

Australian Aid



A COSTING TOOL FOR ACTION

ESTIMATING THE RESOURCE REQUIREMENTS FOR A MINIMUM PACKAGE OF ESSENTIAL SERVICES FOR WOMEN EXPERIENCING VIOLENCE APRIL 2016

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1. Introduction

The aim of this manual is to provide a simple guide for estimating the resource requirements for a minimum package of essential services (MPES) for women experiencing violence. This manual can be used in conjunction with the accompanying Microsoft Excel file. The Excel data template contains the following worksheets: Inputs; Agreed MPES; Cost of MPES by Year; Projections; Macroeconomic Data; Unit Costing; and Survey Results. This guide will outline the steps needed to calculate the unit costs to provide these resource requirements, to calculate the overall cost of providing a MPES and to project future costs. The costing methods used can be applied to a wide range of services and are not limited to the services illustrated in this manual.

There are three principal stages in estimating the resource requirements of a MPES. These principal stages are outlined in Figure 1.

Step 1: Define the MPES	Identify and agree upon the MPES required				
Step 2: Data collection	Data should be collected from: • Service providers' cost data; and • National macroeconomic indicators.				
Step 3: Estimate the resource costs	Estimate the resource costs for providing the services in accordance with the MPES				

Figure 1: Stages to Estimate the Resource Requirements for a MPES

The first stage is to identify the MPES to cost. This should be informed by a series of documentation reviews of national laws and policies relating to and evidence on violence against women and girls in the country. A multi-sectoral response package and a three-year timeline for implementation should then be agreed upon, involving key stakeholders and representatives from the relevant ministries. The second stage is the collection of cost data from different types of service providers within each sector and data on national macroeconomic indicators such as inflation, the exchange rate and the population growth rate. In the third stage, this data can be used to estimate the resource costs for providing the services in accordance with the MPES. In addition to these implementation costs, cost projections can be estimated to reflect different scenarios of demand (utilization) for these services.

2. Defining the Minimum Package of Essential Services

Following meetings with key stakeholders and representatives from relevant ministries, an agreement should reached on a multi-sectoral response package and a key-year timeline to implement the package. An example of this agreed package is provided in the accompanying Excel file and in Figure 2.

MINIMUM PACKAGE OF ESSENTIAL SERVICES				
	YEAR 1	YEAR 2	YEAR 3	
1. Hotline (24hr)	V			
2. One Stop Crisis Centre				
150 Hospital	V			
Mother and Child Hospital		\checkmark		
3.Shelter				
Province 1	V			
Province 2	V			
Provine 3		\checkmark		
Province 4		V		
Province 5		\checkmark		
Province 6			V	
Province 7			V	
Province 8			V	
4. Counseling services				
Pilot in Rural health clinics	V	4	4	
Pilot in School	4	V	V	
Pilot in Workplace	V	V	V	
5. Law Enforcement and Justice	4		4	
Special desk with trained officers on Violence Against Women in provincial police stations	V	V	V	
Special court for Violence Against Women issues			V	
Pilot Mobile Mediation Unit for Rural Without Roads		V		
Strengthen Capacity of Village Mediation Units re: gender sensitive resolution	4	4	4	
Train all Village Mediation Units by end of three years	V	V	V	
6. Referral Network			V	
7. Capacity Bulding of Stakeholders		V	V	

Figure 2: Example of an Agreed Minimum Package of Essential Services

This example of an agreed MPES is comprised of seven elements:

- 1. A national 24 hour hotline to be implemented in year one;
- 2. Two hospital-based one-stop crisis centres, the first to be implemented in year one and the second in year two;
- 3. Eight provincial shelters with implementation split over the threeyear time frame;
- 4. A pilot counselling service in a rural health clinic, school and workplace in several districts;
- 5. Law enforcement services, including a special desk with trained officers in police stations, a special court for violence against women issues, a mobile mediation unit and capacity building of village-level members of mediation committees;
- 6. A referral network to be operational in year three; and
- 7. A capacity building exercise among stakeholders.

