



U.S. Centers for Disease Control and Prevention  
National Center for Health Statistics  
International Statistics Program



# Evaluating & Improving Civil Registration and Vital Statistics Systems

These materials have been developed by the National Center for Health Statistics, International Statistics Program, Hyattsville, Md., as part of the CDC Global Program for Civil Registration and Vital Statistics Improvement.

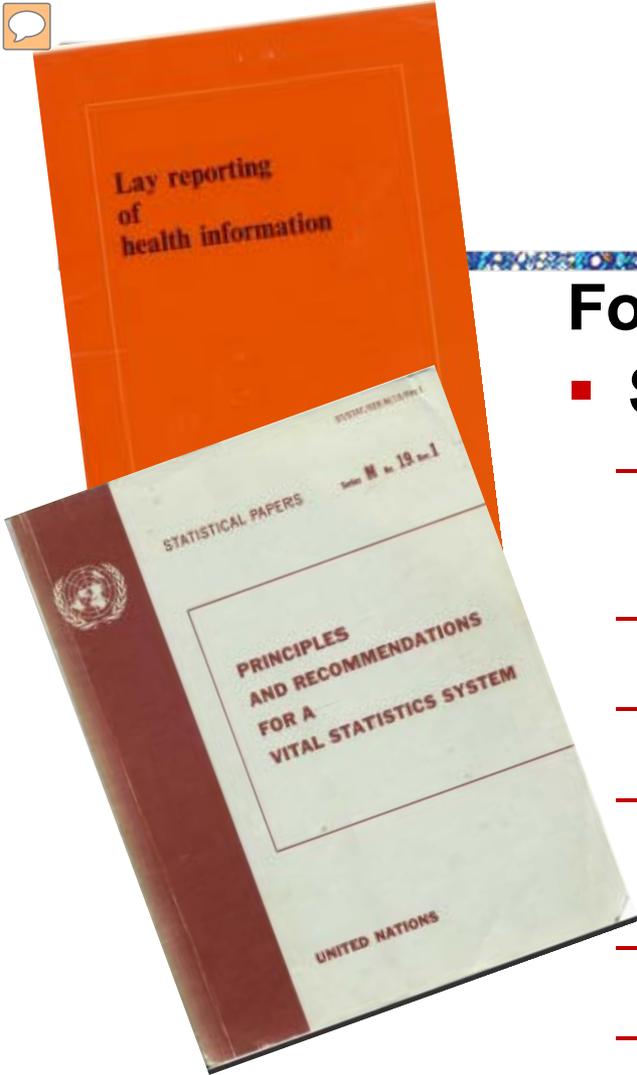


- **Previous international efforts to strengthen CRVS systems**
  
- **Evaluating CRVS systems**
  - Models for evaluating the system
  - Adequacy of government provisions
  - Flexibility
  
- **Improving CRVS systems**

# Previous International Efforts to Strengthen CRVS Systems

## Focused on:

- **Standards to improve comparability**
  - UN Principles & Recommendations for a Vital Statistics System
  - WHO definitions for live birth and fetal death
  - ICD system
  - International Form of Medical Certification of Cause of Death
  - Physician and coder training
  - Verbal autopsy
- **International collection and publication of data**
- **Strengthening national statistical systems**

