8901234567890123456789012345678901234567890123 7890123456789012345678901234567890 1234567890 234567890123456789012345678901234567890123456 890123456789012345678901234567890123456789012 0 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 7890|234567890|234567890|234567890|234567890|234567890 45678901234567890123456789012345678901234567890123456

T 2 3 4 5 6 / 8 9 0 T 2 3 4 5 6 / 8 9 0 T 2 3 4 5 6 / 8 9 0 T 2 3 4 5 6 / 8 9 0 T 2 3 4 5 6 / 8 9 0 T 2 3 4 5 6

# A guide to indicators for male circumcision programmes in the formal health care system





WHO Library Cataloguing-in-Publication Data

A guide to indicators for male circumcision programmes in the formal health care system.

1.Circumcision, Male - statistics and numerical data. 2.Circumcision, Male - utilization. 3.Medicine, Traditional. 4.Data collection. 5.Program evaluation. 6.Guidelines. I.World Health Organization. II.UNAIDS

ISBN 978 92 4 159826 2 (NLM classification: WJ 790)

#### © World Health Organization and Joint United Nations Programme on HIV/AIDS 2009

All rights reserved. Publications of the World Health Organization can be obtained from WHO Press, World Health Organization, 20 Avenue Appia, 1211 Geneva 27, Switzerland (tel.: +41 22 791 3264; fax: +41 22 791 4857; e-mail: bookorders@who.int). Requests for permission to reproduce or translate WHO publications – whether for sale or for noncommercial distribution – should be addressed to WHO Press at the above address (fax: +41 22 791 4806; e-mail: permissions@who.int).

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by the World Health Organization in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

All reasonable precautions have been taken by the World Health Organization to verify the information contained in this publication. However, the published material is being distributed without warranty of any kind, either expressed or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall the World Health Organization be liable for damages arising from its use.

Cover photo credit: UNAIDS/G. Pirozzi. Design and layout: J.Reichenbach Ott

Printed by the WHO Document Production Services, Geneva, Switzerland

# **Contents**

Summary of indicators
Introduction
Indicators and the Action Framework
Standardization of indicators
Integration of indicators
Feedback of results
Using this guide
The programme cycle
Planning for monitoring and evaluation
Data sources
Frequency of data collection
Communicating data
Quality assurance
Introducing indicators
Targeted indicators
Indicators for traditional male circumcision
Indicators for women
Indicators for neonates
Using local definitions
Indicators for advocacy
Indicators for behaviour change and social change
Suggestions for operational research
Understanding demand
Understanding supply
Indicators
Terminology
Annex 1. Rationale and core terms for monitoring and evaluation 46
Annex 2. References and further reading

678

234

890

5 ( 7 0

2 3 4

7 8 9 0

9012

234

890

3 4 5 6

9012

( 7 0

.

.

# **Abbreviations**

AIDS acquired immunodeficiency syndrome

**DFID** Department for International Development (United Kingdom)

**DHS** Demographic and Health Surveys

HIV human immunodeficiency virus

**M&E** monitoring and evaluation

**OR** operational research

PEPFAR President's Emergency Plan for AIDS Relief

**UNAIDS** Joint United Nations Programme on HIV/AIDS

**UNICEF** United Nations Children's Fund

**UNFPA** United Nations Population Fund

**WHO** World Health Organization

# **Acknowledgements**

This guidance was produced in conjunction with the Male Circumcision Working Group, comprising personnel from UNAIDS, UNFPA, UNICEF and WHO, and with helpful advice from the President's Emergency Plan for AIDS Relief (PEPFAR). It was written by Heather Budge-Reid (an independent consultant) and George Schmid (WHO), and valuable assistance was given by Julia Samuelson (WHO) and Jason Reed (PEPFAR) and the following members of the Working Group.

UNAIDS: Sibongile Dludlu, Catherine Hankins, Nic Lohse.

UNFPA: Helen Jackson.

UNICEF: David Alnwick.

WHO: Abdikamal Alisalad, Morkor Newman (Regional Office for Africa); Isabelle De Zoysa, Bruce Dick, Kim Dickson, Tim Farley, Julia Samuelson.

Individuals from other organizations also contributed greatly: Robert C. Bailey (University of Nairobi, Illinois, and Manitoba Project, Lumumba Health Center and University of Illinois at Chicago), Bernard Barrere (Macro International Inc.), Naomi Bock (Centers for Disease Control and Prevention, USA), Nomi Fuchs-Montgomery (Office of the United States Global AIDS Coordinator), J Amy Herman-Roloff ((University of Nairobi, Illinois, and Manitoba Project, Lumumba Health Center and University of Illinois at Chicago), Richard Hughes (JHPIEGO), Mary Mahy (UNAIDS, Geneva), Masauso Nzima (UNAIDS, South Africa), Daniel Shabangu (Orange Farm Male Circumcision Programme, South Africa), Norah Stoops (Health Information Systems Programme, South Africa).

Thoughtful advice was provided by the UNAIDS Monitoring and Evaluation Reference Group and, in particular, by the Indicators Working Group.

The Botswana Ministry of Health provided insightful thoughts on the practicalities of the use of the guide and indicators, and helped to improve both.

# **Summary of indicators**

The indicators described in this guide are based on the Male Circumcision Action Framework. The priority indicators for adoption are the seven *purpose* and *key objective* indicators listed below. A further 12 indicators are recommended as *component objective* indicators for adaptation to country-specific activities. The achievement of the component objectives supports the achievement of the key objectives which, in turn, support the achievement of the purpose objectives.

**Table 1. Summary of indicators** 

Number	Label	Indicator	Reporting frequency	Data source
Purpose (I	P): Increase the n	umber of males circumcised in t	he intended p	opulation
P1	Proportion of males circumcised	Proportion of males circumcised in the intended population	Every 3-5 years	Population- based survey or other representative survey, e.g. DHS
P2	Number of male circumcisions performed	Number of male circumcisions performed according to national standards during the reporting period	Annually	Health-facility- based
Key object		ization of demand for male circ	umcision servi	ices in an
K1	Presentation for surgery	Number of males registered to receive male circumcision services	Annually	Health-facility- based
Component population	objective 1 (C1): Ind	crease demand for male circumcision	n services in an i	ntended
C1.1	Correct knowledge of protective effect	Percentage of population aged 15-49 years with correct knowledge of male circumcision for HIV prevention	Every 3-5 years	Population- based survey or other representative survey
C1.2	Circumcision intention	Percentage of uncircumcised males (or parents of) with a stated intention to be circumcised (have next-born or teenage sons circumcised) in the next 12 months (or at birth) in the intended population	Every 3-5 years	Population- based survey or other representative survey
		ncrease the supportive civil society, p (also supports key objective 2)	policy and legisla	ative environment
C2.1	Leadership knowledge	Percentage of leaders with correct knowledge of male circumcision for HIV prevention	Annually	Special survey
C2.2	Government support	Degree of supportive policy and legislative environment	Annually	Special survey

Number	Label	Indicator	Reporting frequency	Data source	
C2.3	Civil society support	Degree of civil society participation	Annually	Special survey	
Key object intended p		nization of supply of male circur	ncision servic	es in an	
K2	Male circumcision service supply	Number of institutions delivering male circumcision services	Every 2 years	Health facility survey	
		ncrease the capacity of health-care pices to an intended population	providers and ins	stitutions to	
C3.1	Supply stock- outs	Percentage of facilities (distinct locations) that have the necessary medicines, supplies and equipment for providing safe male circumcision services of high quality	Annually	Health-facility- based records or survey	
C3.2	Competent provider supply	Number and percentage of persons who performed at least one male circumcision surgery in the past 12 months and who had received malecircumcision-specific training or who were deemed competent to provide surgery to a national standard	Annually	Health-facility- based records or survey	
C3.3	Unmet demand	The difference between the number of individuals in the targeted population with an intention to be circumcised in the next 12 months (C1.2) and the projected capacity of all providers to perform male circumcisions in the intended population over the following 12 months	Annually	Indicator C1.2 and health- facility survey	
Component objective 4 (C4): Support the delivery of the minimum package of safe male circumcision services (also supports key objective 3)					
C4.1	Male circumcision service safety	Number and percentage of circumcised males experiencing at least one moderate or severe adverse event during or following surgery, during the reporting period	Annually	Health-facility- based records	
C4.2	HIV testing	The number and percentage of persons seeking male circumcision services tested for HIV on site	Annually	Health-facility- based records or survey	

Number	Label	Indicator	Reporting frequency	Data source
C4.3	Counselling/ condoms	Percentage of males circumcised who received at least one age-appropriate risk reduction / abstinence-during-wound-healing counselling session, according to national standards, and who received condoms, during the reporting period	Annually	Health-facility- based records or survey
C4.4	Post-operative follow-up	Percentage of males circumcised who received at least one postoperative follow- up visit (routine or emergency), during the reporting period (date of surgery)	Annually	Health facility records or survey
Key object	tive 3 (K3): Maxin	nization of safer sex behaviour f	ollowing male	circumcision
K3.1	Number of sexual partners	The change in the percentage of men who had more than one sexual partner in the past 12 months	Every 2 years	Special survey
K3.2	Condom use	The change in the percentage of men who had more than one sexual partner in the past 12 months reporting the use of a condom during their last sexual intercourse	Every 2 years	Special survey
K3.3	Sexual activity before wound healing	Number and percentage of males circumcised reporting sexual activity before wound healing (6 weeks or certified wound healing)	Every 2 years	Special survey

## Introduction

Indicators measure achievement or reflect change connected to an intervention. To determine what change has taken place compared to what was planned, indicator results are compared against a baseline value, which must be established at the beginning of a programme. Often a programme also establishes a target value, and the indicator can be used to measure progress towards achieving it.

The indicators described in this guide are based on the Male Circumcision Action Framework<sup>1</sup> and provide a mechanism for important feedback for the management of male circumcision programmes. In the future, as the understanding of good practices in male circumcision programmes increases, additional indicators may be developed or existing ones adjusted.

This guide presents indicators for the creation of demand for and supply of male circumcision services as well as for the maximization of safer sex behaviour. Male circumcision is often associated with cultural practices, social affiliation and identity, which means sensitivity to these issues is required in considering and designing male circumcision programmes and the indicators for monitoring them. For a full briefing on male circumcision, see the Male circumcision information package (http://www.who.int/hiv/topics/malecircumcision/en/index.html).

It is assumed that the reader has knowledge of monitoring and evaluation and knows, for example, about monitoring male circumcision status as well as about the measurement of training in terms of changed awareness, understanding or action. Neither is easy or simple and the extensive references in Annex 2 will help readers to develop their understanding of these issues.

The following documents are referred to throughout this guide.

- Male circumcision information package http://www.who.int/hiv/topics/malecircumcision/en/index.html
- Manual for male circumcision under local anaesthesia http://www.who.int/hiv/pub/malecircumcision/local\_anaesthesia/en/index.html
- Guidance on legal/ethical and human rights considerations http://data.unaids.org/pub/Manual/2007/070613\_humanrightsethicallegalguidance\_en.pdf
- Male circumcision situation analysis toolkit www.malecircumcision.org and http://www.who.int/hiv/pub/malecircumcision/sit\_analysis/en/index.html
- Operational guidance for scaling up male circumcision services for HIV prevention www.malecircumcision.org and http://www.who.int/hiv/pub/malecircumcision/op\_guidance/en/index.html
- Male circumcision quality assessment toolkit www.malecircumcision.org and http://www.who.int/hiv/pub/malecircumcision/who\_hiv\_q\_assessment.pdf
- Communications guidelines www.malecircumcision.org

Although described in the situation analysis document, this framework has been updated and the more recent version is used here.

