

# **Outlining strategies for implementing the International Classification of Diseases in Africa**

**Workshop  
Dar es Salaam, 25-27 August 2014**

**Workshop Report**



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## Background

Reliable knowledge on the mortality and causes of death of a population is critical for policy making. Civil registration and vital statistics systems (CRVS), when functioning properly, are the most reliable source of continuous data on fertility, mortality and causes of death. However most countries in Africa do not have well-established CRVS that register births, deaths and causes of death in a complete and reliable manner. South Africa, Egypt, Mauritius and Seychelles are the only countries where almost all the dead are counted with their respective cause-of-death information. All other countries in the region have either no reliable information; have case fatality and cause of death information for deaths that occurred in health facilities but with limited correct use of International Classification of Diseases (ICD); and may have mortality and cause of death data only for selected communities (e.g. from local health and demographic surveillance studies that apply verbal autopsy). This lack of reliable data greatly limits the ability to ascertain mortality and cause of death trends over time, for instance, vaccine preventable diseases, malaria or HIV/AIDS.

Within the framework of the Commission on Information and Accountability for Women's and Children's Health (CoIA), the first recommendation is for countries to take action to strengthen their CRVS systems. Many African countries are now completing an assessment which forms the basis for strategic and investment planning. Each country has also drawn its own national accountability framework based on the recommendations of the CoIA that includes the strengthening of birth and death registration with reliable causes of death. This workshop focused on ways to improve cause of death information, especially in health facilities, which is a significant initial step in strengthening CRVS systems. The workshop was sponsored by GAVI and funds for the implementation of the workplan resulting from the recommendations of the CoIA.

## Focus

Based on these analyses, several countries in Africa have expressed the need to develop a strategy for implementing the ICD, a classification system developed by WHO that provides codes to classify diseases and a wide range of signs and symptoms, abnormal findings and external causes of injury or disease. It is the international standard diagnostic tool for epidemiology, health management and clinical purposes. It contains over 14,000 different codes and is used to classify diseases and other health problems recorded on many types of health and vital records including death certificates and reasons for primary, secondary and tertiary health care encounters.

There are five elements to a strategy for implementing a collection system for ICD. These are:

- (1) have an organization in place that identifies deaths and allows for medical certification of cause of death
- (2) use of the International Medical Certificate for Cause of Death
- (3) medical certification of death
- (4) ICD coding which includes automation
- (5) compilation and analytical use of the cause- of-death information.

In addition, it is critical to plan for establishing, expanding and sustaining national capacity in use of ICD. Each aspect requires attention and development where the collection system is being introduced. For example, where medical certification is to be made available in hospitals, the need to train physicians in completing properly the medical certificate of the cause of death is vital.

In Africa, it is also particularly relevant to pay attention to a strategy for collecting information on deaths which occur outside of facilities. In settings where the majority of deaths still occur at home and where civil registration systems do not function, there is little chance that deaths occurring away from health facilities will be recorded at all, let alone certified as to the cause or causes of death. As a partial solution to this problem, verbal autopsy has become the primary source of information about causes of death in populations lacking vital registration and medical certification. Verbal autopsy is an interview carried out with family members and/or caregivers of the deceased using a structured questionnaire to elicit signs and symptoms and other pertinent information that can later be used to assign a probable underlying cause of death. Verbal autopsy is an essential public health tool for obtaining a reasonable direct estimation of the cause structure of mortality at a community or population level, although it may not be an accurate method for attributing causes of death at the individual level. For countries where verbal autopsy is being considered, careful attention needs to be given to the implementation and collection process.

## Objectives of the workshop

- To guide countries in developing a sustainable nation-wide strategy to implement ICD for causes of death. By the end of the workshop each country should have a sound strategy with set goals and timelines given their resources. Their strategy may also include using verbal autopsy as an approach to obtain causes of death in deaths occurring outside of health-facilities. This will include:
  - Conducting an assessment of the current practices related to cause of death in each country, including use of the international form, standard of medical certification of the cause of death, use of the ICD in coding causes of death, and compilation and analysis of statistics.
  - Exploring with countries the various tools, innovations and technologies available for ICD implementation and improvement, including strategies for training, implementation of automated coding, and compilation and analyses of cause-of-death information.

## Participants

Eight countries participated in the workshop: Ethiopia, Kenya, Uganda, Tanzania, Ghana, Zambia, Mozambique and Malawi. Each country delegation consisted of a mix of people from ministries of health, statistical offices, civil registries and ministries of justice and WHO country offices.

The workshop was attended by 59 participants, including international and local experts, facilitators, representatives from international organizations and research institutions including UNECA, African Development Bank, the Global Fund and CDC. A complete list of participants is included in Annex A.

## Structure and content

During each of the three days, the workshop was structured with sessions in plenary and group work. In the group sessions country delegations were requested to discuss with the experts present. The results were presented at the end of each group session to the entire audience for comments.

The course of the workshop was organized with distinct goals: the first day was to understand the global and country context, the second day to explain all the elements that are necessary for generating cause-of-death information and the last day was to show the results of the group work on the outline of the each country strategy for generating cause-of-death information.

The agenda of the workshop is found in Annex B.

A USB key containing the presentations was given to participants.

## Summary of sessions – Day 1 (Scope: Global and country context)

Dr Chatora, WHO representative in Tanzania opened the workshop by emphasizing the importance of cause-of-death information for understanding and improving health. He added that the workshop was an important step towards better health information and hoped it would help countries to develop their national strategy for implementing ICD.

The representative from the Ministry of Health Tanzania also addressed the audience by welcoming the first workshop for ICD in Africa. He stated that many countries are at different stages with CRVS assessments and facing the most challenging area which is on system for obtaining cause-of-death information. Hence the need to work across various ministries or government agencies is crucial. Since the workshop brought together a wide range of expertise, it would help improve outcomes for ICD in Africa.

Dr Robert Jakob from WHO as chair of the session indicated that current global initiatives on CRVS provide a unique opportunity to develop better processes for obtaining cause-of-death information in Africa. He also mentioned that the workshop was intended to be practical.

After the opening session, several presentations were delivered. On the global momentum and regional initiatives on CRVS in Africa:

Anneke Schmider from WHO presented on current global conversations regarding CRVS, including causes of death, the World Bank / WHO Global Scaling Up Plan 2014-2030.