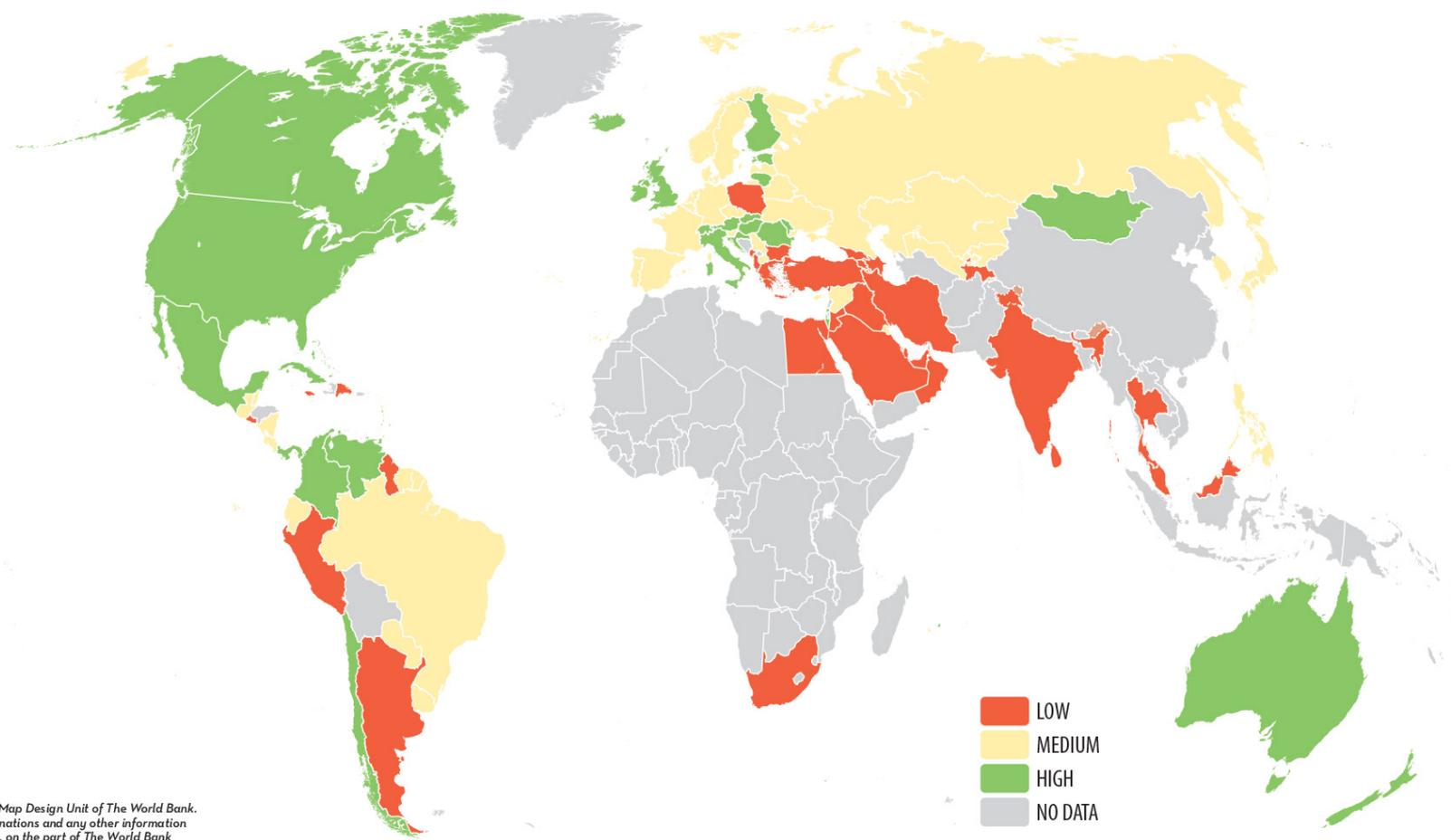




# Previous International Efforts to Strengthen CRVS Systems

- **Setting standards to improve VS comparability** 
- **International collection and publication of data** 
- **Strengthening national statistical systems** 
  - **Not a government priority**
  - **Lack of recognition by development partners as key component of development infrastructure**

# QUALITY OF CAUSE-OF-DEATH STATISTICS, 2012



IBRD 40924 | APRIL 2014  
This map was produced by the Map Design Unit of The World Bank. The boundaries, colors, denominations and any other information shown on this map do not imply, on the part of The World Bank Group, any judgment on the legal status of any territory, or any endorsement or acceptance of such boundaries.

LOW  
MEDIUM  
HIGH  
NO DATA

Source: 2012 World Health Statistics.