#### Indicators and the Action Framework

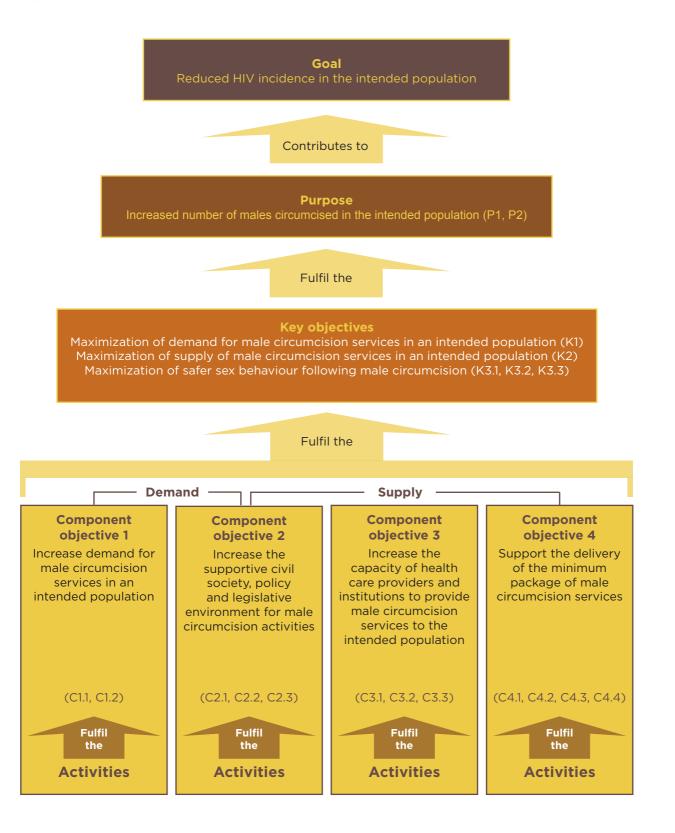
This guide looks at interventions that should be common to all male circumcision programmes and suggests indicators that might be effective for many or all countries. Terms used in the Action Framework are defined in Table 2 and the Action Framework itself is detailed in Figure 1. An introduction to the indicators is found on page 17 and the details on each indicator are given on page 23. The Action Framework provides a diagrammatic overview of all the indicators and shows how they fit into it.

The measurement of overall impact (i.e. change in HIV rates in the intended population, the goal being a reduced HIV incidence in this population) is not covered by this guide, as it is difficult to attribute change to a single intervention (such as male circumcision) outside the setting of a randomized controlled trial.

**Table 2. Action Framework definitions** 

idble 2. Action Francework definitions			
Goal  The broader impact to which the programme contributional and sectoral levels			
Purpose The expected outcome at the end of the programme (to whick key objectives will contribute)			
Key objectives	The expected outcome of achieving the associated component objectives		
Component objectives	The expected outcome of achieving the associated activities		
Activities	The tasks carried out to implement the programme and deliver the identified outputs of each component objective		

Figure 1. Action Framework



#### Standardization of indicators

These indicators have been constructed to be consistent with other WHO/UNAIDS documents, in particular the *Manual for safe male circumcision under local anaesthesia*, *Operational guidance for scaling up male circumcision services for HIV prevention*, and *Male circumcision services quality assessment toolkit*. PEPFAR has constructed a set of indicators with extensive disaggregation advice for PEPFAR-funded programmes. Where possible, the present guidance document has used the same indicators, disaggregations and definitions. The PEPFAR guidance<sup>2</sup> is intended for PEPFAR programmes that supply services and, as such, reflects their reporting requirements.

## Integration of indicators

It will be important to clearly identify sources of data for indicators and how the monitoring of male circumcision will be incorporated into national HIV/AIDS monitoring and evaluation plans. Wherever possible, programmes should integrate the data requirements for male circumcision M&E into existing M&E systems, in accordance with the Three Ones principles.<sup>3</sup>

The indicators should be measured (or data collected) through existing data collection mechanisms to the greatest possible extent. For example, the collection of data on the number of male circumcisions performed should be done through the modification of routine clinic data collection forms or through the addition of questions on attitudes towards male circumcision to existing household survey questionnaires.

#### Feedback of results

The data resulting from these indicators will help to determine how well the programme is working and whether it is achieving its objectives. There will be insights into how to improve the effectiveness and efficiency of interventions but the data will also assist regional and global efforts to determine the scope and effectiveness of male circumcision programmes.

It is essential that information collected on male circumcision be carefully packaged and shared with the communities, with a view to improving the understanding and acceptance of the programme. Feedback requires the dissemination of results to those people who will find them useful or relevant to their personal or professional decision-making.

M&E should engage key stakeholders (including, for example, government, traditional leaders, donors and opinion leaders) in every aspect, from the needs assessment and setting of indicators to their monitoring. This reduces the likelihood of results causing alienation and surprise among those involved in the programme.

<sup>2</sup> The President's Emergency Plan for AIDS Relief. *Next generation indicators reference guide.* Version 1.1, August 2009.

<sup>3</sup> The Three Ones: **one** agreed HIV/AIDS Action Framework that provides the basis for coordinating the work of all partners; **one** national AIDS coordinating authority, with a broad-based multisectoral mandate; **one** agreed country-level monitoring and evaluation system.

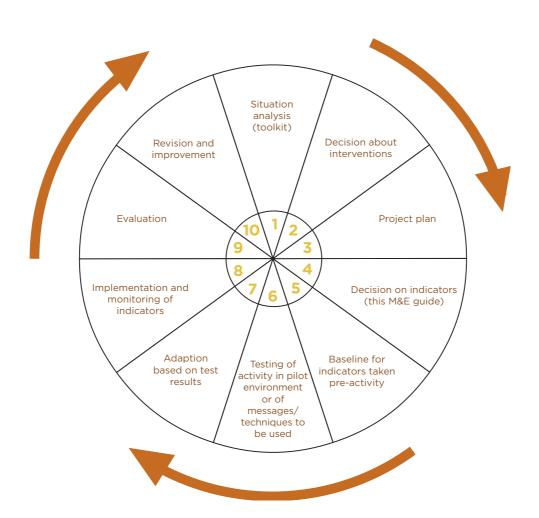
# Using this guide

Male circumcision is the surgical removal of the foreskin of the penis. It is one of the oldest and most common surgical procedures worldwide, undertaken for religious, cultural, social or medical reasons. In 2007, WHO/UNAIDS convened an international consultation in which it was concluded that there was compelling evidence of male circumcision being efficacious in reducing HIV transmission from women to men and that male circumcision should be recognized as an important, additional strategy for preventing heterosexually acquired HIV infection in men.<sup>4</sup> However, it is vital that men and women understand that the procedure does not provide complete protection against HIV infection.

## The programme cycle

The development of a male circumcision programme should not be started without a clear M&E strategy. M&E are a recurring part of the programme cycle (originally presented in the *Situation analysis toolkit*), in which monitoring occurs continuously and evaluation occurs at planned intervals (Figure 2).

Figure 2. Programme cycle



<sup>4</sup> WHO/UNAIDS. New data on male circumcision and HIV prevention: policy and programme implications. WHO/UNAIDS technical consultation: Male circumcision and HIV prevention: research implications for policy and programming. Montreux: 6-8 March 2007 (http://www.who.int/hiv/pub/malecircumcision/research\_implications/en/index.html).

It is necessary for specifically identified indicators to be monitored from the outset of programme activities in order to acquire baseline information so that the overall effect of the programme can be measured. Defining these indicators and monitoring them are therefore part of the programme cycle.<sup>5</sup>

# Planning for monitoring and evaluation

Table 3 presents a template of a standard M&E framework that may help to keep track of decisions made about what and how to measure, thus supporting the measurement of progress towards achieving targets. Targets are specific points to aim for in an indicator scale and are time-bound. An indicator is what is measured to determine whether change towards a target has been achieved. Targets are therefore fundamental to determining whether the objectives of the programme are being achieved, based on the results of monitoring the indicators. By filling in this template, there will be a concrete record of the M&E plan and the targets against which progress will be judged. The template should be used and maintained throughout the lifetime of the programme.

Table 3. Standard monitoring and evaluation plan

Action Framework level*	Input indicators**	Output indicators	Outcome indicators	Targets/ goals	Data source	Frequency of measurement

<sup>\*</sup> Purpose, key objective and component objective levels.

Annex 1 provides further discussion of standard M&E.

#### Data sources

As the collection of data must be repeated, it is important to develop a timetable and replicable methods for collecting the data. Many of the data sources (Table 4) will be part of a routine M&E system, while others will require special surveys. The Standard Monitoring and Evaluation Plan (Table 3) has a column for source of data. Presented below, using indicators from the Action Framework, are the data sources that are suggested for each indicator.

<sup>\*\*</sup> Input, output and outcome indicators are included in the Standard M&E Plan, although the present guidance document does not divide indicators in this traditional way (and input indicators are not used at all). The indicators used here may be entered in Table 3, and the monitoring and evaluation team can determine the type of standard indicator, set a target and add data sources and frequency of measurement.

<sup>5</sup> For more detail, see the Male circumcision situation analysis toolkit.

Table 4. Data sources and indicators

Data source	Indicator label	Indicator number
	Proportion of males circumcised	P1
Population-based surveys	Correct knowledge of protective effect	C1.1
Population-based surveys	Circumcision intention	C1.2
	Leadership knowledge	C2.1
	Government support (National Composite Policy Index 2010 - adapted)	C2.2
	Civil society support (National Composite Policy Index 2010 - adapted)	C2.3
Special surveys	Number of sexual partners (longitudinal cohort or cross-sectional)	K3.1
	Condom use (longitudinal cohort or cross-sectional)	K3.2
	Sexual activity before wound-healing (cross-sectional survey)	K3.3
	Number of male circumcisions performed	P2
	Presentation for surgery	K1
	Male circumcision service supply	K2
	Supply stock-outs	C3.1
Health-facility-based	Competent provider supply	C3.2
	Unmet demand	C3.3
	Male circumcision service safety	C4.1
	HIV testing	C4.2
	Counselling/condoms	C4.3
	Lost to follow-up	C4.4

Whatever system of data collection is used, the following important aspects should be considered.

- Ask only for necessary information. Ask "How will the information from this indicator be useful to my programme?" to check if the information being gathered is really needed, or what is needed.
- · Check that information for the data collection system is, or can be, easily available.
- · Make sure that the people providing and collecting the information understand its value.
- Make sure that the people providing the information and those collecting it understand the question and what information is desired.

The most efficient approach is to draw together all the monitoring data requirements by method of collection (Table 4) and ask the questions together. For example, a form can be produced for completion with each male circumcision procedure to capture the information needed for multiple indicators.

15

## Frequency of data collection

The frequency of data collection should be noted in the M&E plan. It may be difficult to decide on this frequency. For example, health facility records should be collected on a weekly or monthly basis, as this information is needed regularly and it is important to ensure that the data are collected and compiled appropriately. Data will be 'lost' if records are not compiled regularly. On the other hand, a survey of individuals (which requires more resources and collects data that might not be critical to routine programme functioning) could be undertaken on a less frequent basis, e.g. annually.