The next step involves identifying and compiling a list of the resource inputs that are required to ensure that each element of the MPES is realized.

3. Compiling Resource Inputs for the MPES

Typically, for each element these inputs are categorized into establishment costs and annual operational costs. Establishment costs are associated with the set-up year of the initiative, such as protocol development, staff recruitment activities and advertising costs to publicize the service. Annual operational costs are recurring costs such as staff salaries and operating costs such as utilities. For example, in the worksheet titled 'National Violence Hotline' (see Figure 3), establishment costs are associated with the national violence hotline and annual operational costs are associated with the costs of the hotline.

Establishment costs

Establishment costs include those costs associated with getting a service up and running. This could include, for example, developing the protocol for providing support to women experiencing violence. The development of this protocol is likely to incur expert fees to develop the protocol, senior- and junior-level staff time to review and provide feedback on the protocol and staff time to prepare a list of resources required to successfully develop the protocol.

ESTABLISHMENT COSTS
INPUT
Develop Protocol for providing support
Fees of expert to develop protocol
Staff time for review and feedback (senior)
Staff time for review and feedback (staff)
Staff Time for preparing List of resources
Template for Data collection
Fees for expert to develop template
Staff time for review and feedback
Recruitment costs
Staff time
Newspaper ad
Radio ad
Training of Staff
Training cost
Publicity
Flyers
Costs of Broadcast of Radio Ads
Costs of Printing Posters
Coordination with Mobile Service Providers (assuming there is no cost as it would be a government order)
Meeting with Service Providers(staff time)
Meeting costs: Tea / Coffee breaks
Transportation to meeting
TOTAL ESTABLISHMENT COST (NATIONAL CURRENCY)
TOTAL ESTABLISHMENT COST (USD)

OPERATIONAL COSTS
INPUT
Staff salaries
Full Time Staff
Part Time Staff
Senior Admin
Manager
Receptionist
Cleaning
Security
Service Costs
Communication
Stationary
Outreach
TOTAL OPERATIONAL COST (NATIONAL CURRENCY)
TOTAL OPERATIONAL COST (USD)

Figure 3: Example Resource Inputs for a National Violence Hotline

Other establishment costs associated with a service such as a national violence hotline could include the development of a template for data collection on service use. This too will require the services of an expert to develop the data collection template along with staff time to review and provide feedback on the effectiveness of the data collection template. In order to ensure that phone calls to the hotline are free, an important establishment cost would include coordination with mobile service providers, which will incur staff time costs, meeting costs and transportation costs. Finally, given that the service needs to be established, new staff will need to be hired and trained. This will incur recruitment costs (such as staff time and advertising costs) and initial training costs to ensure new staff members have the requisite skills to counsel women experiencing violence.

Depending on the service being provided, other important establishment costs may include the purchase of land and capital, as can be seen in the establishment costs associated with a one-stop crisis centre (see Excel template and Figure 4).

In order to provide the space for the one-stop crisis centre, the purchase of a building will likely be required, along with equipment costs for the centre, such as computers, telephones and furniture. Additionally, other material costs may be required, such as stationary and utility costs to provide electricity, water and telephone lines.

Operational costs

Operational costs refer to the ongoing annual costs associated with running a service. As illustrated in Figure 3, this can include costs of staff salary and costs of services, such as rent, supplies, materials, utilities, communication and outreach. Variations in staff salary costs will depend on a number of factors, such as the number and type of staff required to provide the service, their associated level of expertise and staff time requirements (e.g. whether a particular service requires full-time or parttime staff). As with staff salary costs, service costs are likely to vary across service providers and will depend on the service being required.