# Evaluating CRVS Systems

## The need for periodic evaluation:

- **Civil registers not able to meet information needs of various programs, yet new needs arise**
- **Separation of function requires coordination**
- **Organizational tendency towards status quo**
- **Cost should be appraised to economize methods & procedures, including costs for:**
  - **Collecting raw data**
  - **Processing raw data**
  - **Disseminating statistics to users**



# Evaluating CRVS Systems

- **Purpose:**

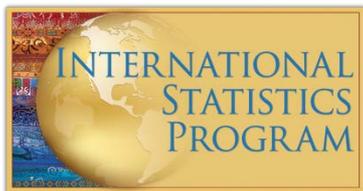
**To provide evidence to guide the development of improvement plans**

- **Designed to:**

- Identify structural weaknesses in system
- Provide a basis for correcting biases in data
- **Plan improvements**



## **Why is a periodic evaluation of a CRVS system necessary?**



# Evaluating CRVS Systems

- **WHO Guidance Tool (Health Metrics Network)**
  - Promotes international standards and practices
  - Does **NOT** prescribe measures
  - Targeted for countries (or regions within countries) where civil registration is established but subject to inadequacies



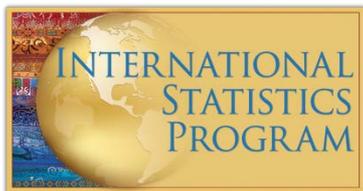


# WHO Guidance Tool

- **Rapid assessment tool**
  - Provide evidence for the need of a detailed review
  - ***Group discussion***
  - Quick evaluation (25 questions)

## Scoring of scenarios for rapid assessment

Scenario	A	B	C	D
Score	3	2	1	0



# WHO Guidance Tool

- Rapid assessment tool

## Scores, ratings and actions required for rapid assessment

Score (%)	Rating	Actions required
<34	Dysfunctional	System requires substantial improvement in all areas
35–64	Weak	Many aspects of the system do not function well, and multiple issues require attention
65–84	Functional but inadequate	System works but some elements function poorly and require attention; specific weaknesses of the system should be identified by completing the comprehensive review
85–100	Satisfactory	Minor adjustments may be required in an otherwise well functioning system