The development of a Gantt chart will support the monitoring function.<sup>6</sup> Most monitoring must become an automatic part of people's activities but may require specific efforts to ensure that data are collected and reported. A hospital may 'forget' to send in monitoring information. It may be possible to collect data later but the hospital staff may have 'forgotten' to fill in the forms. Such a situation should be rectified quickly to avoid loss of data. It is important to seek and use regular feedback opportunities for monitoring information, e.g. a circulated memorandum or presentation and a monthly meeting, to remind people that the information is being actively analysed and is not just sitting in a file. People involved in a programme appreciate knowing the results of their work.

Evaluation takes place at various times during a programme. The Gantt chart reminds people when it is likely to happen so that they can build it into their own activities. Consider existing events when scheduling (such as team meetings, budgeting periods, etc.). Look for existing feedback opportunities, such as monthly staff meetings, that can be incorporated into the timetable.

### Communicating data

#### **Communicating numbers**

Indicators are often expressed in percentages (proportions). While this is useful, it can also create confusion or be misleading, as indicated below.

- A 100% increase can be achieved by a programme that increases the number of males being circumcised from one to two!
- If the percentage of men circumcised in an area changes from 20% to 40%, this could be because the number of men living in the area has changed. For example, over a one-year period the number of miners at a hostel who were circumcised remained the same at 200. However, if the number of men in the hostel has decreased from 1000 to 500 over the same time (perhaps because miners from a non-circumcising tribe left), then the proportion of miners circumcised has actually increased from 20% (200 out of 1000) to 40% (200 out of 500).

It is important to explain the changes in a denominator in any dissemination report. In addition, reporting both the numerator and denominator enables better comparison with results from other regions or from different countries.

<sup>6</sup> A Gantt chart is a type of bar chart that illustrates a programme schedule. It shows pictorially, in an easily understood way, when individual activities should occur.

#### **Communicating results**

While it is important to think carefully about how numbers and results are expressed, it is also important to consider, and attempt to record, all the important facts used in the interpretation of the results, such as population changes and the number of service points. An indicator is more likely to be properly completed and interpreted when one knows more about the situation/issue being monitored or evaluated.

Feedback and analysis by stakeholders is important. This will probably enhance participation, ownership of results and understanding of the reasons why a certain situation or change has arisen. Finally, these features can lead to improvement of the indicators or the way data are collected in the future.

# Quality assurance

Quality assurance is vital to any male circumcision programme or M&E system. For quality assurance of male circumcision services, specific standards and criteria can be found in the *Male circumcision services quality assessment toolkit*. These quality assurance criteria are not provided in this document. However, there is some overlap with the M&E indicators, e.g. performance of male circumcisions in accordance with national standards, clinical competency of persons performing male circumcision, supply stock-outs and adverse events monitoring.

Assurance of data quality is another aspect of quality assurance. As noted earlier, this M&E document is addressed to individuals who already have some knowledge of M&E, and data quality assurance should be a routine part of M&E to ensure the timely and accurate collection of data.

	9	0

	U
	$\sim$
	7

	8

	4

	9	

	5	6

	2

# Introducing indicators

# **Targeted indicators**

#### Indicators for traditional male circumcision

This guide does not provide indicators for traditional male circumcision. It may be difficult to monitor traditional male circumcision for numbers of circumcisions, type of practice or adverse events following circumcision because of the often informal and private nature of the process.

Work to improve safety in this area will require close and positive relationships with traditional male circumcision providers. The issue of M&E should not be raised until a positive relationship has been developed. The subject is highly sensitive and could easily be misinterpreted as a criticism of the safety of current procedures.

There are many different customs and rituals involving male circumcision, each with its own inherent risks and benefits. Useful indicators could include: number of male circumcisions completed, use of single-use sterile equipment, frequency of adverse events, estimated demand for traditional male circumcision providers to carry out male circumcision, estimated number of adverse events following male circumcision by traditional male circumcision providers. It will also be important to learn about the content of traditional counselling and condom promotion that may be given along with the male circumcision procedure.<sup>7</sup>

If these indicators are collected, they should probably use the term 'estimated' because traditional male circumcision providers may not have systematic or verifiable records of their activities. As a result, these indicators may have to be based on estimations of what is happening, made by the traditional male circumcision providers themselves.

This will only give an approximate picture, which is nonetheless important. It may be possible to introduce a more verifiable M&E system, depending on the success of efforts to work with traditional male circumcision practitioners.

#### Indicators for women

Although males are the primary focus for male circumcision activities, women and girls are often involved in decision-making. They are also affected by men's circumcision and should therefore be included in M&E programming. To this end, indicators have been written and disaggregations included that look at the involvement of women and girls and their access to information and understanding of it.

#### **Indicators for neonates**

Neonatal male circumcision refers to the circumcision of male children in the first 28 days of life.

Many experts believe that if a male circumcision programme is to become sustainable its focus should shift from catch-up with adults to neonates, because the circumcision of neonates is considerably easier and less expensive than that of adults.

The indicators in this document have been constructed so that many of them can be used if programme activity focuses on neonates.

<sup>7</sup> UNAIDS. Collaborating with traditional healers for HIV prevention and care in sub-Saharan Africa: suggestions for programme managers and field workers. 2007 (UNAIDS/06.28E, http://data.unaids.org/pub/Report/2006/jc0967-tradhealers\_en.pdf).

## Using local definitions

Certain terms used in the indicators will need to be defined by each country in relation to local characteristics within its society. For example, what constitutes a leader may differ between societies. Similarly, terms such as 'correct knowledge' will need to be defined in the context of existing knowledge and local message choices.

This M&E guide assists in measuring the quality of services by monitoring some service functions, e.g. numbers of health-care institutions delivering services according to an appropriate standard. However, it does not provide a comprehensive method of verifying the quality of services (see *Male circumcision services quality assurance: a guide to the safety and quality of services* and the *Male circumcision services quality assessment toolkit*).

## Indicators for advocacy

Six of the 20 indicators described in this document relate to advocacy work with a strong policy focus. The Action Framework is not just about service provision, it is also about creating a positive policy environment for both supply and demand. However, it is acknowledged that measurement of these six indicators may be difficult. Many of the documents listed in Annex 2 look at social change indicators and M&E processes. Although these indicators tend to be qualitative, they are not 'soft' indicators. Indeed, they can be difficult to measure but worth measuring as it is in the areas of policy, implementation and leadership that much of the work to increase male circumcision rates will be most effectively achieved.

- For advocacy and policy change see: Gosling L, Edwards M. *Toolkits: a practical guide to assessment, monitoring, review and evaluation.* 2<sup>nd</sup> ed. London: Save the Children UK; 2003 (ISBN 1-84187-064-1).
- For general social change see: The Communications Initiative website at http://www.comminit.com

The following particular challenges confront all advocacy M&E.

- Multiple forces. The complexity of issues can make it difficult to determine the cause and
  effect between advocacy initiatives and outcomes. A change in a law or an increase in a
  standard of implementation may result from economic changes, pressure from another
  direction, a change in government, etc.
- **Time frame.** The time frame for measuring success in advocacy may be long and therefore it is a challenge for feedback mechanisms to be put into practice.
- Compromise versus outright success. There are likely to be a variety of opinions among
  different partners and stakeholders in any campaign. Compromise is often necessary, with
  some objectives being discarded or modified. Outright success, i.e. achievement of all the
  project objectives, is rare.
- Implementation and outcomes. It is important to ask whether the desired change in policy or action has benefited the people it was intended to benefit.

Measuring the result of advocacy, and understanding how advocacy is linked to success, is not always easy, and Table 5 is presented as an example of why advocacy and indicators for monitoring it are important. Consulting the National Composite Policy Index 2010 as an example may also better explain this importance.

Table 5. Understanding use of advocacy indicators†

Dimension of work	Output indicators <sup>†</sup>	Outcome indicators
Policy, implementation or activity change	<ul> <li>Increased dialogue on an issue</li> <li>Raised profile of an issue</li> <li>Changed opinion</li> <li>Changed rhetoric in public or private</li> <li>Change in written publications</li> <li>Change in actions</li> </ul>	<ul> <li>Changed policy</li> <li>Changes in legislation</li> <li>Policy/legislation change implemented</li> </ul>
Strengthening civil society by working with:  • partner UN organizations  • NGOs  • movements/networks  • community-based organizations  • popular organizations	<ul> <li>Change in individual members' skills, capacity, knowledge and effectiveness</li> <li>Change in individual civil groups' capacity, organizational skills and effectiveness</li> <li>Greater synergy of aims/activities in networks/movements</li> <li>Change in collaboration, trust or unity of civil society groups</li> <li>Change in people's skills, capacity and knowledge to mobilize and advocate on their own behalf</li> </ul>	<ul> <li>Increased effectiveness of civil society work</li> <li>Civil groups active in influencing decision-makers in ways that will benefit people</li> <li>Increased participation of civil society groups in influencing decisions</li> <li>Change in accountability and transparency of public institutions</li> </ul>

<sup>&</sup>lt;sup>†</sup> Adapted from Coates and David, 2000.

Dutput and outcome indicators are included here as examples and in order to aid understanding although this guidance document does not specifically address them using this categorization.

## Indicators for behaviour change and social change

Much of the work of the male circumcision programme is likely to involve behaviour change activities and social change communication. It is hoped to:

- influence people's understanding of the benefits of male circumcision and allow them to make
  an informed choice about seeking male circumcision (for themselves, for the male partners of
  women, and for their male children);
- influence leaders:
- influence policy and its implementation.

Knowledge is a key part of behaviour change and thus is an indicator of the likelihood of increased demand for male circumcision. In order to use this indicator, knowledge among men and women has to be tested. Finding out how accurately messages are turned from information into knowledge and then into action, and counteracting myths and misunderstandings, are fundamental to effective communications interventions. An important aspect of male programmes is the knowledge that male circumcision is not 100% protective for males, that it is not proven to protect women from acquiring HIV from HIV-positive men and that safer sex methods are still needed for circumcised men in order to prevent risk compensation. This knowledge is important for both males and females. Indicators that signify the likelihood of long-term change are required (e.g. attitudes towards male circumcision) as well as for immediate success (e.g. changes in the level of adult male circumcision). As a result, 'intention to change' is often used as a predictor of actual change (a proxy indicator). This means that the programme can see whether its work is having an immediate effect as well as a long-term one.

## Suggestions for operational research

The indicators suggested in this guide cannot represent all the important information that a male circumcision programme requires. For the optimization of programmes it is necessary to carry out operational research (OR), and this should be part of all safe male circumcision programmes. OR seeks to make programmes more effective, more efficient or of higher quality.

Monitoring and evaluation is the first step to understanding how well programmes are working, as it tells programme managers what is happening and sometimes why. OR can be used to further understand why something is happening, or to test a hypothesis about a cause or a potential solution.

OR investigates specific causes of potential problems and potential solutions to problems that limit programme effectiveness, efficiency or quality; or, having identified possible solutions, it determines which solutions would yield the best results. For example, a study to increase condom use among patients on antiretroviral treatment might experiment with changes in provider training or client counselling, and measure the impact on the number of condoms distributed or the frequency of consistent condom use. OR is sometimes described as 'the science of better', as it seeks to improve the delivery of services by looking at the results of different approaches.

Below are some suggested issues that programmes could investigate using OR in order to better understand demand and supply.