ESTABLISHMENT COSTS
INPUT
Development of Protocol
Fees for development of Protocol
Staff time for feedback (senior)
Staff time for feedback (staff)
Staff time developing list of referrals
Development of template for data collection
Fees for expert to develop template
Staff time for review and feedback
Hiring Required Staff
Staff time for recruitment
Newspaper ad
Radio ad
Training of Staff
Staff training
Publicity
Flyers
Costs of Broadcast of Radio Ads
Costs of Printing Posters
Provide Space for Crisis Centre
Rent or Purchase - annual cost
Utitilies -costs of electricity, water, telephone lines
Equipment (computers, telephones, furniture)
Material cost (stationery, etc)
TOTAL ESTABLISHMENT COST (NATIONAL CURRENCY)

TOTAL ESTABLISHMENT COST (USD)

Figure 4: Example Establishment Costs of a One-Stop Crisis Centre

4. Deriving Unit Costs

Once the MPES has been agreed upon and a list of required inputs has been compiled, the next stage involves deriving unit costs for each package element. Unit costs refer to the cost of providing a single service and range from the cost of providing a single test to the cost of providing a service. This unit cost data will come from several sources, including service provider surveys, secondary data sources and macroeconomic variables (in particular, the exchange rate, if required). In the Excel spreadsheet, all unit costs should be included on the 'Inputs' worksheet (see Figure 5).

CATEGORY	ELEMENT	SOURCE	UNIT COST (NATIONAL CURRENCY)
Social Services Expenditures	Training	Survey	
	Personnel	Survey	
	Utilities	Survey	
	Communication	Survey	
	Admin	Survey	
	Stationary	Survey	
	Transport	Survey	
	Outreach	Survey	
	Subsistence	Survey	
	Contingency	Survey	
	Meetings	Survey	
Health Expenditures	Equipment	Survey	
	Medical equipment	Survey	
	Training	Survey	
	Vehicles	Survey	
	Personnel	Survey	
	Utilities	Survey	
	Admin	Survey	
	Stationary	Survey	
	Transport	Survey	
	Supplies	Survey	
	Health insurance	Survey	
	Contingency	Survey	

Figure 5: Compiling Inputs

This 'Inputs' worksheet should contain all of the unit costs used throughout the estimation of the resource requirements.

Service provider surveys

Service provider surveys should provide the bulk of the data required to estimate the unit cost of particular services. In particular, the service provider surveys should supply the information on:

- General information on the facility (e.g. services provided, number of staff, number of people served, budget and expenditure information);
- 2. Cases of violence against women (e.g. number of cases handled, staff trained on handling violence against women); and
- 3. More detailed information on specific services that handle cases of violence against women (e.g. types of services, unit costs of providing such services, staff training on handling cases of violence against women and referrals).

The first element will provide valuable information needed for several parts of the unit costing exercise. In particular, this information can be used to derive general service usage statistics, staff salary costs, staff requirements and average expenditure on a range of services including rent, utilities, communications and materials. The second element will determine current service utilization and staff training statistics on handling violence against women. The third element will be used to determine the unit cost of providing individual services, the availability and use of these services and the costs associated with providing referrals.

Staff salary costs: Salary costs are one of the most important unit costs that needs to be derived from the survey. Obtaining staff salary cost estimates requires two elements. First, the average number of staff employed at the facility needs to be estimated, and second, the average expenditure on salaries needs to be obtained. The average number of staff employed can be obtained by taking the average number of person hours worked in the last week, month and year and dividing by five, 22 and 260 days respectively. Using these values, average staff salary costs per person in each facility can be obtained.

Expenditures: Unit costs, such as rentals, utilities, communications, transportation, equipment and training can be derived using the survey information that details the service provider's expenditures. Using this, the average expenditure by each facility in a particular service sector can be obtained (e.g. the average expenditure in health, courts, social services or police). Depending upon the service being provided and the specific country context, these expenditures should be used as estimates of the annual operating costs associated with providing the service. Additionally, this information is also useful for deriving particular establishment costs, such as the cost of purchasing materials, vehicles, office supplies and furniture.