- See Scaling Up Plan at <http://documents.worldbank.org/curated/en/2014/05/19581045/global-civil-registration-vital-statistics-scaling-up-investment-plan-2015-2024> .
- See four CRVS country plans and indicative investment cases (including causes of death) at [http://www.who.int/healthinfo/civil\\_registration/TechnicalConsultation\\_April2014/en/](http://www.who.int/healthinfo/civil_registration/TechnicalConsultation_April2014/en/)

Mr Raj Mitra from UNECA presented on the APAI-CRVS process in Africa, including births, deaths, marriages, divorces and causes of death. The programme has been endorsed by all African Ministers responsible for civil registration. The upcoming Ministerial meeting (February 2015) will include Ministers responsible for civil registration and Ministers of health.

Doris Ma Fat from WHO presented on the current status of death registration in participating countries and reiterated the objectives and expected outcomes of the workshop.

Dr Robert Jakob presented the five core elements for implementing a collection system for cause-of-death information (Have a dead, Have a form, Fill in the form, Code causes of death, Tabulate and disseminate) with particular emphasis on the need of collaboration between ministries and entities involved in CRVS. Additional emphasis was given to the need to analyze and design proper data flows and workflows before writing a plan for implementation of CoD reporting and coding. Persons to be involved, steps, changes to laws and much more were described. The plan ideally would be verified in a small prototype before being rolled out countrywide. Instructions and hints were given for the group work in the afternoon.

Kidist Bartolomeos presented on systems for collecting data on external causes of death from injuries.

South Africa and Turkey have successfully implemented the ICD in the recent years, and presented on their system for death notification, certification and registration.

Later in the afternoon the 8 countries were required to work in group to think about their current system in registering deaths from natural causes occurring in hospitals, outside of hospitals and deaths that resulted from violent causes. An electronic template containing the various elements for death registration was provided to each country to facilitate their task (Annex C). One of the goal was also to identify the current weakness. During a plenary session, each country team presented their results followed by a discussion. Here are below the themes that were discussed:

- Linkage to other data sources to strengthen data flows and statistics
- Security and confidentiality in the business process
- Legal responsibilities within the system
- Timeframes for business process
- Accounting for community deaths and cultural practices
- Coverage of deaths
- Proportion of medical and non-medical deaths
- Multi sectoral collaboration
- Making processes efficient and effective
- Planning and piloting
- Problem solving where there were perceived barriers or bottlenecks

## **Summary of sessions – Day 2 (Scope: Obtaining cause-of-death information)**

### **Overview of death certification practice and implementation and use of the ICD**

Dr Robert Jakob provided a detailed account of the steps involved in the death certification practice from the examination of the deceased, diagnosis and sequence leading to death, completion of the medical certificate of the cause of death for deaths from natural and non-natural causes and coding procedures.

## **Training in ICD-10: certifiers and coders**

Dr Yusuf Hemed presented on developing an ICD-10 training for both certifiers and coders. He presented on the process of developing and implementing a training plan, including costing, curriculum development, and pre and post assessment. He used case studies and examples from different countries to share his experiences in conducting ICD-10 training in low and middle-income countries, including in Africa.

## **Introducing automation**

Dr Francesco Grippo from the Italian National Institute of Statistics presented on the role of automated coding systems, specifically on the software "IRIS", which is an interactive automatic system for coding multiple cause of death and for the selection of the underlying cause of death. He provided an overview of the system and how it operates, the status of its current implementation and existing support resources and the type of support available by the network. This was followed by a presentation by South Africa showing the practical implementation of IRIS at a country level. Mr. Sonnyboy Monamodi from Statistics South Africa presented the process how IRIS is implemented, invested resources (personnel, equipment, IT infrastructure, etc.) the experience with the implementation when compared with manual coding as well as some of the challenges encountered with the automation. He also presented some of the planned improvements and how they are using the IRIS Institute and user groups to address some of the technical challenges.

## **WHO verbal autopsy standard tool**

Dr Robert Jakob presented on the concepts and tools for notification and registration of cause-of-death information for out-of-hospital deaths, specifically using a Verbal Autopsy (VA) instrument. He gave background on the verbal autopsy methodology. He explained the history of the VA tool development and elaborated on the content of the 2014 WHO VA questionnaire and other available tools for data collection. This was followed by presentations from Kenya, Ghana and Tanzania, summarizing their local experience implementing VA surveys at DSS. Some countries also presented on other related developments, such as the piloting of the 2014 instrument in Kenya.

Some of the issues discussed include:

- how to move data from DSS to CRVS systems
- advantage of using InterVA instead of physician review
- barriers around implementing VA as part of CRVS

Session concluded with general agreement that:

- national implementation of either the ICD automation, training or the VA implementation would need to take an incremental approach, for example starting with health facility deaths first, and
- there is a need for a specific strategy for registering and certifying out-of-hospital/community deaths

## **Overview of a system for obtaining cause-of-death information**

Mozambique team presented their current system for obtaining cause-of-death information in hospitals. The team also exposed the problems with data collection via vertical programmes that would result in some deaths being captured twice or more.

## Group work

In the afternoon, the countries worked in group to review their current procedures in death registration from previous day group work and improve them based on the standard practices and instruments presented to them earlier. During a plenary session, each country team presented their improved strategy.

Later in the evening a group of facilitators, Erin Nichols, Frank Odhiambo, Maletela Touane-Nkhasi, Doris Ma Fat and Robert Jakob met together to review some of the countries draft strategies to identify missing elements or inconsistencies.

## Summary of sessions – Day 3 (*Scope: Refining national strategies. Data generation, analysis and use*)

At the first session (plenary) Dr Robert Jakob presented the comments from review done by the group of facilitators on three countries draft strategies.

The themes/areas that countries need to address:

- Need better coordination between key agencies, and with various projects and partners within countries – e.g. mortality projects
- Use champions within country
- Need to strengthen business processes efficiently
- Work with law, but also with policies and processes
- Use technology effectively
- Share data and processes
- Train and build capacity at all levels

On this last day the countries were again requested to do some group work to critically review their draft strategy taking into consideration the themes raised above. Results of the group work were presented in a plenary session and are found in Annex D.

The second part of the last day was focused on the value of cause-of-death statistics, their collection, compilation, verification, dissemination and use. Anneke Schmitter stressed the value of mortality data followed by examples from South Africa and Turkey. Tools for checking and analyzing data were demonstrated by Doris Ma Fat. Since some countries are using DHIS2 as a means for collecting health information, a demonstration of the system was done by the DHIS2 Tanzanian team to show its possible integration with the cause of death process.

Dr E. Shargie from the Global Fund mentioned the Global Fund's interest in supporting countries in activities that would improve their system for cause-of-death reporting.

## Recommendations and next steps

Feedback from workshop participants was highly positive. The workshop had provided a good understanding on how to define their strategy to implement ICD for causes of death.