	2

	4

	9	0

	2

	8

	4

	9	(

	5	6

	7
	ľ

	8

	4

8	9	(

	5	6

	7

	3

#### **Understanding demand**

- The reason for a stated intention not to be circumcised
- Parental intention to have sons circumcised, in order to achieve a full picture of current demand as well as the sustainability of demand for male circumcision
- The effect of cost on seeking male circumcision
- The effect of various available services on male circumcision being sought, e.g. HIV testing and counselling
- The effect of promotion events led by leaders showing accurate knowledge of male circumcision issues, in order to achieve a fuller picture of the influence of leaders

#### **Understanding supply**

- Assess cost-effective ways to integrate male circumcision into facility services
- Average time spent on a waiting list for male circumcision, disaggregated by health institution
- Assess acceptability and reach of service delivery options: mobile, fixed or fixed with events such as opening on weekends, and including the private sector
- Attitudes of health-care providers to male circumcision, disaggregated by trained status of operating individual
- Estimate success of counselling approaches in maintenance or adoption of safer sexual behaviour

A false distinction between OR and M&E is sometimes made *solely* on the basis of frequency or regularity of data collection, and this can lead to confusion. Monitoring is a routine event, for which data must be collected systematically and regularly. It could, for example, be done every day of the year, daily for one month or semiannually. *Because something is not done on every patient does not mean that it is not monitoring and that it is thus OR.* 

In this document, 'special survey' means that a survey is done regularly. It need not be done on every patient. It may measure the quality or quantity of services, but it does not specifically seek to do what OR does, i.e. to determine why there are problems and what potential solutions to the problems might be, nor does it seek to test possible solutions to the problems.

See Annex 1 for further discussion of M&E.

## **Indicators**

The format of the indicators listed below is similar to that used in the UNAIDS document *Monitoring* the Declaration of Commitment on HIV/AIDS: guidelines on construction of core indicators: 2010 reporting.8 Table 6 gives the headings adapted from this document which are used in the present guide and a brief explanation of each.

**Table 6. Description of indicator format** 

<u> </u>	
Label	A short description of the indicator, used in table of contents and tables
Indicator	A full description of the indicator
Rationale	What the indicator is intended to measure
Frequency of reporting	How frequently data should be reported centrally. Data may be collected with this frequency or data may be continuously collected, collated or reported more frequently at a local level
Measurement tool	The type of survey or source of data that will provide information for the indicator
Method of measurement	How the data will be collected
Numerator	Description of what constitutes the numerator
Denominator	(If applicable) Description of what constitutes the denominator
Disaggregation	(If applicable) Categories that provide further information and better understanding of the indicator
Interpretation	How the indicator may be used, including the use of disaggregated data

# **Terminology**

In general, standard terminology is used in the indicator descriptions. However, some terms are described below for clarity.

**Male.** When the word 'male' is used, it is not restricted to any particular age, unless otherwise indicated: it includes neonates through to adults.

Men. When the word 'men' is used, it is restricted in meaning to adolescents and adults.

**Adolescent.** Definitions may vary from society to society. The WHO definition includes ages 10 to 19 years, corresponding to the age categories below.

Age disaggregation. The following age categories (in years) are used.

- <1
- 1-9
- 10-14
- 15-19
- 20-24
- 25-49
- 50+

UNAIDS. Monitoring the Declaration of commitment on HIV/AIDS: guidelines on construction of core indicators. Geneva: 2009 (UNAIDS/09.10E/JC1676E, http://data.unaids.org/pub/Manual/2009/JC1676\_Core\_Indicators\_2009\_en.pdf).

It is also useful to consider how the M&E data from the programme may be fed back into national and international reporting systems. The WHO Health Sector Response disaggregates data by age on the basis of categories of less than 15 years and 15 years and over at the broadest level, and categories 15–24 years and 25–49 years for further analysis of differences between youth and older adults. It is important to consider what age categories are needed for disaggregation in order to be in harmony with the choices made locally. This age disaggregation works with UNGASS goals as well as Spectrum estimates.

Children aged 1-9 years, while comprising an age disaggregation category, do not constitute an age category commonly used. This is because safe male circumcision programmes do not target this age group on account of the need to typically use general anaesthesia

**Health-care facility.** Health-care facilities are disaggregated by static (fixed) versus temporary (including mobile) facilities. If static, there is further disaggregation into hospital or clinic, using WHO-defined or locally defined categories. Defining static services as governmental or nongovernmental is also recommended.

**Intended population.**<sup>9</sup> The term 'intended population' is used to describe a group targeted to benefit from male circumcision services that might be defined in differing ways. For example, an intended population might be a particular tribe that has a low prevalence of male circumcision, a geographical area where there are men with a low prevalence of male circumcision, or even a district/province/country. 'Intended population' should be defined locally.

Correct identification of the intended population and accurate assessment of baseline male circumcision prevalence are critical to the design of any male circumcision programme, since even in non-circumcising communities some boys and men may have been circumcised for medical reasons or there may be intermingling of individuals from groups that traditionally circumcise and those that do not. Thus, for instance, an intended population may be:

- an identifiable subgroup of a population, e.g. the Luo in Kenya;
- · males in a physical area;
- the national male population.

Where the intended population is a subgroup mixed with a larger population, a population survey may be required to gather data. However, results will only come from the disaggregation of the data by subgroups. See *Male circumcision situation analysis toolkit* and *New data on male circumcision and HIV prevention: Policy and programme implications.*<sup>10</sup>

The Demographic and Health Surveys (DHS) may collect data on male circumcision.

<sup>9</sup> Population estimation techniques are also available should they be required. The following are additional reference sources for information on population estimation techniques:

<sup>•</sup> How to conduct a coverage exercise: a rapid assessment tool for programs and services. Population Council, Inc. (http://www.popcouncil.org/pdfs/CoverageExerciseGuide.pdf).

<sup>•</sup> Rapid assessment and response technical guide (TG-RAR). World Health Organization (http://www.who.int/docstore/hiv/Core/Index.html).

The AIDS Indicator Survey (AIS) also collects data on male circumcision.

<sup>10</sup> Male circumcision situation analysis toolkit, and New data on male circumcision and HIV prevention: Policy and programme implications (www.malecircumcision.org).

**Health facility survey.** A periodic survey of a representative sample of health-care facilities (public and private) in a country. This is a method of obtaining information about services delivered. More detailed information is obtained than in a facility census but a health facility survey is more time-consuming and costly.<sup>11</sup>

**Health facility reports/records/service statistics.** Regular health facility data collection and reporting to regional and national levels by service providers. Usually standard reporting formats/records are used along with a reporting cycle. Limited details are available, and often information is incomplete and with delays in reporting; generally from the public sector only.

The reporting period. The time over which data are collected.

**Cadre of provider.** This term is intended to disaggregate types of providers of service. For surgical services, these are likely to be doctor, clinical officer and nurse, although countries may wish to use additional categories and the provision of neonatal/infant circumcision will probably require additional, locally determined categories. For other services, other categories, also determined locally, may be used.

**Surgery.** The terms 'surgery' and 'surgical' include, where appropriate, the use of non-surgical interventions for neonatal circumcision, e.g. the use of devices.

**Minimum package.** Male circumcision should always be considered as part of a comprehensive HIV prevention package including:

- provision of HIV testing and counselling services;
- treatment for sexually transmitted infections;
- the promotion of safer sex practices;
- the provision of male and female condoms and promotion of their correct and consistent use.

**Knowledge.** The word 'knowledge' is used in several contexts, each of which will be clear when used. A key concept of 'knowledge' in constructing indicators is that knowledge is (generally) required as a prerequisite to action, e.g. correct knowledge of the protective effect of male circumcision against HIV acquisition is a prerequisite for seeking male circumcision for HIV prevention purposes.

The indicators in this guide have been constructed by individuals knowledgeable about male circumcision, and monitoring and evaluation. They represent collective best judgement about the areas of a male circumcision programme that are important to monitor and evaluate, using the least number of indicators feasible. Indicators other than those in this guide could be used. Countries are welcome to add indicators to their own M&E system that they feel are valuable or adapt those in this guide. Similarly, countries need not use all indicators proposed in this guide.

8 9 0

6 7 8

8 9 0

0 1 2

2 3 4

789(

4 5 6

0 1 2

6/8

.

25

Toolkit on monitoring health systems strengthening: service delivery. WHO, June 2008 (http://www.who.int/healthinfo/statistics/toolkit\_hss/EN\_PDF\_Toolkit\_HSS\_ServiceDelivery.pdf).

Purpose level indicator 1	(P1). Proportion of males circumcised
INDICATOR	Proportion of males circumcised in the intended population
RATIONALE	To assess changing rates of male circumcision in an intended population The results of the indicator inform modelling of male circumcision's impact on HIV incidence, and provide an indication of potential demand in an intended population
FREQUENCY OF REPORTING	Every 3-5 years
MEASUREMENT TOOL	Population-based survey (DHS, HIV/AIDS survey, Multiple Indicator Cluster Surveys) or other representative survey
METHOD OF MEASUREMENT	In a survey, men are asked about their circumcision status
Numerator	Number of males circumcised
Denominator	Number of males responding
DISAGGREGATION	Age, source/practitioner of circumcision procedure (formal health-care system, traditional or mixed)
INTERPRETATION	Changing rates of male circumcision may or may not be the result of a programme. For example, changing societal norms not due to a programme may be leading to changing rates of male circumcision. This indicator measures total change in the population, whatever the reason(s).  Existing population-based surveys (such as DHS) may not accurately measure true circumcision status because of a lack of knowledge of what circumcision is, confusion about circumcision status, or perceived social desirability of circumcision status. Other approaches to determining circumcision status might be used, e.g. the use of pictures or drawings (drawings may be more culturally appropriate), prompts or even direct examination.  Modelling the potential impact of changing rates of male circumcision on HIV incidence requires accurate knowledge of male circumcision status over time. HIV prevalence, or modelled incidence, will be acquired from population-based surveys and changes will then need to be interpreted using information from this indicator.  Changes in the result will inform interpretation and the triangulation of supply and demand indicators.

Purpose level indicato	r 2 (P2). Number of male circumcisions performed
INDICATOR	Number of male circumcisions performed during the reporting period according to national standards
RATIONALE	To assess progress towards providing male circumcision services to the intended population
FREQUENCY OF REPORTING	Annually.  Data should be collected routinely at the health-care facility level and aggregated periodically, preferably monthly or quarterly, for use at the local level
MEASUREMENT TOOL	Health facility recording and reporting forms
METHOD OF MEASUREMENT	Patient records or health facility registers
Numerator	Number of males circumcised during the reporting period according to national standards
Denominator	Not applicable
DISAGGREGATION	Required:  Age  HIV status (this disaggregation provides data for indicator C4.2 - HIV testing)  Tested at facility – positive result  Tested at facility – negative result  Tested at facility – indeterminate result  Tested elsewhere – positive, verification provided: yes no  Tested elsewhere – negative, verification provided: yes no  Refused/unknown  Recommended:  Type and location of health facility  Cadre of provider
INTERPRETATION	The total number of male circumcisions carried out indicates either change in the supply of services or change in demand. Comparing the results against previous values shows where male circumcision services have been newly instituted or where male circumcision volume has changed. When numbers of male circumcisions are disaggregated by:  HIV status and age, it will be possible to adjust modelling inputs used in models to determine the impact of male circumcision programmes on HIV incidence and, if a country has prioritized services to or set targets for particular age groups, determine the success of those priorities; age, it is also possible to determine whether age-specific communication strategies are working by creating demand; type and location of health-care facility, it may be possible to assess resource allocation needs and successes; cadre of health-care provider, it will be possible to determine the results of task-shifting efforts and help to determine resource allocation.  Some programmes will work closely with voluntary counselling and testing services to provide HIV testing. A patient desiring male circumcision may have been recently tested, in which event an on-site HIV test may be unnecessary. In these cases, a written 'verified result' may be requested at the facility to verify HIV status. There is no specific length of time before male circumcision that the test should have been done, but within three months is suggested (the purpose of testing is not to identify every man who might be infected but to provide HIV testing to men seeking health care and to identify HIV-positive men who, if they choose to be circumcised, are likely to be at higher risk of surgical complications, i.e. men who are chronically infected and with low CD4 counts).

