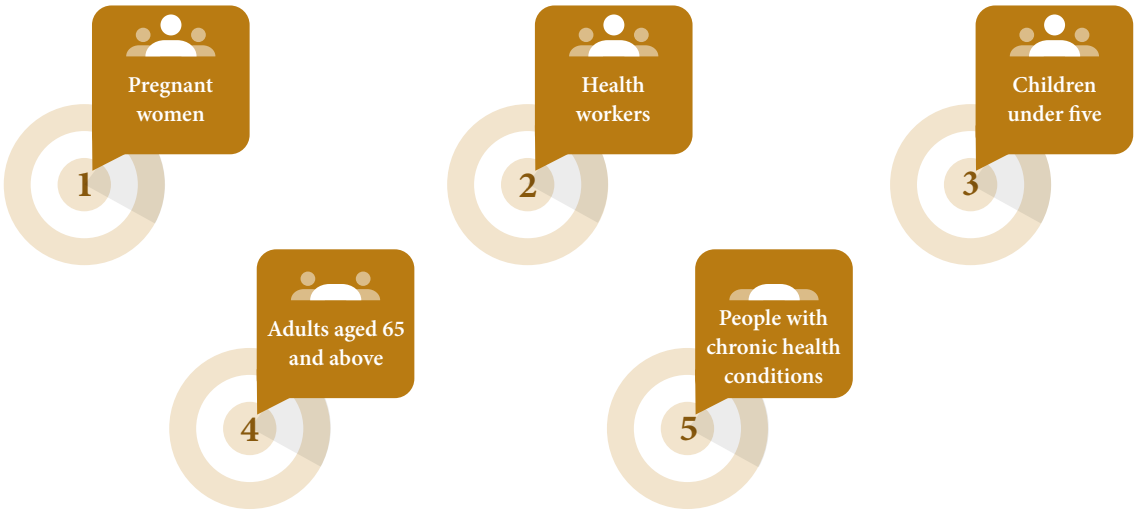
1. INTRODUCTION

Seasonal influenza causes considerable morbidity and mortality worldwide. Three pathogens – influenza A, B and C viruses – cause outbreaks, usually during the winter. Seasonal influenza is particularly dangerous for several target populations:



The expanded FLUTOOL focuses on planning and costing of influenza vaccination programs to include all of these target populations.

Vaccines have been developed against influenza A and B viruses and are a useful form of prevention against seasonal influenza in pregnant women.

Governments are considering different approaches to reducing the incidence of seasonal influenza among the target populations in the expanded FLUTOOL

Vaccination year-round or seasonal vaccination during five months	Vaccination with supplementary immunization activities (SIAs)

In order to facilitate decision-making on these interventions, programme managers and policy-makers need information on the projected costs of introducing influenza vaccine to pregnant women, health workers, children under five, adults 65 and over and persons with chronic health conditions. The Seasonal Influenza Immunization Costing Tool (SIICT) has been developed to assist governments to estimate the costs of influenza vaccine introduction for these populations and is described in detail in this user guide.

2. WHAT THE FLU COSTING TOOL IS COSTING OUT FOR INFLUENZA VACCINE INTRODUCTION

The costing tool enables the user to estimate the value of incremental (additional) resources required to add the influenza vaccine to an existing vaccination programme. That is, it estimates only the value of new resources needed and does not include the cost of other goods and services (e.g. transport) already being used for other vaccines. For example, the tool does not estimate the cost of transporting influenza vaccine if this is part of the same transport used to deliver other vaccines from the central warehouse to the periphery in the country.

The quantity of resources required to introduce influenza vaccine to national immunization programs (NIPs) will differ from other vaccines since it targets some non-traditional populations – i.e. health workers, adults 65 and over, and people with chronic diseases. Service delivery strategies could range from vaccination at fixed clinics or routine outreach to supplementary immunization activities. The SIICT enables the user to estimate the additional resource requirements based on the specific strategy that will be used for vaccinating the target populations in the country.

The SIICT provides estimates of several cost measures

Total costs of adding the influenza vaccine for each target population to specific regions/provinces or at the national level	Cost per immunized child, person or health worker

It differentiates **recurrent** (operational) and **capital** costs as well as **financial** and **economic** costs. It also present expenditures required for initial investments required for the influenza vaccine introduction.