Participants were informed of some upcoming policy emphasis for consideration:

- Country CRVs assessments, including causes of death – currently underway in countries
- APAI-CRVS Ministerial Meeting involving Health and Civil Registration Ministers– Feb 2015

Follow-ups are needed but they will be determined in discussion with countries or through workshops. The approach will depend on each country situation and needs. WHO will continue to provide support countries in elaborating their national strategy for ICD implementation. This will involve reviewing their related activities in the next phase, connecting them with the experts and helping them to monitor their progress. WHO also recognizes the benefit of this workshop and will undertake further workshops in the future where funding can be made available.

## **Annex A. List of participants**

### **Outlining strategies for the implementation of the International Classification of Diseases (ICD) in African countries White Sands Hotel and Resort, Dar Es Salaam, Tanzania 25-27 August 2014**

#### **ETHIOPIA**

Biruk Abate

Policy and Planning Directorate  
Ministry of Health  
[brookabate@yahoo.com](mailto:brookabate@yahoo.com)

Mengistu Wolde

Policy and Planning Directorate  
Ministry of Health  
[mengistu\\_wolde@yahoo.com](mailto:mengistu_wolde@yahoo.com)

Kifle Gebre

Central Statistics Agency  
[kgebre@yahoo.com](mailto:kgebre@yahoo.com)

Tamiru Genbeto Awalso

Vital Events Registration Agency (VERA)  
Ethiopia  
[tamirug13@gmail.com](mailto:tamirug13@gmail.com)

#### **GHANA**

Kingsley Asare Addo

Principal Assistant Registrar  
Births and Deaths Registry  
[kingaddo@yahoo.com](mailto:kingaddo@yahoo.com)

Samuel Kaba Akoriyea

Director, Institutional Care Division  
Ghana Health Service  
[samuelkaba@hotmail.com](mailto:samuelkaba@hotmail.com)  
[Samuel.kabaakoriyea@ghsmail.org](mailto:Samuel.kabaakoriyea@ghsmail.org)

Abraham Hodgson

Director, Research and Development Division  
Ghana Health Service  
[abraham.hodgson@ghsmail.org](mailto:abraham.hodgson@ghsmail.org)

#### **KENYA**

Abdulkadir Amin Awes

Senior Manager Social Statistics  
Kenya National Bureau of Statistics  
[aawes@knbs.or.ke](mailto:aawes@knbs.or.ke)

Judith Kilobi	Assistant Director Department of Civil Registration <a href="mailto:kilobijudy@yahoo.com">kilobijudy@yahoo.com</a>
David O. Soti	Head, Division of Health Informatics Monitoring and Evaluation Ministry of Health <a href="mailto:dosoti2002@yahoo.com">dosoti2002@yahoo.com</a>
<b>MALAWI</b>	
Mwayi Kachapira	Economist Ministry of Health <a href="mailto:mwayikac@gmail.com">mwayikac@gmail.com</a>
Sophie Kang'oma	Deputy Director National Registration Bureau <a href="mailto:sophiekgoma@gmail.com">sophiekgoma@gmail.com</a>
Jameson Ndawala	Deputy Commissioner National Statistics Office <a href="mailto:jndawala@hotmail.com">jndawala@hotmail.com</a> <a href="mailto:jndawala@statistics.gov.mw">jndawala@statistics.gov.mw</a>
<b>MOZAMBIQUE</b>	
Cidalia Baloi	Ministry of Health <a href="mailto:cidaliabaloi@yahoo.com">cidaliabaloi@yahoo.com</a>
Experanca Nhangumbe	Civil Registry Ministry of Justice <a href="mailto:enhangumbe@gmail.com">enhangumbe@gmail.com</a>
Carla Benjamin Guilaze Soto	National Director, Notary and Registry Ministry of Justice <a href="mailto:cguilaze@yahoo.com.br">cguilaze@yahoo.com.br</a>
Maria de Fatima Zacarias	Advisor for demographic and vital statistics National Statistics Office (INE) <a href="mailto:fatima.zacarias@ine.gov.mz">fatima.zacarias@ine.gov.mz</a>
<b>TANZANIA</b>	
Emilian Karugendo	Principal Statistician National Bureau of Statistics <a href="mailto:emilian.karugendo@nbs.go.tz">emilian.karugendo@nbs.go.tz</a>
Josephat Msami	Principal, Training Centre for Health Records Technology, KCMC, Moshi <a href="mailto:msami70@yahoo.com">msami70@yahoo.com</a>

Geoffrey Semu  
Senior Health Records and Information Officer  
ICD Unit, Muhimbili National Hospital  
[geofreysemu@yahoo.com](mailto:geofreysemu@yahoo.com)  
[geofrey.semu@mnh.or.tz](mailto:geofrey.semu@mnh.or.tz)

Azma Simba  
Monitoring and Evaluation Officer  
Ministry of Health  
[azmatan@yahoo.com](mailto:azmatan@yahoo.com)

Koheleth Winani  
National Coordinator Safe Motherhood  
Ministry of Health and Social Welfare  
[kwinani1977@gmail.com](mailto:kwinani1977@gmail.com)

Claud J. Kumalija  
Monitoring and Evaluation  
Ministry of Health and Social Welfare  
[claudjohnk@yahoo.com](mailto:claudjohnk@yahoo.com)

Angela Anatory  
Registration Manager RITA  
[akemanzi@yahoo.com](mailto:akemanzi@yahoo.com)  
[angelaanatory@gmail.com](mailto:angelaanatory@gmail.com)

Ester Michael  
Statistician  
Ministry of Health and Social Welfare  
[esthermichael7@gmail.com](mailto:esthermichael7@gmail.com)

## **UGANDA**

Eddie Mukooyo  
Assistant Commissioner, Health  
Services/Resource Center  
Ministry of Health  
[emukooyo@gmail.com](mailto:emukooyo@gmail.com)

Esther Nalumansi  
Medical Records Officer  
Medical Records Department  
Mulago National Referral Hospital  
[e\\_nalumansi@yahoo.co.uk](mailto:e_nalumansi@yahoo.co.uk)

Charles Benjamin Nsimbi  
Manager, Civil Registration  
Uganda Registration Services Bureau  
[charles.nsimbi@ursb.go.ug](mailto:charles.nsimbi@ursb.go.ug)

## **ZAMBIA**

Kabanda Lisuwa  
Monitoring and Evaluation  
Ministry of Health  
[lisubakabanda@yahoo.com](mailto:lisubakabanda@yahoo.com)

Martin Nyahoda  
Principal Registrar Births, Marriages & Deaths  
Department of National Registration (NRPC)  
[martinny2@yahoo.co.uk](mailto:martinny2@yahoo.co.uk)  
[mnyahoda@nationalregistration.gov.zm](mailto:mnyahoda@nationalregistration.gov.zm)