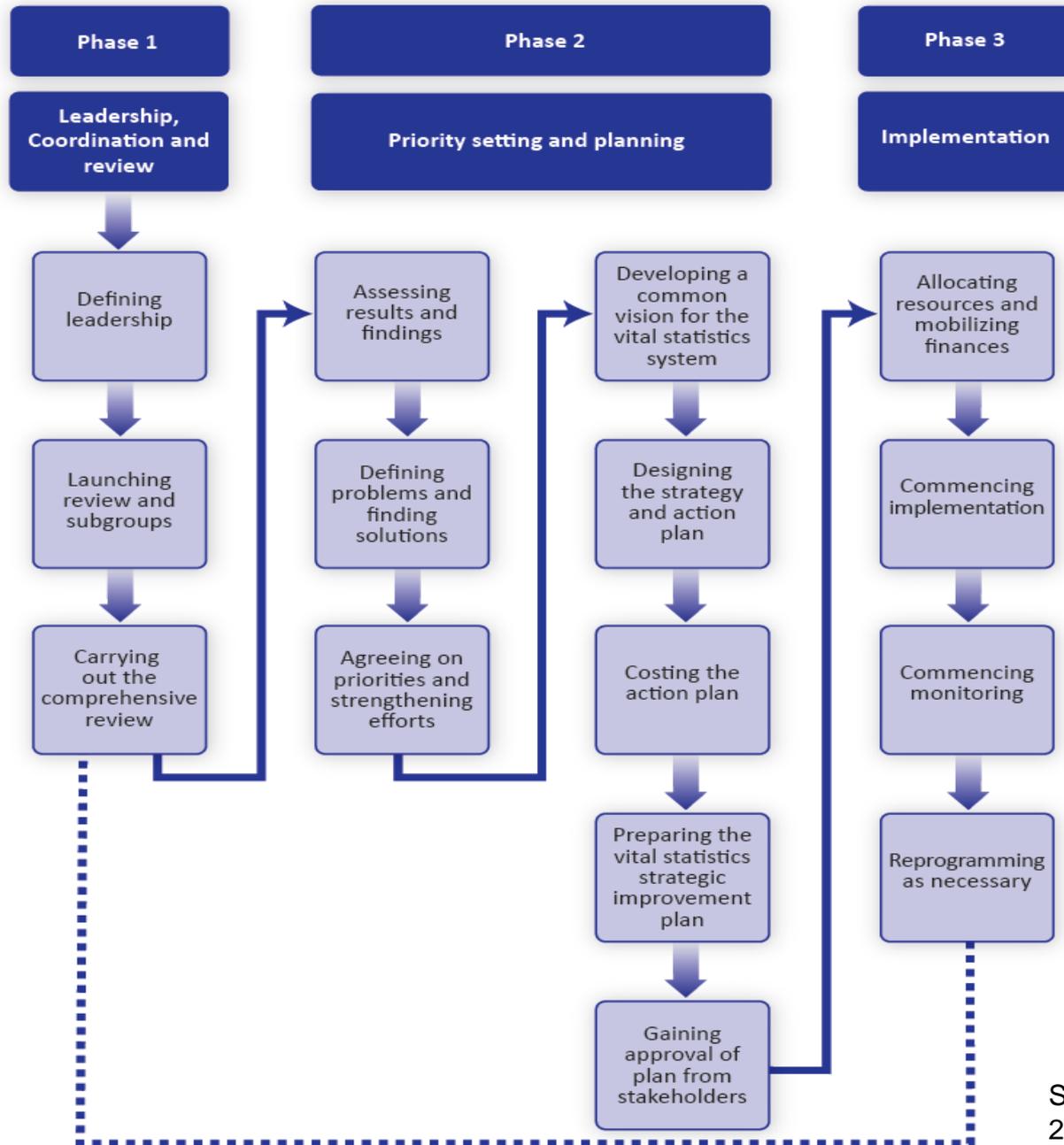


# WHO Guidance Tool

- **Detailed assessment tool**
  - **Main aspects**
    - 1) Legal & regulatory framework**
    - 2) Registration, certification, & coding practices**
    - 3) Compilation, tabulation, & use of resulting data**
  - **Roadmap: outlines main steps**
  - **Assessment framework: template for review**