As with all capital equipment, some depreciation rate should be applied to reflect the loss in value of assets over time. The depreciation rate applied will depend upon the asset in use. With respect to estimating the average unit cost of each expenditure for each of the resources (for example, the hotline or the one-stop crisis centre), it may be necessary to assume some portion of the overall average expenditure may relate to the provision of that service. For example, assume that 10 per cent of the overall average expenditure provided by the social services sector relates to the national violence hotline. Or in the case of the one-stop crisis centre (which is usually based within a national or district hospital), there could be shared costs for space and equipment that would be hard to separate. In that case, a proportion of overall hospital expenditure could be approportioned based on the percentage of clients using medical services due to violence.

Training costs: Training costs represent an essential required element for all staff coming into contact with survivors of violence against women. This cost-per-person can be obtained from the survey by taking the average expenditure spent by service providers on training and dividing by the average number of staff in each facility. Alternatively, if this data is not available or if it appears to be unreliable, then it is essential that average training costs are obtained from secondary resources within the country. Additionally, other costs associated with providing training may need to be factored in such as the costs of hiring a venue, providing lunch and refreshments, stationary costs, training materials and banners.

Service demand: The survey data collected will provide information on service use by women over the last 30 days, along with the average number of visits made to the service, the average person-hours required to provide the service per visit plus the associated cost. This information is essential to obtain estimates of current service use, expected future use and other important information, such as staff time costs for providing these services.

Secondary data sources

Specific costs that cannot be obtained directly from the survey should be derived from secondary data sources. This information typically includes costs associated with meetings (such as food allowances, venue hire, equipment rental and transport), publicity costs (such as the cost of providing radio and TV advertisements, printing posters, banners and invitations and press coverage) and the fees for hiring an expert to develop service protocols.

Macroeconomic variables

In general, four macroeconomic variables should be obtained: the exchange rate (if using), the five-year average inflation rate, the five-year average population growth rate, and the country's GDP.

Once obtained, all unit costs should be entered into the 'Input' worksheet in the Excel workbook. This Excel sheet contains all of the unit costs used in the MPES estimation. This data is broken down into four headings: category, element, source, and unit cost. This data can be filtered using the arrows for easy access to data.

The next step is to fill in each of the columns for each element of the agreed MPES. This includes:

- **Number of units**, including the number of staff required, the number of invitations needed and the number of radio adverts. The number of units will depend upon the service being provided and the needs of each service.
- **Price per unit** should be the unit cost of each component needed to establish and operate the service. This information should be linked to the 'Inputs' worksheet in the Excel file;
- Unit description should specify how the unit is expressed (i.e. staff time per day, cost per flyer, cost per day);
- Total price of units is estimated by multiplying the number of units by the price per unit;
- Number of days, months and districts will specify the number of days a staff member may be required, or the number of days a radio advert may run, or the number of districts transportation will be required for; and
- **Total cost of unit** is estimated by multiplying the total price of units by the number of days, months and districts.

The formulas needed to calculate the total price of units and the total cost of units are included in the Excel spreadsheet provided.

5. Estimating the MPES Cost per Year

The calculation of the MPES cost per year is provided over a three-year period, and is shown in the Excel worksheet titled 'Cost of MPES by Year' (see Figure 6). This cost includes an establishment cost and an operational cost. The establishment cost is incurred in the year in which the service is set up and established. The operational costs are incurred every year once the service has been established and is running.

MINIMUM PACKAGE OF ESSENTIAL SERVICES: OVERALL ESTIMATES OF COSTS BY YEAR								
		YEAR 1		YEAR 2		YEAR 3		TOTAL (including all facilities)
		Total (National Currency)	Total (USD)	Total (National Currency)	Total (USD)	Total (National Currency)	Total (USD)	TOTAL (USD)
24 Hour National Hotline								0
One-Stop Crisis Centre	150 Hospital							0
	Mother & Child Hospital							0
Shelter	Shelter 1							0
	Shelter 2							0
	Shelter 3							0
	Shelter 4							0
	Shelter 5							0
	Shelter 6							0
	Shelter 7							0
	Shelter 8							0
Counselling Services	Pilot in Rural Health Clinics (number of clinics)							0
	Pilot in Schools (number of schools)							0
	Pilot in Workplaces (number of workplaces)							0
Law Enforcement & Justice	Special desk with trained officers on Violence Against Women in provincial police stations (number of police stations)							0
	Special court for Violence Against Women issues (number of courts)							0
	Pilot Mobile Mediation Unit (number of PMMUs)							0
	Train all Village Mediation Units by end of year three (Number of districts)							0
Total		0	0	0	0	0	0 % of GDP	0 #DIV/0!