## **EXPERTS**

Elizabeth Awini  
Statistician Dodowa, HDSS, Accra  
[awini.elizabeth@gmail.com](mailto:awini.elizabeth@gmail.com)

Berrak Basara  
General Directorate, Health Research  
Ministry of Health, Turkey  
[berrak.basara@saglik.gov.tr](mailto:berrak.basara@saglik.gov.tr)  
[berrakbasara@gmail.com](mailto:berrakbasara@gmail.com)

Genene Bizuneh  
Consultant, African Development Bank/ECA  
[genenez2009@yahoo.com](mailto:genenez2009@yahoo.com)  
[gbizuneh@uneca.org](mailto:gbizuneh@uneca.org)

Moses Chikowi  
Monitoring and Evaluation Officer  
National AIDS Commission  
Malawi  
[chikowim@aidsmalawi.org.mw](mailto:chikowim@aidsmalawi.org.mw)

Francesco Grippo  
National Institute of Statistics, Italy  
[frgrippo@istat.it](mailto:frgrippo@istat.it)

Mehmet Gunal  
Turkish Statistical Institute (Turkstat)  
[mehmut.gunal@tuik.gov.tr](mailto:mehmut.gunal@tuik.gov.tr)

Yusuf Hemed  
Consultant  
ICD-10 advisor and trainer  
Dar es Salaam, Tanzania  
[hemed\\_234@yahoo.com](mailto:hemed_234@yahoo.com)

Francis Levira  
Statistician Rufiji HDSS  
Ifakara, Tanzania  
[flevira@ihi.or.tz](mailto:flevira@ihi.or.tz)

Raj Gautam Mitra  
Chief, Demographic and Social Statistics Section  
African Centre for Statistics  
UNECA, Addis Ababa  
[rmitra@uneca.org](mailto:rmitra@uneca.org)

Sonnyboy Monamodi	Statistics Division Statistics South Africa Pretoria <a href="mailto:sonnyboymo@statssa.gov.za">sonnyboymo@statssa.gov.za</a>
Abraham Moyo	Statistics Division Statistics South Africa Pretoria <a href="mailto:abramm@statssa.gov.za">abramm@statssa.gov.za</a>
John Mukulu	Computer Science & Engineering Department College of Information and Communication Technologies, University of Dar es Salaam <a href="mailto:john.f.mukulu@gmail.com">john.f.mukulu@gmail.com</a>
Erin Nichols	International Statistics Program National Center for Health Statistics Centers for Disease Control and Prevention <a href="mailto:idg1@cdc.gov">idg1@cdc.gov</a>
Frank Odhiambo	Chief, KEMRI/CDC Kisumu, Kenya <a href="mailto:fodhiambo@kemricdc.org">fodhiambo@kemricdc.org</a> <a href="mailto:frankouma7@gmail.com">frankouma7@gmail.com</a>
Vincent Orimba	Senior M&E Associate MEASURE Evaluation Kenya <a href="mailto:vincent.orimba@icfi.com">vincent.orimba@icfi.com</a>
William Senyoni	Computer Science & Engineering Department College of Information and Communication Technologies University of Dar es Salaam <a href="mailto:senyoni@gmail.com">senyoni@gmail.com</a>
Amri Shante	Coordinator Ifakara HDSS Tanzania <a href="mailto:samri@ihi.or.tz">samri@ihi.or.tz</a>
Estifanos Shargie	Senior Public Health Specialist Impact and Evaluation, GFATM <a href="mailto:Estifanos.Shargie@theglobalfund.org">Estifanos.Shargie@theglobalfund.org</a>
Maletela Touane-Nkhasi	Executive Manager Health and Vital Statistics Division Statistics South Africa <a href="mailto:maletelat@statssa.gov.za">maletelat@statssa.gov.za</a>

## WHO

Kidist Bartolomeos	Technical Officer Unintentional Injuries Prevention Injuries and Violence Prevention <a href="mailto:bartolomeosk@who.int">bartolomeosk@who.int</a>
Juliet Bataringaya-Wavamunno	National Professional Officer WHO Uganda <a href="mailto:bataringayaj@who.int">bataringayaj@who.int</a>
Eduardo Celades	National Professional Officer WHO Mozambique <a href="mailto:celadese@who.int">celadese@who.int</a>
Robert Jakob	Medical Officer Classifications, Terminology and Standards Health Statistics and Information Systems <a href="mailto:jakobr@who.int">jakobr@who.int</a>
Theopista John Kabuteni	National Professional Officer WHO Tanzania <a href="mailto:kabutenit@who.int">kabutenit@who.int</a>
Hillary Kipruto	National Professional Officer WHO Kenya <a href="mailto:kiprutoh@who.int">kiprutoh@who.int</a>
Doris Ma Fat	Statistician Mortality and Burden of Disease Health Statistics and Information Systems <a href="mailto:mafatd@who.int">mafatd@who.int</a>
Francis Magombo	National Professional Officer WHO Malawi <a href="mailto:magombof@who.int">magombof@who.int</a>
Anneke Schmider	Technical Officer Health Statistics and Information Systems <a href="mailto:schmidera@who.int">schmidera@who.int</a>
Nuhu Yaqub	Junior Professional Officer WHO Tanzania <a href="mailto:yaqubn@who.int">yaqubn@who.int</a>

## **Annex B. Agenda**

### **Workshop for outlining strategies for implementing the International Classification of Diseases in African countries**

Organized by WHO in Dar Es Salaam

25-27 August 2014

#### **Day 1: 25 August 2014:**

*Scope: Global and country context*

<b>Time</b>	<b>Session</b>	<b>Presenter</b>
08.30 : 09.00	Registration	<i>All participants</i>
09.00 : 09.15	Welcome	<i>WR Tanzania, MOH Tanzania</i>
09:15 : 09:30	Opening remarks	<i>Robert Jakob</i>
09.30 : 09.40	Introduction	<i>All participants</i>
09.40 : 10.00	Global momentum and regional status	<i>Anneke Schmitter and Raj Mitra</i>
10.00 : 10.10	Current status of death registration in participating countries	<i>Doris Ma Fat</i>
10.10 : 10.15	Objectives and expected outcomes of workshop	<i>Doris Ma Fat</i>
10.15 : 10.30	Discussions	
<i>10.30: 10.45</i>	<i>Coffee break</i>	
10.45 : 11.45	The 5 core elements for implementing a collection System for cause of death information System for collecting external causes of death information	<i>Robert Jakob  Kidist Bartolomeos</i>
11.45 : 12.30	Discussions	
<i>12.30 : 13.30</i>	<i>Lunch</i>	
13.30 : 14.30	Death notification, certification and registration: Process and examples from countries	<i>South Africa, Turkey</i>
14.30 : 15.00	Discussions	
<i>15.00 : 15:15</i>	<i>Coffee break</i>	
15.15 : 16.45	Review of the current country death collection system with a focus on causes of death	<i>Group work</i>
16.45: 17.30	Report of the group work and recommendation	<i>All countries</i>