Key objective level 1.1 (K	1). Presentation for surgery
INDICATOR	Number of males registered to receive male circumcision services
RATIONALE	To assess progress towards receiving male circumcision services
FREQUENCY OF REPORTING	Annually
MEASUREMENT TOOL	Health-care facility records and reporting forms
METHOD OF MEASUREMENT	Facility records of males who request male circumcision services, with data collected continuously and collated quarterly
Numerator	Number of males scheduled for surgery
Denominator	Not applicable
DISAGGREGATION	Age
INTERPRETATION	The number of males registered presenting for male circumcision services is an objective measure of demand.  Facility scheduling records, including ones for education and counselling services about male circumcision, and surgical scheduling records, may be available. The former would be a list of men who desire surgery and are placed on a list, while the latter might be men actually scheduled for surgery, compiled very close to the day of surgery. Facility records are more likely to be of use as a measure of demand, particularly when used as suggested in the next two paragraphs.  When compared to the results of indicator C1.2 (circumcision intention), this indicator assesses the translation of potential demand into actual demand, and changes over time will illustrate increases or decreases in demand.  When compared to the results of indicator P2 (number of male circumcisions performed), this indicator may identify when there are barriers to demand fulfilment between presentation and circumcision.
	When disaggregated by age, age-specific demand can be assessed.

Key objective level 1, com	ponent objective 1.1 (C1.1). Correct knowledge of protective effect
INDICATOR	Percentage of the population aged 15–49 years with correct knowledge of male circumcision for HIV prevention
RATIONALE	To assess progress towards maximization of correct knowledge
FREQUENCY OF REPORTING	Every 3–5 years
MEASUREMENT TOOL	Population-based survey or other representative survey
METHOD OF MEASUREMENT	The following questions can be used in a survey  All survey respondents  Can a man who is circumcised also be HIV-positive?  (1) Yes (2) No (3) Don't know  Can a circumcised HIV-negative man who has sex without a condom get infected with HIV during sex?  (1) Yes (2) No (3) Don't know  Can a circumcised HIV-positive man who has sex without a condom infect his sex partner* with HIV?  (1) Yes (2) No (3) Don't know  Can an HIV-negative woman who has sex without a condom with a circumcised HIV-positive man become infected with HIV?  (1) Yes (2) No (3) Don't know  Can an HIV-positive woman who has sex without a condom with a circumcised HIV-negative man infect him with HIV?  (1) Yes (2) No (3) Don't know  'The term 'sex partner' is used in the questions for men because it is appropriate for both heterosexuals and men who have sex with men.
Numerator	Number of respondents with correct knowledge
Denominator	All respondents
DISAGGREGATION	Age Male circumcision status Sex
INTERPRETATION	By measuring knowledge, this indicator shows the result of communication strategies creating awareness of the partially protective effect of male circumcision and for the continued use of safer sex practices. Evidence of a lack of knowledge suggests a need for enhanced communication strategies.  Disaggregation by age may inform the allocation of resources to improve communications that target certain age groups.  Disaggregation by circumcision status may inform the adequacy of communications or counselling to uncircumcised men.  Disaggregation by sex may inform the allocation of resources to improve communications that target a particular sex.

Key objective level 1, con	nponent objective 1.2 (C1.2). Circumcision intention
	For uncircumcised males: percentage of uncircumcised males in the intended population with a stated intention to be circumcised in the next 12 months  For all males: percentage of males in the intended population with a
INDICATOR	stated intention to have next-born or teenage son circumcised  For females: percentage of females in the intended population with a stated intention to encourage a male partner to be circumcised
	For females: percentage of females in the intended population with a stated intention to have next-born or teenage son circumcised
RATIONALE	To assess progress towards maximization of demand
FREQUENCY OF REPORTING	Every 3–5 years
MEASUREMENT TOOL	Population-based survey (DHS, HIV/AIDS survey, Multiple Indicator Cluster Survey) or other representative survey
	The following questions can be used in a survey.
	For uncircumcised adult males
	Do you intend to be circumcised in the next 12 months?
	(1) Yes (2) No (3) Maybe (4) Don't know what circumcision is (5) Have not thought about it
	For all men
	If you were to have a male child in the future, would you have him circumcised at birth?
	(1) Yes (2) No (3) Maybe (4) Don't know what circumcision is (5) Have not thought about it
METHOD OF	If you had/have a teenage son, would you encourage him to be circumcised in the next 12 months?
MEASUREMENT	(1) Yes (2) No (3) Maybe (4) Don't know what circumcision is (5) Have not thought about it
	For women
	If you were to have a male child in the future, would you have him circumcised at birth?
	(1) Yes (2) No (3) Maybe (4) Don't know what circumcision is (5) Have not thought about it
	If you had/have a teenage adolescent son, would you encourage him to be circumcised in the next 12 months?
	(1) Yes (2) No (3) Maybe (4) Don't know what circumcision is (5) Have not thought about it
	Would you encourage a male sexual partner to be circumcised?
	(1) Yes (2) No (3) Maybe (4) Don't know what circumcision is (5) Have not thought about it
Numerator	Those answering 'Yes'
Denominator	All those surveyed
DISAGGREGATION	Age of respondent
DIOAGGREGATION	Sex of respondent

INTERPRETATION	Demand in the intended population may be estimated by multiplying the percentage of respondents answering 'Yes' to the first question above by the number of appropriate individuals (either uncircumcised men, uncircumcised adolescents or neonates) in the intended population.
	Estimating the number of uncircumcised men in the intended population requires knowing the total size of the intended population and the percentage who are uncircumcised, the latter being derived from population-based surveys (see indicator P1).
	The percentage of respondents answering 'Yes' is an indication of current or future demand and the effect of communication messages. Changes over time in percentages, in particular, allow the estimation of the effect of communication messages or changing societal norms.

Key objective 1, compon	Key objective 1, component objective 2.1 (C2.1). Leadership knowledge		
INDICATOR	Percentage of leaders with correct knowledge of male circumcision for HIV prevention		
RATIONALE	To assess progress towards maximization of demand. Correct knowledge of the protective effect of male circumcision is vital for leaders to promote male circumcision		
FREQUENCY OF REPORTING	Annually		
MEASUREMENT TOOL	Special survey		
METHOD OF MEASUREMENT	The following questions can be used in a survey to assess the level of knowledge among leaders.  Can a man who is circumcised also be HIV-positive?  (1) Yes (2) No (3) Don't know  Can a circumcised HIV-negative man who has sex without a condom get infected with HIV during sex?  (1) Yes (2) No (3) Don't know  Can a circumcised HIV-positive man who has sex without a condom infect his sex partner* with HIV?  (1) Yes (2) No (3) Don't know  Can an HIV-negative woman who has sex without a condom with a circumcised HIV-positive man become infected with HIV?  (1) Yes (2) No (3) Don't know  Can an HIV-positive woman who has sex without a condom with a circumcised HIV-negative man infect him with HIV?  * The term 'sex partner' is used in the questions for men because it is appropriate for both heterosexuals and men who have sex with men.		
DISAGGREGATION	Sex of respondent Age of respondent		
Numerator	Leaders with correct knowledge (a scale or appropriate means of scoring correct answers will need to be devised)		
Denominator	Number of respondents completing survey		
INTERPRETATION	This indicator shows the level of awareness among leaders. Changes over time will assess the success of communications targeting both the general population and those specifically targeting leaders.		

Key objective 1, compone	ent objective 2.2 (C2.2). Government support
INDICATOR	Degree of supportive policy and legislative environment
RATIONALE	To assess progress towards a supportive policy and legislative environment
FREQUENCY OF REPORTING	Annually
MEASUREMENT TOOL	Special survey
METHOD OF MEASUREMENT	Adaptation of UNAIDS National Composite Policy Index 2010 to relate to male circumcision. In particular, adaptation of Annex 4, section A, subsection I (question 1, whether there is an adopted national policy/strategy for male circumcision), subsection II (questions 1,3), and subsection III (questions 1,2,3, 4.1). http://data.unaids.org/pub/Manual/2009/JC1676_Core_Indicators_2009_en.pdf  These key questions (adapted to male circumcision) include:  I. A1. Has the country developed a national multisectoral strategy to respond to HIV with male circumcision programme/services?
	If not, explain why.  II. 1. Do high officials speak publicly and favourably about male circumcison for HIV prevention in national forums at least twice a year?
	II. 3. Does the country have a mechanism to promote interaction between government, civil society and the private sector for implementing male circumcision for HIV prevention?
	III. Does the country have a policy or strategy:
	(1) promoting information, education and communication on male circumcision for HIV prevention to the general population?
	(2) promoting male circumcision and related reproductive and sexual health education for young people?
	(3) promoting information, education and communication on male circumcision among vulnerable subpopulations?
	(4) determining the extent to which male circumcision for HIV prevention has been implemented?
	One additional question that should be included is: "Does the country have a policy or strategy for reaching women with information and education on male circumcision for HIV prevention?"
DISAGGREGATION	Not applicable
Numerator	Not applicable
Denominator	Not applicable
INTERPRETATION	For successful increases in demand for male circumcision, as well as successful scale-up of male circumcision services, a supportive legislative and policy environment is necessary. Successful efforts for indicator C2.1 (leadership knowledge) should lead to positive changes in this indicator. This indicator identifies gaps in areas of government support and allows the targeting of advocacy strategies.

Key objective 1, component objective 2.3 (C2.3). Civil society support		
INDICATOR	Degree of civil society participation	
RATIONALE	To assess progress towards maximization of civil society participation and support.	
FREQUENCY OF REPORTING	Annually	
MEASUREMENT TOOL	Special survey	
	Adaptation of <i>National Composite Policy Index 2010</i> to relate to male circumcision. In particular, adaptation of Annex 4, Part B subsection II (questions 1,2,3,5), subsection III (question 1.1). http://data.unaids.org/pub/Manual/2009/JC1676_Core_Indicators_2009_en.pdf	
	1. To what extent has civil society contributed to strengthening the political commitment of top leaders and strategy/policy formulations?	
	2. To what extent have civil society representatives been involved in the planning and budgeting process for male circumcision for HIV prevention?	
	3. To what extent are the services provided by civil society in male circumcision for HIV prevention included in national strategy, national budget and national reports?	
METHOD OF	4. To what extent is civil society sector representation in HIV efforts inclusive of diverse organizations?	
METHOD OF MEASUREMENT	III. 1.1 To what extent has male circumcision for HIV prevention been implemented?	
	In addition, the following should be assessed.	
	1. What is the percentage of civil society groups with policy consistent with WHO recommendations? (The denominator is civil society groups estimated to exist by governments.)	
	2. What is the extent of involvement of women-focused civil society groups in male circumcision activities? (Use Likert scale ranging from low to high.)	
	3. What is the extent of involvement of youth-focused civil society groups in male circumcision activities? (Use Likert scale ranging from low to high.)	
	4. What is the extent of involvement of people living with HIV/AIDS groups in male circumcision activities? (Use Likert scale ranging from low to high.)	
DISAGGREGATION	Not applicable	
Numerator	Not applicable	
Denominator	Not applicable	
INTERPRETATION	For successful demand and supply, civil society needs to be involved. The results of this indicator allow for evaluating the involvement of civil society in male circumcision strategy, planning and involvement, and for the targeting of civil society-related strategies to assist in male circumcision communication and demand strategies.	