# Assessment tool from WHO/University of Queensland, 2010

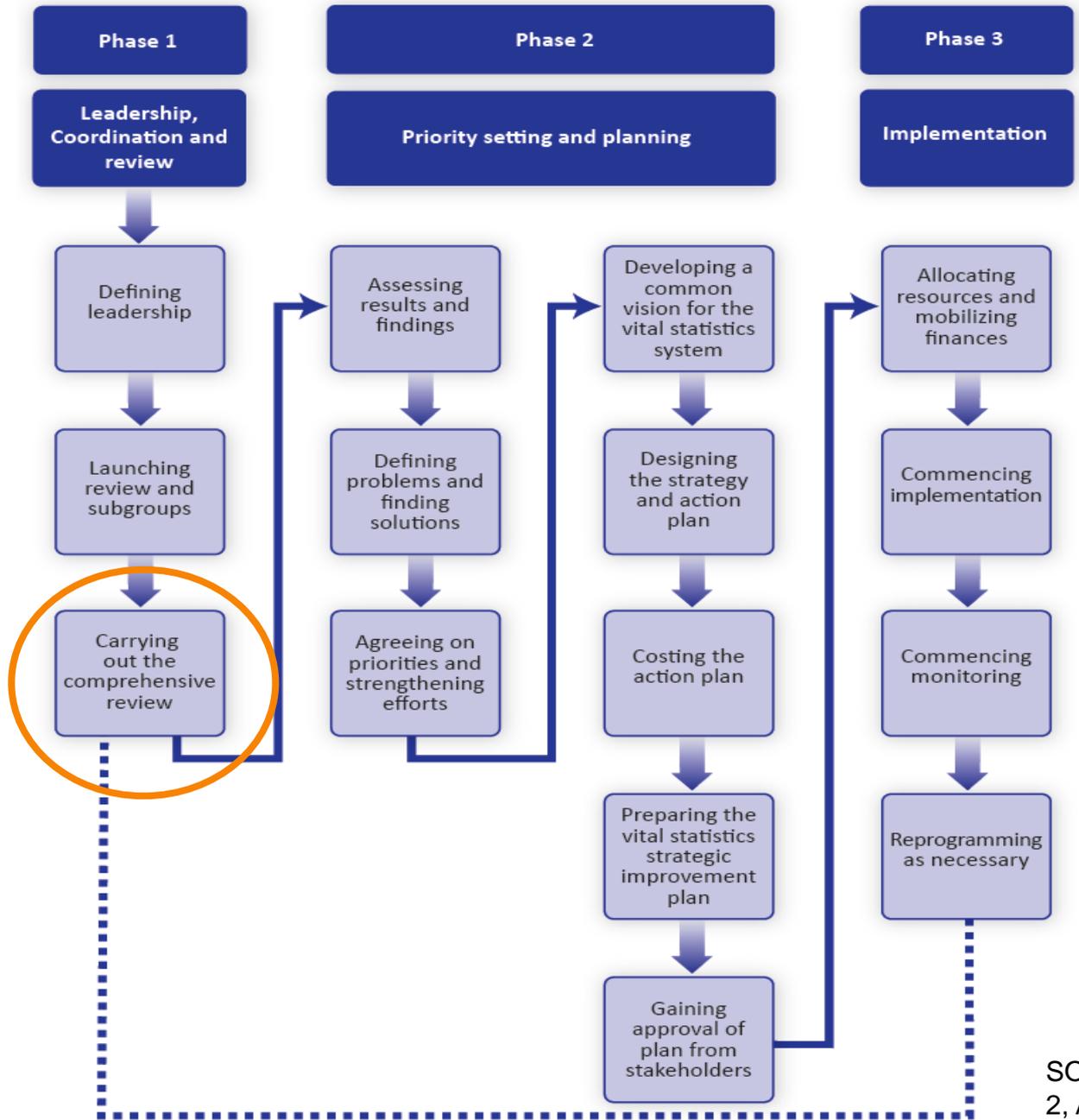


SOURCES: WHO/UQ, 2, Annex A.

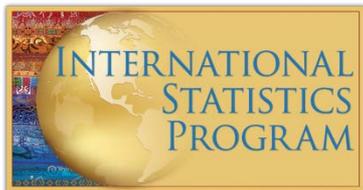


**What would be the functions of a steering committee in carrying out a comprehensive evaluation?**

# Assessment tool from WHO/University of Queensland, 2010



SOURCES: WHO/UQ, 2, Annex A.



# The WHO Assessment Framework: Phase 1 – Comprehensive Review

## Inputs

**A: Legal basis and resources for civil registration**

## Processes

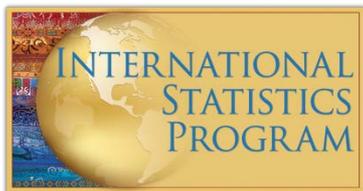
**B: Registration practices, coverage, and completeness**

**C: Death certification and cause of death**

**D: ICD mortality coding practices**

## Outputs

**E: Data access, use, and quality checks**



# Adequacy of Government Provisions

- Legal provisions
- Organization
- Government sponsorship
- Procedures of recruitment & training
- Adequacy of instructions for recording data
- Adequacy of management procedures

Conference of African Ministers  
Responsible for Civil Registration

Home  
Overview  
Documents  
Information  
ECA Website  
African Centre for Statistics