***Group Dinner at 19.00***

**Day 2: 26 August 2014**

***Scope: Obtaining cause of death information***

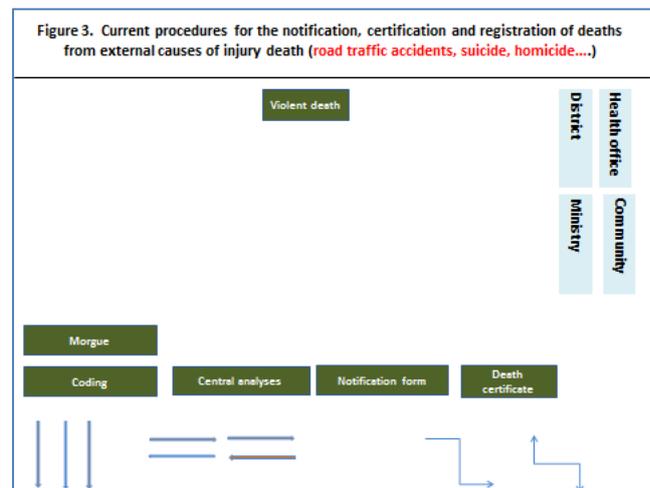
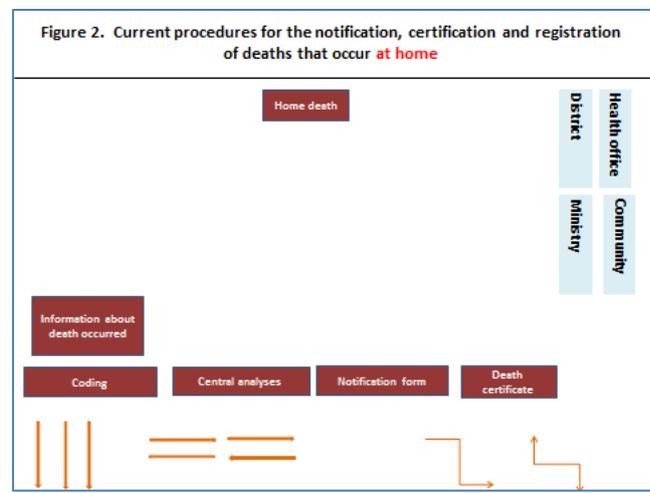
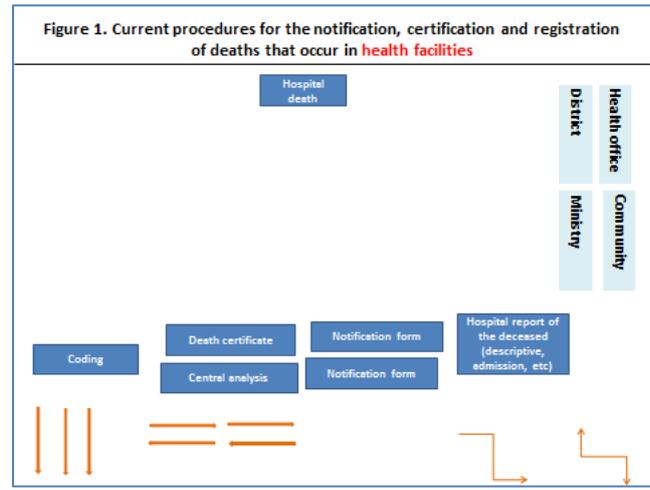
<b>Time</b>	<b>Session</b>	<b>Presenter</b>
08.30 : 08.40	Recap of previous day discussions	<i>Doris Ma Fat</i>
08.40 : 09.15	An overview of death certification practice and implementation and use of the ICD	<i>Robert Jakob</i>
09:15 : 09:30	Training in ICD-10: certifiers and coders	<i>Yusuf Hemed</i>
09.30 : 10.30	Introducing automation Implementing automation	<i>Francesco Grippo</i> <i>South Africa</i>
<i>10.30: 10.45</i>	<i>Coffee break</i>	
10.45 : 11.30	WHO verbal autopsy standard tool: - Concepts and tools - Kenya experience - Ghana experience - Tanzania experience	<i>Robert Jakob</i> <i>Frank Odhiambo</i> <i>E. Awini</i> <i>Amri Shamte &amp;</i> <i>Francis Levira</i>
11.30 : 12.30	Discussions	
<i>12.30 : 13.30</i>	<i>Lunch</i>	
13.30 : 14.00	Overview of a system for obtaining cause of death information	<i>Mozambique</i>
14.00 : 15.15	Changes incorporated in outlining a national strategy for obtaining cause of death information	<i>Group work</i>
<i>15.15 : 15.30</i>	<i>Coffee break</i>	
15.30 : 16:30	Presentation of draft national strategy from group work	<i>All countries</i>
16.30: 17.30	Discussions	