Key objective 2 (K2). Male circumcision service supply	
INDICATOR	Number of institutions delivering male circumcision services
RATIONALE	To assess progress towards maximization of supply of male circumcision services available to the intended population
FREQUENCY OF REPORTING	Every 2 years
MEASUREMENT TOOL	Health facility survey
METHOD OF MEASUREMENT	Facilities are asked if, over a reporting period, they have provided male circumcision services
DISAGGREGATION	Type and location of health-care facility Age of clients (neonates or men)
Numerator	Number of facilities providing male circumcision service (a mobile provider counts as a single facility)
Denominator	Not applicable
INTERPRETATION	Knowledge of lack or surplus of supply supports the effective and efficient distribution of resources. This indicator is useful for indicator P2.  Disaggregation by type and location of facility allows an assessment of the range and numbers of facilities that deliver male circumcision services, and government or nongovernmental activity. If compared with total numbers of facilities the indicator may inform the allocation of resources, e.g. if only a small proportion of government district hospitals are performing male circumcision services, resources may have to be allocated to them. In addition, if mapping of each facility is done, geographical coverage may be assessed.  Disaggregation by age of client allows an assessment of possible demand for or supply of services, by age of client.

Key objective 2, cor	mponent objective 3.1 (C3.1). Supply stock-outs
INDICATOR	Percentage of facilities that have the necessary medicines, supplies and equipment for providing safe male circumcision services of high quality
RATIONALE	To assess progress towards maximization of supply of safe, male circumcision services of high quality
FREQUENCY OF REPORTING	Annually  Facilities should monitor inventory levels continuously. Data should be aggregated periodically, preferably monthly or quarterly.
MEASUREMENT TOOL	Health facility survey or reporting forms  See <i>Male circumcision services quality assessment toolkit</i> for general guidance. http://www.malecircumcision.org/programs/documents/WHO_QA_Toolkit_WEB.pdf
METHOD OF MEASUREMENT	Has the facility experienced a stock-out of one or more of the following tracer commodity items used for male circumcision over the last 28 days?  • Sterile scalpels • Local anaesthetic • Sutures • Sterile clamps in good working order These four essential commodities were chosen to represent all the items that would be needed to perform male circumcision safely.
DISAGGREGATION	Health-care facility type Health-care facility location
Numerator	Number of facilities experiencing a stock-out of one or more tracer commodities over the last 28 days
Denominator	Number of facilities providing male circumcision services that respond
INTERPRETATION	Evidence of stock-outs indicates problems with supply chain management. Operations research may supply further detail on what causes these stock-outs and possible solutions.  Disaggregation by type of facility may indicate a need for resource redistribution to particular types of facilities.

Key objective 2, co	mponent objective 3.2 (C3.2). Competent provider supply
INDICATOR	Number and percentage of persons who performed at least one male circumcision in the past 12 months and who received certified male-circumcision-specific training or who were deemed competent/certified to provide male circumcision surgery to a national standard
RATIONALE	To assess progress towards an adequate supply of clinically competent providers to meet demand and to assess the safety of services currently provided. Assessing competence at an institution is a means of verifying that all providers are competent to perform assigned duties and responsibilities.
FREQUENCY OF REPORTING	Annually
MEASUREMENT TOOL	Health facility survey or health records / reporting forms
	A checklist based on the standards of care has been developed, which the observer uses as the provider demonstrates competence in each skill. Adaptation of the <i>Male circumcision services quality assessment toolkit</i> may be used to assess competence.
	http://www.malecircumcision.org/programs/documents/WHO_QA_ Toolkit_WEB.pdf
METHOD OF MEASUREMENT	These assessments can be carried out within the facility by an approved trainer or evaluator. Competence can be assessed in many ways. One of the commonest involves a written test. Tests can be developed and administered by the facility manager or educator. This method can be effective in measuring knowledge but does not gauge the provider's skills. Direct observation of clinical practice is therefore used to determine whether the provider is able to apply the knowledge and skills. Some countries may choose to certify staff who complete an established training course with observed practice requirements. A qualified physician or non-physician provider can be trained to make these assessments.
Numerator	Number of persons providing male circumcision surgical services in the reporting period, who have received certified male-circumcision-specific training or who were deemed competent/certified to provide male circumcision surgery to a national standard
Denominator	Number of persons providing male circumcision surgical services
DISAGGREGATION	Cadre of provider (nurses, midwives and other probable cadres of providers must be included in this disaggregation because of their likelihood of providing circumcision)  Health facility type and location
INTERPRETATION	Evidence of service provision without training or assessment of competence may result in services that are not safe or effective, e.g. too little foreskin removed.  Disaggregation allows a facility-specific or cadre-specific indication of the above interpretations.

Key objective 2, component objective 3.3 (C3.3). Unmet demand	
INDICATOR	The difference between the number of individuals in the targeted population registered for surgery (K1) and the projected capacity of all providers to perform male circumcisions in the intended population over the next 12 months
RATIONALE	To assess progress towards reduction of unmet demand
FREQUENCY OF REPORTING	Annually
MEASUREMENT TOOL	A derived (calculated) indicator
METHOD OF MEASUREMENT	The difference between the results of indicator K1 (presentation for male circumcision services), annualized, and a health facility survey asking:
	How many male circumcisions, performed according to national standards, could the facility provide over the next 12 months, assuming unlimited demand and based on expected resources for the 12-month period?
	For K1 either the number of males registered over a 12-month period or annualization from a shorter period, e.g. the most recent four months, may be used.
DISAGGREGATION	Health-care facility
Numerator	Not applicable
Denominator	Not applicable
INTERPRETATION	The difference between demand and capacity is an indication of whether demand may or may not be met. These results can be used for advocacy for increased supply and planning purposes.  Care should be taken to ensure that the period used is representative of the entire year (if annualized reporting is chosen).

Key objective 2, component objective 4.1 (C4.1). Male circumcision service safety	
INDICATOR	Number and percentage of circumcised males experiencing at least one moderate or severe adverse event during or following surgery during the reporting period (based on date of surgery, not date of adverse event)
RATIONALE	To assess the safety of male circumcision surgical services
FREQUENCY OF REPORTING	Annually  Data should be collected continuously at the facility and aggregated periodically, preferably monthly or quarterly
MEASUREMENT TOOL	Health facility records; a specific register of adverse events might be maintained for ease of recording.
	See Male circumcision services quality assessment toolkit and Manual for safe male circumcision under local anaesthesia for general guidance. For specific data recording, Tool 23 (Adverse event descriptions and management) in the former and Appendix 9.3 (Sample male circumcision adverse event form) in the latter should be consulted. http://www.malecircumcision.org/programs/documents/WHO_MC_Manual_Local_Anaesthesia_v2-5C_Jan08.pdf
	Clinical staff must routinely assess and record the presence of adverse events.
METHOD OF MEASUREMENT	Adverse events are defined as either moderate or severe, with definitions found in Sample 23 and Appendix 9.3, above.  Adverse events are defined as follows.  Intraoperative: Pain Excessive bleeding Anaesthesia-related Excessive skin removal Damage to the penis Sharps injury to personnel (not in Tool 23 or Appendix 9.3)  Postoperative: Abnormal pain Excessive swelling Infection Haematoma Bleeding Difficulty urinating Wound disruption Delay in healing Problem with appearance (including scar or disfigurement) Injury to the glans Excessive skin removal
DISAGGREGATION	Adverse event type Timing of adverse event: • intraoperative • postoperative (disaggregated by day 0, 1, 2, 3, 4, 5, 6, 7 or >7), based on the day the adverse event began Age Health-care facility
Numerator	Number of males circumcised who experience at least one moderate or severe adverse event.
Denominator	All males circumcised

Surgery of any type occasionally leads to adverse events, determined in part by the skill and quality of the surgery, the effectiveness of postoperative instructions, the willingness or ability of the patient to follow postoperative instructions, the suitability of the surgical candidate (e.g. for male circumcision), the level of the CD4 count if HIV-positive men are circumcised, and the judgement of the health-care personnel assessing adverse events. The frequency, or frequency of severity, of adverse events above an acceptable level is an indication of the need for investigation into causes and possible interventions. Operational research may provide further information about specific causes and possible solutions.

Disaggregation by type of adverse event will help to determine the need for additional training to prevent or manage certain complications.

Disaggregation by timing of adverse event may inform the planning of postoperative care considerations, particularly as regards mobile services that may not be available many days following surgery.

Disaggregation by age may inform the need for age-specific investigation into causes.

Disaggregation by type of facility may indicate institutional typespecific needs.

Clients receiving surgery at one location but follow-up at another pose a challenge to data linkage. No single successful approach to linking these data has been devised. Furthermore, determining adverse events among men who do not return for follow-up presents a challenge, for which various approaches, e.g. short message service (SMS) or mail-in forms, are being tried in order to obtain post-surgery data from all men.

INTERPRETATION

7 8 9 0

0 1 2

6 7 8

.

890

.

9012

5 6 7 8

890

3 4 5 6

0 | 2

6 7 8

2 3 1

7 8 9 0

4 5 6

0 | 2

6 7 8

2 3 4

890

3 4 5 6

0 | 2

6 7 8

2 3 4

8 9 C

Key objective 2 compon	ent objective 4.2 (C4.2). HIV testing		
Rey objective 2, compon	Key objective 2, component objective 4.2 (C4.2). HIV testing		
INDICATOR	The number and percentage of persons seeking male circumcision services tested for HIV on site		
RATIONALE	To assess progress towards maximization of testing of unknown or unverifiable HIV status clients		
FREQUENCY OF REPORTING	Annually		
MEASUREMENT TOOL	Clinical recording forms and clinic registers		
METHOD OF MEASUREMENT	Clinic staff should routinely assess and record whether men seeking male circumcision services have been tested or accept testing for HIV on site		
Numerator	The sum of P2 disaggregation of:  • tested by facility, positive  • tested by facility, negative  • tested by facility, indeterminate result  Also, disaggregate those tested elsewhere with verification		
Denominator	The sum of P2 disaggregation of:  • tested by facility, positive  • tested by facility, negative  • refused/unknown  Refused/unknown includes clients who refuse HIV testing, missing on-site test results, etc.		
DISAGGREGATION	Health facility type and location		
INTERPRETATION	Evidence of low HIV testing acceptance indicates a lack of quality of the HIV prevention aspect of male circumcision services or, alternatively, high levels of knowledge of HIV test results done elsewhere (which should be recent testing in the case of HIV-negative men).		

Key objective 2, compon	ent objective 4.3 (C4.3). Counselling/condoms
INDICATOR	Percentage of males circumcised who received at least one age- appropriate risk-reduction/abstinence-during-wound-healing counselling session, according to national standards, and who received condoms, during the reporting period
RATIONALE	To assess progress towards maximization of safer sex behaviours and protection from HIV transmission in the postoperative period
FREQUENCY OF REPORTING	Annually
MEASUREMENT TOOL	Clinic recording forms including observation checklists
METHOD OF MEASUREMENT	Appropriateness and adequacy of counselling are based on those in the <i>Male circumcision services quality assessment toolkit</i> and are in accordance with national standards
Numerator	Number of males circumcised who receive age-appropriate counselling and condoms
Denominator	Results of P2 (number of male circumcisions performed)
DISAGGREGATION	Health facility (see interpretation)
INTERPRETATION	Evidence of circumcision without age-appropriate counselling to a standard, and provision of condoms, indicates a lack of quality of the HIV prevention aspect of male circumcision services.  In this indicator, all males are included rather than men. Age-appropriate counselling is applicable to all clients, including parents of neonates. Programmes may consider the counselling of parents of neonates being circumcised inappropriate or impossible. If so, it is reasonable to limit this indicator to men.  The provision of condoms is included because counselling includes the subject of abstinence from sexual activity until certified wound healing / six weeks post-surgery. If clients begin sexual activity before this period against the advice given in counselling, having condoms facilitates having safer sex.