Cost components of influenza vaccination

The SIICT allows the user to estimate the costs of activities that take place during the introduction of influenza vaccination into a national immunization programme. These activities include the following: procurement of vaccines and injection supplies, micro-planning, training, social mobilization and IEC (information, education, communication), purchase of cold chain equipment, service delivery of vaccines to target population, monitoring and evaluation, supervision, and waste management.

In the following section, the differences between types of costs are discussed.

Recurrent costs

Recurrent costs are the value of resources that last less than one year (*Table 1*). These include programme costs such as the value of personnel time, transport, maintenance, monitoring and evaluation, and supervision, as well as the costs of short-term training activities that last less than a year (i.e. do not include material development and initial training).

Table 1. Vaccination activities and associated recurrent costs

Vaccination activity	Recurrent costs
Vaccine procurement and storage	Vaccines, injection supplies, freight, clearance, insurance and taxes
IEC	Health personnel time, printing, production of leaflets, posters, radio and television spots
Service delivery	Health personnel time, per diem expenses, transport
Supervision	Supervisor time, driver time, per diem expenses, transport
Monitoring and evaluation	Vaccination cards, tally sheets, surveillance, AEFI
Waste management	Fuel for incinerators

Capital costs: introduction costs, supplemental cold chain and other equipment

Capital costs are the value of resources that last longer than one year, such as cold chain equipment and vehicles. The capital goods and services used in influenza vaccination include initial investments such as introduction costs (micro-planning, initial training and social mobilization/IEC material development) as well as additional cold chain equipment, vehicle requirements, and incinerators (*Table 2*). Capital costs in the SIICT are found under the worksheets:

a. Introduction Costs,
b. Supplemental Cold Chain,
c. Other.

Table 2. Vaccination activities and associated capital costs

Vaccination activity	Costs
Vaccine procurement and storage	Additional cold chain equipment requirements
Introduction	Micro-planning, initial training, curriculum development, IEC material development/sensitization meetings
Waste management	Additional incinerators
Other transport	Additional vehicles, motorcycles, boats, bicycles, etc.

Calculation of capital costs differs from calculation of recurrent ones since these are annualized and/or discounted depending on the purpose of the analysis and whether financial or economic costs are preferred.

Financial and economic costs

Both financial and economic costs are calculated in the SIICT. **Financial costs** are resources purchased by the buyer (e.g. government) for influenza introduction. Resources purchased for the influenza vaccine introduction include injection supplies, outreach allowances and per diem, and resources used in training, developing new communication materials,,and supervision and monitoring. Financial costs do not include donated items and in-kind resources.

Economic costs comprise the value of all outlays for the vaccine introduction: i.e. financial costs as well as the value of in-kind resources used for the intervention. In-kind resources include those already paid for by the Ministry of Health, donated goods, and other sources of financing (e.g. the salaries of health personnel, vaccines paid for by partners, and time of volunteers). This analysis gives a more complete picture of resources that are tied up in the provision of the new vaccine, and their opportunity costs and should be used if a cost-effectiveness or cost-benefit analysis is to be conducted. This analysis is useful if users are interested in evaluating the share of different sources of finance for the vaccine introduction. For example, users may want to know the share of total costs financed by the Ministry of Health, external partners, clients and the community.

Capital costs are calculated differently depending on whether financial or economic costs are being estimated. When calculating financial costs, straight-line depreciation is used in the calculation of capital costs. That means that the cost of the item is annualized by dividing it by the useful life-years of the item. For example, if cold chain equipment could be expected to last for 10 years, the total cost would be divided by 10. Straight-line depreciation assumes that capital goods are used up equally over the useful time period of the item. For economic costs, capital goods are discounted as well as annualized. This type of depreciation assumes that people prefer to use goods and services now rather than in the future.

Table 3 presents a comparison of resources included in cost estimation based on whether financial or economic costs are being calculated. For micro-planning, for instance, the value of personnel time spent in meetings is included in economic costs but not in financial costs.

The main differences between financial and economic costing are threefold

The time spent by health personnel and volunteers is valued in economic costing

The value of donated goods and services is included in economic costs but not