**Day 3: 27 August 2014**

**Scope: Refining national strategies. Data generation, analysis and use**

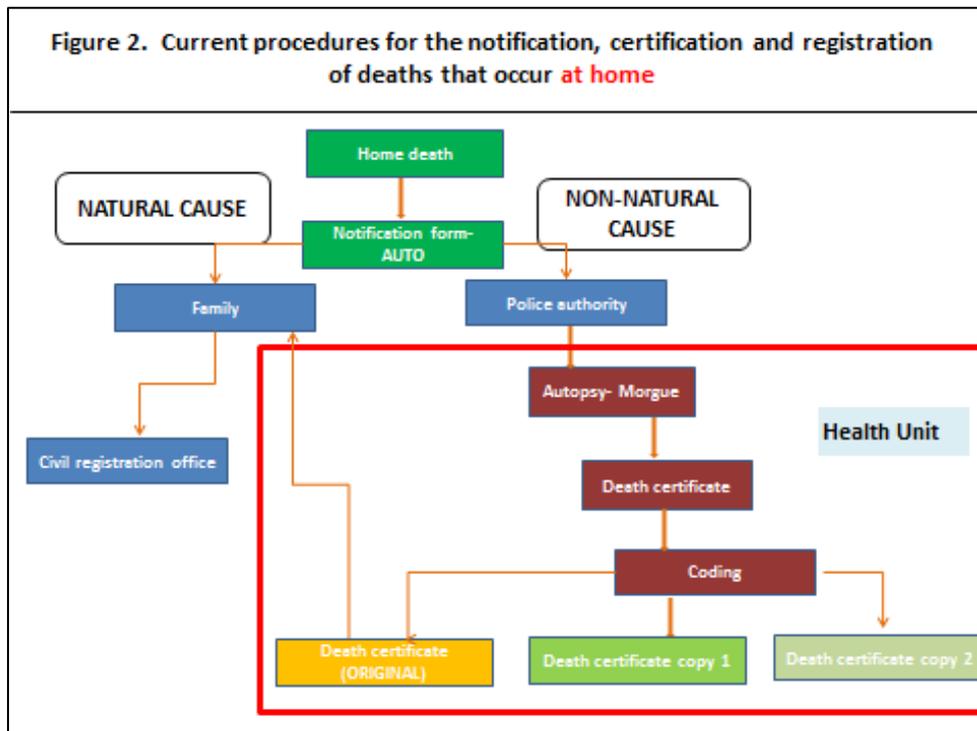
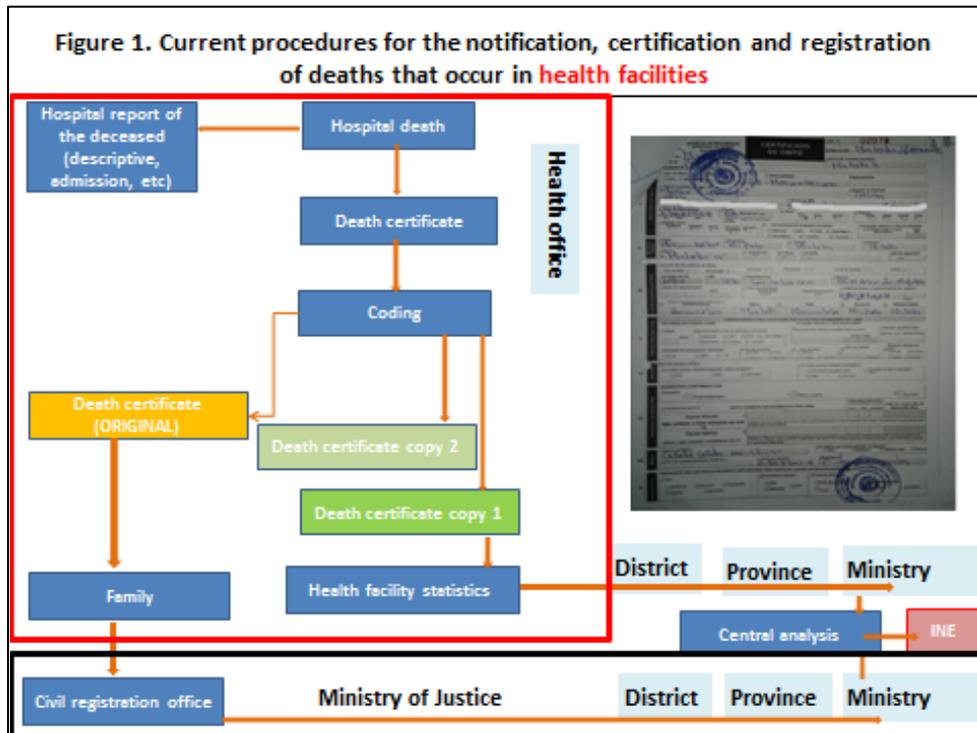
<b>Time</b>	<b>Session</b>	<b>Presenter</b>
08.30 : 08.40	Recap of previous day discussions	<i>Doris Ma Fat</i>
08.40: 09.00	Critical review of national strategy: feasibility, costs, sustainability: three examples	<i>Robert Jakob</i>
09.00: 10.15	Critical review of each national strategy: feasibility, costs, sustainability. Presentation of improved strategy	<i>Group work</i>
10.15: 10.30	The value of mortality data	<i>Anneke Schmider</i>
<i>10.30: 10.45</i>	<i>Coffee break</i>	
10.45 : 11.45	Data flows: from collection, compilation, verification, dissemination and use of cause-of-death data	<i>South Africa, Turkey</i>
11.45: 12.30	Discussion	
<i>12.30 : 13.30</i>	<i>Lunch</i>	
13.30 : 14.00	Presentation of data analyses tools	<i>Doris Ma Fat</i>
14.00 : 14.45	Integrating technology: Key issues to consider for reporting mortality	<i>Robert Jakob DHIS2 Tanzania</i>
14.45 : 15:15	Discussions	
<i>15.15 : 15.30</i>	<i>Coffee break</i>	
15.30 : 16.00	Outcomes of the workshop / next steps/ working with partners	<i>Robert Jakob Estifanos Shargie</i>
16.00 : 16.15	Closure	<i>Robert Jakob</i>