Key objective 2, compon	ent objective 4.4 (C4.4). Postoperative follow-up
INDICATOR	Percentage of males circumcised who received at least one postoperative follow-up visit (routine or emergency) during the reporting period
RATIONALE	To assess progress towards optimization of safe male circumcision services and safer sex behaviours
FREQUENCY OF REPORTING	Annually Data should be collected continuously at the facility level and should be aggregated periodically, preferably monthly or quarterly, for use at the local level
MEASUREMENT TOOL	Clinical records / reporting form
METHOD OF MEASUREMENT	Clinical records, registry  Male circumcision services quality assessment toolkit and in accordance with national standards
Numerator	Number of males circumcised who received one or more postoperative follow-up visits
Denominator	Results of P2 (number of male circumcisions performed)
DISAGGREGATION	Location and type of health-care facility
INTERPRETATION	Accurate assessment of the safety of male circumcision programmes (indicator C4.1) requires assessment of the client for adverse events.  Optimization of safer sex behaviours following male circumcision and achieving the degree of the protective effect of male circumcision against HIV infection found in randomized trials probably requires repeated counselling sessions, including as part of each postoperative visit.  Clients receiving surgery at one location but follow-up at another pose a challenge to data linkage and no single successful approach to linking the data has been devised.

Key objective 3.1(K3.1).	lumber of sex partners
INDICATOR	The change in the percentage of men who had more than one sexual partner in the past 12 months
RATIONALE	To assess progress towards preventing exposure to HIV with non-regular partners
FREQUENCY OF REPORTING	Biennially (and in DHS when these are done, typically every 3–5 years)
MEASUREMENT TOOL	Special survey
METHOD OF MEASUREMENT	Longitudinal cohort among men surveyed at the time of circumcision and then again 12 months following circumcision, or cross-sectional surveys  Respondents are asked if they have ever had sexual intercourse. If they have, they are asked:  In the last 12 months, how many different people have you had sexual intercourse with?
Numerator	Number of respondents who reported having more than one sex partner in the last 6 (or 12) months
Denominator	Number of men responding
DISAGGREGATION	Type and location of health-care facility Age
INTERPRETATION	The percentage of men with multiple sex partners before male circumcision is compared to the percentage following circumcision. An increase in the percentage following circumcision indicates an increase in risky behaviour.  This indicator could be calculated in an additional way, by calculating the mean numbers of different sex partners before and after male circumcision.  If DHS gather information using this question, and considering that interviewing techniques/situations may differ, the answers of respondents can be compared with those from the population-based survey of the DHS. This can give an indication of the sexual habits of men undergoing circumcision compared to the general population or men who remain uncircumcised (if the DHS gathers data on circumcision status).  Disaggregating by health-care facility may give an indication of the effectiveness of counselling in differing types of institutions.  Disaggregation by age may give an indication of subgroups who need additional/different messages.

Key objective 3.2 (K3.2).	Condom use
INDICATOR	The change in the percentage of men who had more than one partner in the past 12 months reporting the use of a condom during their last sexual intercourse
RATIONALE	To assess progress towards preventing exposure to HIV through unprotected sex with non-regular partners
FREQUENCY OF REPORTING	Biennially (and in DHS when these are done - typically every 3-5 years)
MEASUREMENT TOOL	Special survey
METHOD OF MEASUREMENT	Longitudinal cohort, with men surveyed at the time of circumcision and then 12 months following circumcision or cross-sectional surveys.  Respondents are asked if they have ever had sexual intercourse. If they have, they are asked:  In the last 6 (or 12) months, how many different people have you had sexual intercourse with?  If with more than one person, respondents are asked:  Did you or your partner use a condom the last time you had sexual intercourse?
Numerator	Number of respondents who reported having more than one sexual partner in the last 6 (or 12) months and who also reported that a condom was used at last sexual intercourse
Denominator	Number of respondents who reported having had more than one sex partner in the past 6 (or 12) months
DISAGGREGATION	Type and location of health-care facility
INTERPRETATION	The use of condoms before circumcision will be compared with their use after circumcision. A decrease in the use of condoms after circumcision indicates an increase in risky behaviour.  If DHS gather information using this question, and considering that interviewing techniques/situations may differ, the answers of respondents can be compared with those from the population-based survey of the DHS. This can give an indication of the sexual habits of men undergoing circumcision compared to the general population or men who remain uncircumcised (if the DHS gathers data on circumcision status).  Disaggregating by health-care facility and age may give an indication of the effectiveness of counselling in different types of facilities and age groups.

Key objective 3.2 (K3.2).	Sexual activity before wound-healing
INDICATOR	Number and percentage of men circumcised reporting sexual activity before wound-healing (6 weeks or certified wound-healing)
RATIONALE	To assess progress towards preventing exposure to HIV
FREQUENCY OF REPORTING	Biennially
MEASUREMENT TOOL	Special survey
METHOD OF MEASUREMENT	Men are asked at least 6 weeks postoperatively:  • Did you masturbate or have sex between the time of circumcision and either 6 weeks following surgery or when the doctor told you that you could have sexual activity?
Numerator	Number of men reporting sexual activity before 6 weeks post-circumcision
Denominator	Men responding
DISAGGREGATION	Age
INTERPRETATION	Early resumption of sexual activity may be evidence of ineffective communication about the need to abstain from sexual activity for at least 6 weeks after circumcision.  Early resumption of sexual activity may be evidence of ineffective counselling.  Sexual activity is defined as either masturbation or sexual intercourse (vaginal or insertive oral/anal). Masturbation affects only wound-healing, whereas sexual intercourse affects both wound-healing and possible HIV transmission. It may be that men will be reluctant to answer 'Yes' to masturbation (the question does not distinguish the two for this reason) but, if so, and if it is desired to address only HIV transmission, asking about masturbation may be deleted.

# Annex 1. Rationale and core terms for monitoring and evaluation

## Rationale for M&E

**Monitoring** is the routine tracking and reporting of priority information about a programme and its intended inputs, outputs and outcomes.<sup>12</sup> **Evaluation** is the rigorous, scientifically based collection of information about programme activities, characteristics and outcomes that determines the merit or worth of a specific programme. Evaluation studies are used to improve programmes and inform decisions about future resource allocations.<sup>13</sup>

In practice, a broad spectrum of sources of information might be considered to contribute to M&E. At one end of the spectrum are 'gut feelings', hunches and informal information. This information is often useful but is subjective, open to manipulation and not always reliable. At the other end of the spectrum are detailed audits, and full evaluation and impact assessment studies. These provide very reliable information but can be costly and may provide information that is too late to be useful. This guide aims to support effective M&E that balances resources and information needs.

Tracking the progress and effectiveness of efforts to increase rates of male circumcision and evaluating the results will lead to better programming and better use of resources. M&E should be approached as an evidence-based tool for shaping decisions through feedback. While it is not intended to be a way of policing activity, it increases accountability and provides useful information for advocacy work.

One of the most important reasons for carrying out M&E activities is that they create a learning environment, which increases programme performance and thus:

- inform decision-making by providing accurate information when goals and objectives, priorities and the allocation of resources are being reviewed;
- **improve activities** by providing accurate information about their implementation, impact and cost-effectiveness;
- **support good programme management practices** by providing accurate information to management and about management;
- increase stakeholders' ownership and enthusiasm by showing that programmes are working and achieving their objectives;
- produce evidence-based knowledge of what works and, importantly, what does not work;
- increase critical thinking by making programmes carefully consider how well they are working;
- **increase accountability** to a range of stakeholders, by showing that programmes seriously determine if they are working effectively and efficiently.

<sup>12</sup> UNAIDS. *National AIDS Programmes: a guide to monitoring and evaluation.* Geneva: 2000 (UNAIDS/00.17E, http://data.unaids.org/Publications/IRC-pub05/jc427-mon\_ev-full\_en.pdf).

<sup>13</sup> UNAIDS. A framework for monitoring and evaluating HIV prevention programmes for most-at-risk populations. Geneva: 2007 (UNAIDS/07.15E, http://data.unaids.org/pub/Manual/2007/20070420\_me\_of\_prevention\_in\_most\_at\_risk\_populations\_en.pdf).

### Core terms

Specific definitions of terms used in the context of M&E vary between organizations and topics. Definitions used in this guide attempt to find a common understanding with all readers and are based on:

- Global advances in HIV/AIDS monitoring and evaluation (Rugg, Peersman, Carael, 2004);
- Glossary of key terms in evaluation and results-based management (OECD/DAC, 2002);
- Handbook on monitoring and evaluating for results (UNDP, 2002).

Some core concepts are described here.

#### **Monitoring**

Monitoring aims to measure **what** is happening and what progress has been made with respect to a baseline established at the beginning of a programme.

Monitoring is an ongoing function. It is used to assess the progress of a programme and should be undertaken by those running the programme on a continuous timeline with regular feedback. Means of monitoring and verifying progress should be built into the programme design. To be effective, a set of indicators and a baseline must be fully understood and agreed to by staff, beneficiaries and the different types of stakeholders. Monitoring processes are becoming increasingly participatory in nature.

#### **Evaluation**

Evaluation aims to explain **why** things are happening and to identify and share important lessons. Evaluation refers to judgements about the **relevance**, **effectiveness**, **efficiency**, **impact** and **sustainability** of a programme.

Evaluation is not an ongoing function: it is normally carried out after the end of a programme or at key midpoints. Although the evaluation procedure is not a daily, ongoing activity, it is something that programmes must always be determining. Consequently, repeated evaluations are often used.

Formative evaluation, i.e. activities undertaken to obtain information that will guide programme improvement, may occur at any time. Such evaluation is often not planned but occurs because of observations indicating that programmes can be improved in particular ways. It seeks to identify these ways before they become part of the programme or a formal operational research study to judge their value.

Evaluative processes are becoming more:

- involved at the programme design stage;
- focused on communicating with and to stakeholders;
- concerned with qualitative and quantitative approaches;
- concerned about the intended audience for the results;
- related to outcomes and impact and less to inputs;
- frequent in programmes;
- participatory in approach;
- independent from programme owners but often donor-driven.

#### **Indicators**

An indicator is a measurable bit of data that provides a simple and reliable means for measuring changes caused by an intervention or for helping the performance of an activity. An indicator needs to be measured over time in order to find out something about the actions taken.

An indicator is not a target. A target defines what is to be achieved and an indicator is what needs to be measured in order to find out whether the target has been (or is being) achieved.

Indicators are indispensable tools for programme management and lesson-learning. If properly chosen, they inform programme management by defining what data need to be collected in order to communicate progress in achieving goals. Achieving results in turn motivates staff, clients and public or private funding entities by providing evidence of success and positive feedback. Indicators support the communication of results (because they are used to measure progress) and improve the motivation of staff (because staff can see whether the programmes they are delivering are achieving results). Indicators are most successful when programme beneficiaries or the staff who implement programmes are involved with their identification and monitoring (because these individuals often know what information needs to be collected and feel ownership of the monitoring effort).