Figure 6: Cost of MPES by Year

In order to complete this, it is necessary to refer to the agreed MPES package (see Figure 2), which will state the time-frame for the implementation of each element.

For a one-stop crisis centre, for example, the agreed MPES states that the first one-stop crisis centre will be provided in year one, and the second one-stop crisis centre will be provided in year two. Therefore, the cost of this MPES element is calculated as:

- Year 1: Establishment and operational cost of the first one-stop crisis centre;
- Year 2: Establishment and operational cost of the second one-stop crisis centre plus the annual operational costs from the first one-stop crisis centre; and
- Year 3: The annual operational costs of the first and second one-stop crisis centres.

The above procedure should be followed for each element of the MPES in order to obtain the cost over a three year period. Additionally, the final row of the spreadsheet includes a link to GDP, so the total cost of the MPES over a three-year period can be expressed as a percentage of a country's total GDP.

6. Estimating the Projected Cost of the MPES

The Excel sheet provides the formula for estimating the projected cost of the MPES over a three-year period. This projected cost is estimated using the following variables (see Figure 7):

- 1. Cost of the MPES package (by year);
- 2. Inflation rate (five-year average);
- 3. Service utilization rate (from the national prevalence study);
- 4. Expected increase in service utilization (assumes a 50 per cent increase per year); and
- 5. Population growth rate (five-year average).

PROJECTIONS OF THE MPES							
Assume 50% increase							
Inflation rate (average 5 years)	0.00%						
Current utilisation rate	0.00%	0.00%	0.00%	0.00%			
Increase in service utilisation	0.000%	0.00%	0.00%	0.00%			
Population growth (average 5 years)	0.00%						
	End year 3	2018/2019	2019/2020	2020/2021			
Projection of MPES cost	0	0	0	0			

Figure 7: Projections of the MPES

These projections are obtained by taking the total estimated MPES cost and multiplying it by the inflation rate, the expected increase in the service utilization rate, and the population growth rate.

The projected cost of the MPES can be calculated according to Equation 1, where π_t is the average inflation rate and pop_t is the average population growth rate over the last five years. The variable u_t is the increase in service utilization as a result of the introduction of the MPES.

Equation 1 Projected cost = MPES Cost $*(1+\pi_t)*(1+pop_t)*(1+u_t)$

7. Conclusion

This manual aims to provide a user guide to estimate the resource requirements for a MPES for women experiencing violence, which can be used in conjunction with the accompanying Excel file. This guide outlines the steps needed to calculate the unit costs to provide these resource requirements, to calculate the overall cost of providing a MPES and to project future costs.

There are three principal stages to estimate the resource requirements for a MPES:

- 1. Identify the MPES to cost in consultation with key stakeholders and national ministries;
- Collect cost data from different types of service providers within each sector as well as data on national macroeconomic indicators to derive unit cost estimates; and
- 3. Use this data to estimate the resource costs for providing the services in accordance with the MPES.

Inputs within this costing framework are categorized into establishment costs and annual operational costs. Establishment costs are associated with the set-up year of the initiative, such as protocol development, staff recruitment activities and advertising costs to publicize the service. Annual operational costs are recurring costs such as staff salaries and operating costs such as utilities. Once the associated costs of these activities have been identified, unit costing (i.e. the cost of providing a single service) can begin. This unit cost data will come from several sources, including service provider surveys, secondary data sources and macroeconomic variables (in particular, the exchange rate, if required). Using these unit cost estimates, the overall cost of the MPES over a three-year period can be mapped out. Finally, projections of future resource requirements, which are based on assumptions on macroeconomic indicators (e.g. inflation rate), and assumptions of rates of expansion of services based on factors such as target coverage can be established.