## Annex C. Template for group work

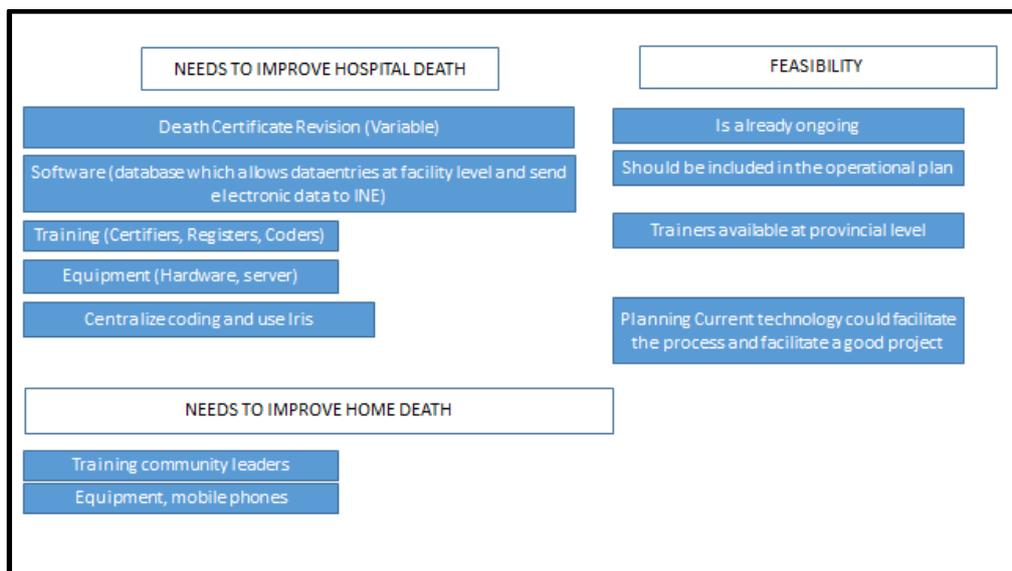
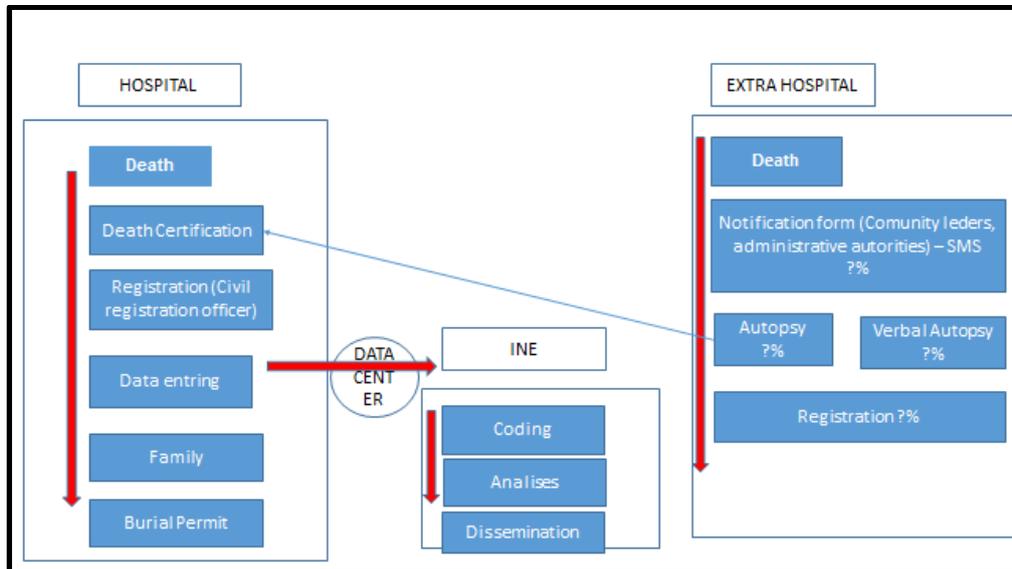


## Annex D. Results of countries group work

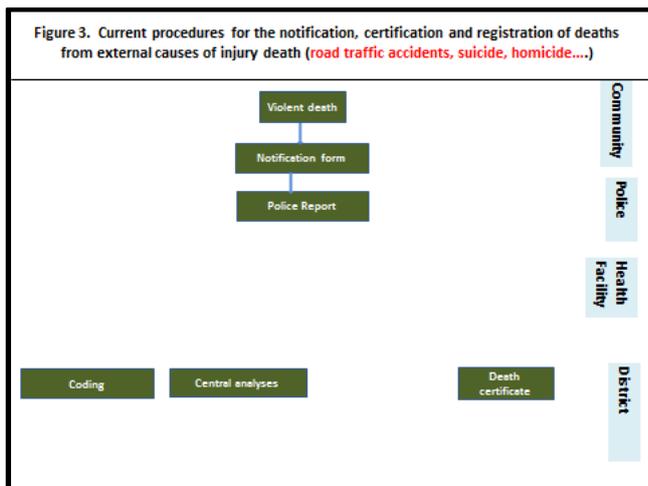
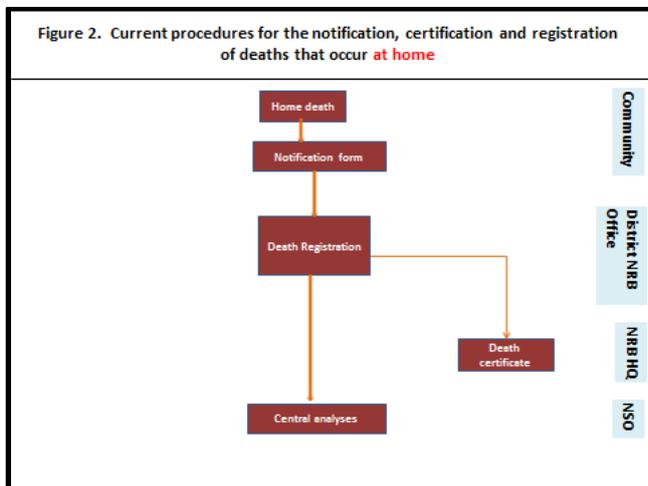
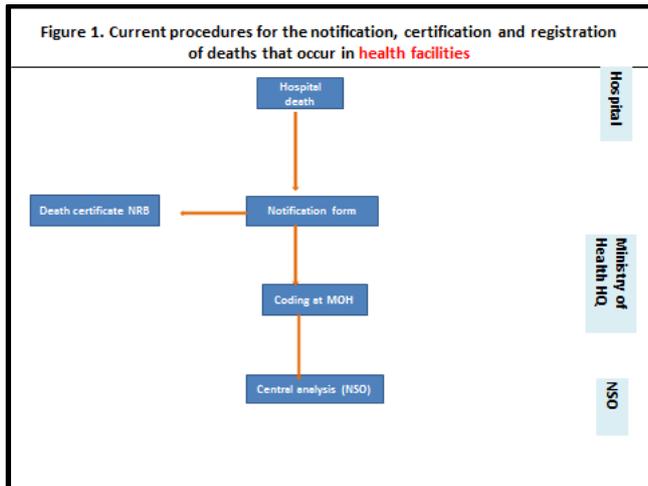
### 1. Mozambique: current procedures



## Mozambique: proposed draft strategy



## 2. Malawi: current procedures



## Malawi: proposed draft strategy

### **National ICD Strategy Development - The Process**

By

Malawi

### **Work Flow**

- Death registration implementation procedures are being finalized.
  - There is need to put in place the ICD system as part of the procedures
  - The system on data sharing is being worked on
  - There is need for hospitals to be reporting deaths
  - There is need to have the TWG to coordinate the implementation of the ICD system
  - There must be timelines for data-sharing
  - The first challenges will be to modify the death notification form to align it with international standards and to train certifiers and coders
  - Coding to be done at the district level and the data will be sent electronically to the registration office which will in turn send the information to statistical office

### **Legal Base**

- Malawi has a National Registration Act (2010)
- Some Areas that need attention;
  - No clear provision for responsibilities for ICD-10 implementation
  - Need to finalize forms/tools to meet international standards.
  - Sharing of information needs to be clear
    - Currently finalizing the regulations; this will be taken care of.