#### Characteristics of indicators<sup>14</sup>

Validity
 They should measure what they are supposed to measure.

• **Reliability** (Verifiable or objective): Conclusions based on them should be the same

when measured by different people at different times and in different

circumstances.

**Sensitivity** They should be sensitive to changes in the situation being observed.

• **Specificity** They should clearly and directly relate to specific elements of the action

framework.

• Cost-effectiveness The results should be worth the time and money it costs to apply them.

Timeliness The frequency of measurement should be long enough to allow the

indicator to respond.

The following categories of indicators are usually found in public health interventions.

- Input indicators: Indicators that provide a measure of the resources that are the basic materials of a programme (e.g. financial resources, policies, personnel, facilities, space, equipment, supplies). Included in this group are the following.
  - » Planning indicators, which indicate the presence of programme logic, planning documentation and reporting requirements.
  - » Relevance indicators, which indicate the degree to which the programme is suited to local and national development priorities and the extent to which the activities reflect local contexts.
  - » Action indicators, which indicate the amount of resources (human, material, financial, etc.) used in relation to the results achieved (e.g. how economically or optimally the inputs were used to produce outputs). They are used to answer the question "Did the intervention provide value for money?"

<sup>14</sup> UNICEF. Guide to monitoring and evaluation of the national response for children orphaned and made vulnerable by HIV/AIDS. New York: 2007 (http://data.unaids.org/Topics/M-E/ovc\_me\_guide\_en.pdf).

- **Output indicators:** Indicators that provide a measure of programme activities (e.g. number of people trained, number of debates aired on the radio over the last quarter, level of satisfaction with clinic services). Included in this group are the following.
  - » *Involvement indicators*, which indicate the degree to which those closest to the issue have been involved with programme or message design.
  - » Efficiency indicators, which enable a comparison of the cost of outputs and results achieved with similar outputs and results achieved by other organizations or programmes.

**Outcome indicators:** Indicators that provide a measure of whether the outputs have reached the intended audience and have had an effect (e.g. number of people who have been trained who then implement the protocol, level of attendance at a local clinic). They represent actions that lead to impact.

**Impact indicators:** Indicators that provide a measure of whether the outcomes actually affected the goal (e.g. the incidence of HIV). Impact indicators usually fall within the realm of evaluation, although sometimes are collected as part of other programmes, e.g. a surveillance programme for HIV would capture incidence. Impact indicators might include sustainability indicators, measuring the continuation of impact after the programme has finished.

**Proxy indicators:** Indicators that are used to represent something that is difficult to measure directly at the time of measurement.

# **Annex 2. References and further reading**

- Bakewell O, Adams J, Pratt B. *Sharpening the development process: a practical guide to monitoring and evaluation*. Oxford: INTRAC; 2003 (Praxis Guide No. 1, ISBN 1-897748-78-7).
- Center for Development Information and Evaluation. *Selecting performance indicators*. USAID, 1996 (Publication #6 [PN-ABY-214], http://www.usaid.gov/pubs/usaid\_eval/pdf\_docs/pnaby214.pdf).
- Church M, Bitel M, Armstrong K, et al. *Participation, relationships and dynamic change: new thinking on evaluating the work of international networks.* London: Development Planning Unit; 2002 (http://networkedlearning.ncsl.org.uk/knowledge-base/research-papers/participation-relationships-and-dynamic-change-madeline-church-2002.pdf).
- Cracknell BE. Evaluating development aid: issues, problems and solutions. New Delhi: Sage; 2000 (ISBN 0-7619-9404-1).
- CSSC. Who measures change?: an introduction to participatory monitoring and evaluation of communication for social change. Communications of Social Change Consortium; 2005 (http://www.communicationforsocialchange.org/publications-resources.php?id=283).
- Davies R. Evaluating the effectiveness of DFID's influence with multilaterals. Part A: a review of NGO approaches to the evaluation of advocacy work. 2001 (http://www.mande.co.uk/docs/EEDIMreport.doc).
- Division for Oversight Services. *The Programme manager's planning, monitoring and evaluation toolkit.* New York: UNFPA; 2004 (http://www.unfpa.org/monitoring/toolkit.htm [particularly *Glossary of planning, monitoring and evaluation terms*] http://www.unfpa.org/monitoring/toolkit/tool1\_glossary.pdf]).
- Earle L, ed. *Creativity and constraint: grassroots monitoring and evaluation and the international aid arena.* Oxford: INTRAC; 2004 (ISBN 1-897748-81-7).
- FOCUS on Young Adults. *A guide to monitoring and evaluating adolescent reproductive health programs.* Washington DC: 2000 (Tool Series 5, http://www.pathfind.org/site/PageServer?pagename=Pubs\_Focus).
- Gosling L, Edwards M. *Toolkits: a practical guide to assessment, monitoring, review and evaluation,* 2<sup>nd</sup> ed. London: Save the Children UK; 2003 (ISBN 1-84187-064-1).
- Grubbels P, Koss C. From the roots up: strengthening organizational capacity through guided self-assessment. Oklahoma City: World Neighbors; 2000 (World Neighbors Field Guide: Capacity Building).
- IADB/IDRC. Organizational assessment: a framework for improving performance. Washington/Ottawa: 2002 (ISBN 0-88936-998-4, http://www.idrc.ca/en/ev-23987-201-1-DO\_TOPIC.html).
- IFRC. *Handbook for monitoring and evaluation*. Geneva: 2002 (http://www.ifrc.org/cgi/pdf\_evaluation.pl?handbook.pdf and addendum http://www.ifrc.org/cgi/pdf\_evaluation.pl?impact-handbook.pdf).
- Kusek JZ, Rist RC. *Ten steps to a results-based monitoring and evaluation system: a handbook for development practitioners.* Washington DC: World Bank; 2004 (ISBN 0-8213-5823-5, http://www-wds.worldbank.org/servlet/WDS\_IBank\_Servlet?pcont=details&eid=000160016\_20040827154900).
- Lusthaus C, Adrien M-H, Anderson G, Carden F. *Enhancing organizational performance: a toolbox for self-assessment.* Ottawa: IDRC; 1999 (ISBN 0-88936-870-8, http://www.idrc.ca/en/ev-9370-201-1-DO\_TOPIC.html).
- Marsden D, Oakley P, Pratt B. *Measuring the process: guidelines for evaluating social development.* Oxford: INTRAC; 1994 (ISBN 1-897748-06-X).
- Oakley P, Clayton A. *The monitoring and evaluation of empowerment: a resource document.* Oxford: INTRAC; 2000 (http://www.intrac.org/resources\_database.php?id=107).
- OECD/DAC. Glossary of key terms in evaluation and results based management. Paris: 2002 (http://www.oecd.org/dataoecd/29/21/2754804.pdf).
- Performance and Effectiveness Department. *Tools for development: a handbook for those engaged in development activity.* London: DFID; 2003 (http://www.dfid.gov.uk/Documents/publications/toolsfordevelopment.pdf).

- Population Council, Inc. *How to conduct a coverage exercise: a rapid assessment tool for programs and services.* New York: 2006 (http://www.popcouncil.org/pdfs/CoverageExerciseGuide.pdf).
- Results-Based Management Division. *RBM handbook on developing results chains: the basics of RBM as applied to 100 project examples.* CIDA; 2000 (http://www.acdi-cida.gc.ca/CIDAWEB/acdicida.nsf/En/EMA-218132532-PN9).
- Roche C. *Impact assessment for development agencies: learning to value change.* Oxford: Oxfam GB; 1999 (ISBN 0-85598-418-X).
- Rugg D, Peersman G, Carael M, eds. *Global advances in HIV/AIDS monitoring and evaluation*. San Francisco: Jossey-Bass and the American Evaluation Association (*New Directions for Evaluation* 2004;103:ISSN 1097-6736).
- Sayce K, Norrish P. *Perceptions and practice: an anthology of impact assessment experiences.*Wageningen: Technical Centre for Agricultural and Rural Cooperation (CTA); 2006 (http://www.anancy.net/index.php?specific=rss&file\_id=12204).
- Spreckley F. Social audit toolkit, 3rd ed. Clifford: Local Livelihoods; 2000 (ISBN 0-9538674-0-4).
- Synergy Project. APDIME toolkit, v2.0 [CD-ROM] (http://www.synergyaids.com/apdime/index.htm).
- Tennyson R. *The partnering toolbook.* London: International Business Leaders Forum and Global Alliance for Improved Nutrition; 2003 (ISBN 1899159-08-8, http://www.iblf.org/resources/general.jsp?id=49).
- The President's Emergency Plan for AIDS Relief. Next generation indicators reference guide, version 1.1, 2009.
- UNAIDS. *National AIDS programmes: a guide to monitoring and evaluation*. Geneva: 2000 (http://data.unaids.org/Publications/IRC-pub05/JC427-Mon\_Ev-Full\_en.pdf).
- UNAIDS. *Monitoring and evaluation: resource materials* [CD-ROM]. 2003 (particularly *Guidelines on construction of core indicators*) (http://data.unaids.org/pub/Manual/2007/20070411\_ungass\_core\_indicators\_manual\_en.pdf).
- UNAIDS. *A framework for monitoring and evaluating HIV prevention programmes for most-at-risk populations*. Geneva: 2007 (UNAIDS/07.15E / JC1338E, ISBN 978 92 9173 577 8, http://data.unaids.org/pub/Manual/2007/20070420\_me\_of\_prevention\_in\_most\_at\_risk\_populations\_en.pdf).
- UNDP. Handbook on monitoring and evaluating for results. Geneva: 2002 (http://www.undp.org/eo/methodologies.htm).
- UNICEF. Guide to monitoring and evaluation of the national response for children orphaned and made vulnerable by HIV/AIDS. New York: 2005 (ISBN 92-806-3859-9, http://data.unaids.org/Topics/M-E/ovc\_me\_guide\_en.pdf).
- WHO. *Toolkit on monitoring health systems strengthening: service delivery*. Geneva: 2008 (http://www.who.int/healthinfo/statistics/toolkit\_hss/EN\_PDF\_Toolkit\_HSS\_ServiceDelivery.pdf).
- Wood A, Apthorpe R, Borton J, eds. *Evaluating international humanitarian action: reflections from practitioners.* London: Zed Books; 2001 (ISBN 1-85649-976-6).

#### Advocacy, monitoring and evaluation

- Chapman J, Fisher T. *The thoughtful activist: a toolkit for enhancing NGO campaigning and advocacy.* London: New Economics Foundation; 1999 (http://www.getvisable.org/files/resourcesmodule/@random41940ceb78dbb/toolkit\_campaign.pdf).
- Chapman J. Wameyo A. *Monitoring and evaluating advocacy; a scoping study.* London: ActionAid; 2000 (http://www.actionaid.org/assets/pdf%5CScoping%20advocacy%20paper%202001.pdf).
- Coates B, David R. Learning for change: the art of assessing the impact of advocacy work. Development in practice 2002;12:(3/4) (http://publications.oxfam.org.uk/oxfam/display.asp?TAG=&CID=&K=002J0507).
- Cohen D, de la Vega R, Watson G. *Advocacy for social justice: a global action and reflection guide.* Oxfam/Advocacy Institute, Kumarian Press; 2001 (ISBN 1-56549-131-9).
- Save the Children. Closing the circle: from measuring policy change to assessing policies in practice. An overview of advocacy inputs. 2003 (http://www.mande.co.uk/docs/ClosingTheCircle.pdf).





A guide to indicators for male circumcision programmes in the formal health care system