Towards Improved Civil Status Information for Efficient Public Administration and Generation of Statistics for National Development and MDGs Monitoring in Africa

13-14 August 2010, United Nations Conference Centre, Addis Ababa, Ethiopia



# Flexibility of the System



Population Health Metrics

- **Must accommodate necessary changes & modifications**
- **Must remain responsive to various needs & uses**

- **Previous efforts to improve CRVS systems**
- **Status of CRVS quality**
- **Evaluating the CRVS system**
  - Purpose
  - WHO Guidance Tool
    - Rapid assessment tool
    - Detailed assessment
      - 3 phases
      - Phase 1 - Comprehensive Review
  - Adequacy of government provisions
  - Flexibility of the system

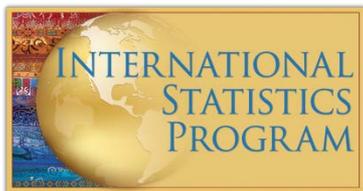


**How might the priorities for improvement be the same or different if in an urban office versus a rural office?**



# Improving CRVS Systems: Common Issues

- **Sharing of costs**
- **Involvement of local authorities**
- **Motivating individuals to register: certificates & incentives**
- **Strategic plan to support long investment (5-10 yrs)**
- **Strong central management for standard approach**
- **Coordination btwn registration function & statistical unit**
- **Use of interim registration points as needed (e.g. schools and health facilities)**



# Improving CRVS Systems: Suggested Activities

- Public education campaigns to promote CRVS
- **Produce small area information as available**
- Training: internal and external
- Pilot/demonstration project
- Model registration areas
- Use of information technology & automation

## \$80 smartphone drives Kenyan mHealth adoption

By: Chris Gullo | Aug 19, 2011

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**What are the advantages of setting up a demonstration area?**

**How would you tailor the scope of activities for a demonstration area?**

**What would be the functions of a steering committee in carrying out a demonstration project?**

**What output and by-products would you expect to have at the end of a demonstration project?**



**What preconditions need to be satisfied before we can formulate an action program to develop or improve a national vital statistics system?**

**How may public education impact a registration system?**

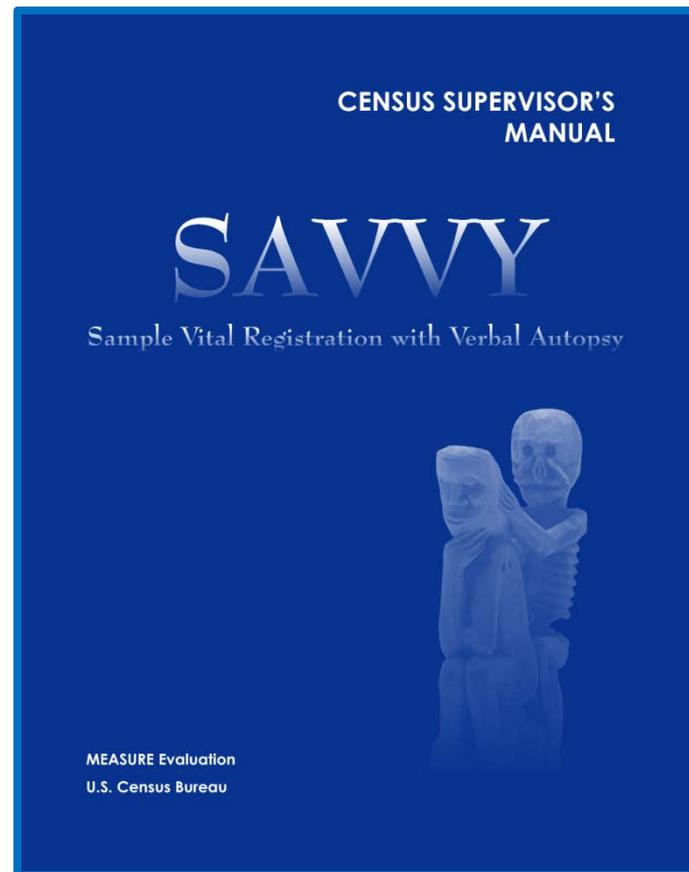


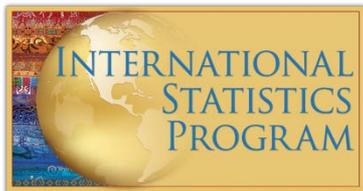
# Improving Severely Lacking Systems & Complementary Sources of VS

- **Population censuses**
- **Household sample surveys**
- **Sample registration:  
e.g. SAVVY**

## **Sample Vital Registration with Verbal Autopsy**

- **Reduced cost**
- **Improvement in timeliness**
- **Higher quality data**





**What future changes are likely to occur in the vital statistics of developing countries?**

**What are some implications of those future changes?**

**What are major obstacles to establishing and improving a vital registration system?**



# Monitoring Progress

- **Establish database of core indicators:**
  - **Relevance**
  - **Measurability**
  - **Understandability**
  - **Responsiveness to change**
  - **Data availability**
- ***Plan from the beginning***
- **Measure every 3-4 years**



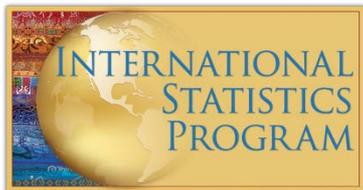
# Other CRVS System Indicators

- **# of staff trained on vital statistics**
- **# of supportive supervision visits conducted**
- **# of district registrar offices that are fully staffed**
- **# of local/national organizations receiving funding from partners**
- **% of trainees that apply skills to current work**
- **Local/national partners demonstrate responsibility and ownership of program based on identified benchmarks**



# CRVS System Improvement Efforts in [COUNTRY]

- Describe any efforts that have been taken to improve the CRVS system in [COUNTRY].



**What are some areas where improvement/action programs are most needed in many countries?**

- **Improving CRVS Systems**
  - **Common issues**
  - **Suggested activities**
  - **Severely lacking systems & complementary VS sources**
  
- **Monitoring progress**
  
- **CRVS System indicators**



# References

- (Mahapatra) Mahapatra P, Shibuya K, Lobez AD, et al. Civil registration systems and vital statistics: successes and missed opportunities. *Who Counts? 2. Lancet.* 370:1653-63. 2007.
- (NCHS) National Center for Health Statistics. *Methods of Civil Registration: Modular Course of Instruction.*
- (PRVSS2) UN. *Principles and Recommendations for a Vital Statistics System, Revision 2.* New York. 2001.
- (WHO/HMN) WHO, University of Queensland. *Rapid assessment of national civil registration and vital statistics systems.* WHO: Geneva. 2010.
- (WHO/UQ) WHO, University of Queensland. *Improving the quality and use of birth, death and cause-of-death information: guidance for a standards-based review of country practices.* WHO: Geneva. May 2010.



# Activity

- **In small groups, design a registration improvement education program for your assigned target population.**
- **Outline the following details for your event:**
  - **Location**
  - **Agenda (activities and main topics/messages)**
  - **Attendees**
  - **Stakeholder involvement**
  - **How event will be advertised**
  - **Follow-up activities that will be conducted**
- **Discuss the similarities and differences between designs for different target populations.**



# Overall Review

- 1. One explanation for the inability to make CRVS improvements at the country level is that governments have not (*funded / prioritized*) civil registration systems.**
- 2. The WHO Guidance Tool promotes (*international / national*) standards and practices.**
- 3. The WHO Guidance Tool (*does / does not*) prescribe measures for improvement.**
- 4. The five key components of the WHO Guidance Tool framework cover inputs, (*processes / measures*), and outputs crucial aspects to the functioning of a system.**
- 5. While working to improve a system, small area information (*should / should not*) be produced as available.**