## **Capacity Building/Strengthening**

- Lack of capacity for medical personnel to implement ICD-10
  - Identify experienced trainers and provide comprehensive training
  - Institutionalize ICD 10 among key departments/ and organizations (both public and private).
  - Provide refresher trainings and regular meetings to share experiences
  - Need to introduce ICD in medical school curriculum
  - Need to link chiefs with the Civil Registration offices and HMIS offices for them to notify the offices whenever a death occurs

## **Resources**

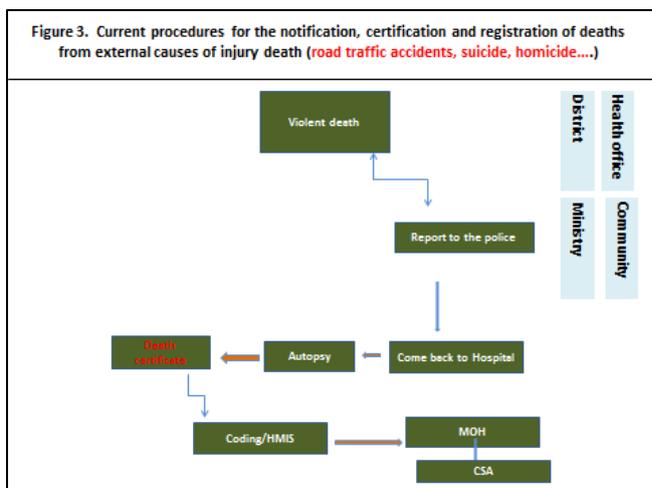
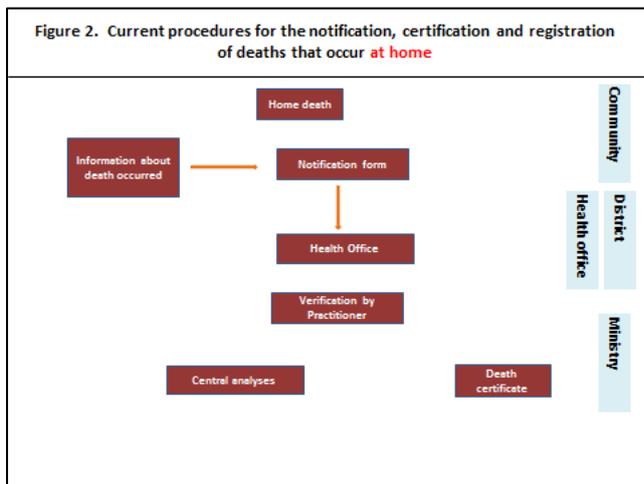
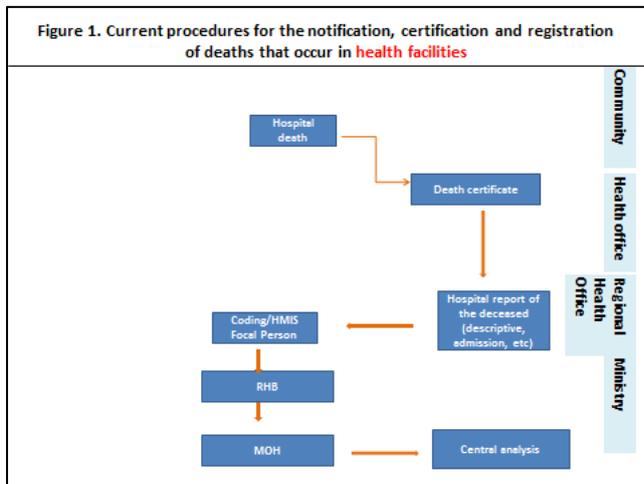
- **Human**
  - Inadequate human resource
    - MoH – Vacancy rate very high
    - NRB Understaffed
      - Planning for a functional review to increase the number of staff
- **Technology**
  - Inadequate appropriate equipment and software
  - Need for training on management of software, and hardware.

## **National Champions**

- This being a new concept, there are currently no champions.
- There is need to strategize/lobby for championship targeting respectable senior and influential citizens, most likely the Minister of Home Affairs

**ZIKOMO KWAMBIRI!!!**

### 3. Ethiopia: current procedures



## Ethiopia: proposed draft strategy



Gaps and the work flow of Ethiopia  
August, 2014 Dar Es Salaam

### Facility Death Report

Identified problems	Possible solutions
Lack of formal collaborative framework with the responsible bodies (VERA, MOH CSA, and others stockholders)	Creating accountability, clearly setting the roles and responsibilities, making agreement,
Non-standardized death certificate and process	Standardizing the facility level death registration and certificate
No death notification process for the responsible body	Establishing formal death notification system
Gap to enforce the facility to implement death registration and certification system	Making a proclamation and make it practical
Lack of trained and expertise on ICD coding	Facilitate TOT on ICD coding
Lack of technologically supportive system of death registration and certification	Look into/ explore technological bench markings

### Community Level

Identified problems	Possible solutions
Lack of formal Death Notification, certification and reporting system	Implement the recently ratified proclamation of vital event registration and reporting
Lack of awareness in the community in the relevance of death registering	Create awareness for the community using the health extension workers, community leaders, religious leaders, social groups,

## What needed to be done

- ❖ Establish National Technical working group
- ❖ Prepare TOR, Action plan and Endorse at higher level officials,
  - ❖ Customize the existing death registration certification, tools, forms, procedures
  - ❖ Selecting pilot sites both in health facilities and communities and launch pre test Orientation for the facility, informing higher officials/health workers/ Community leaders/about the standard format
  - ❖ Mapp the Financial resources Resources
  - ❖ Customize The Verbal Autopsy
  - ❖ Trainings

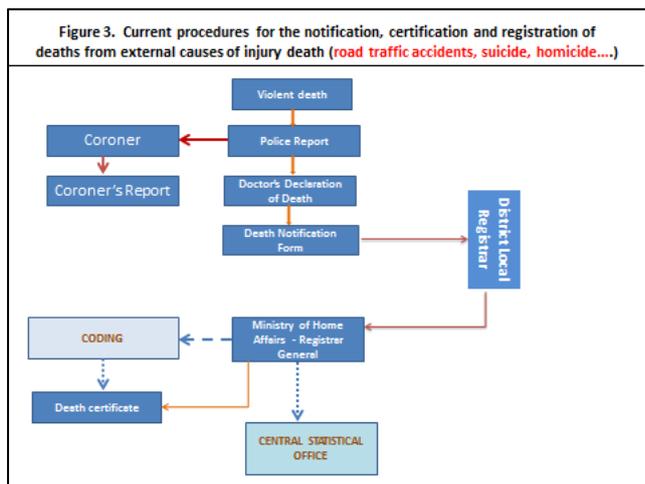
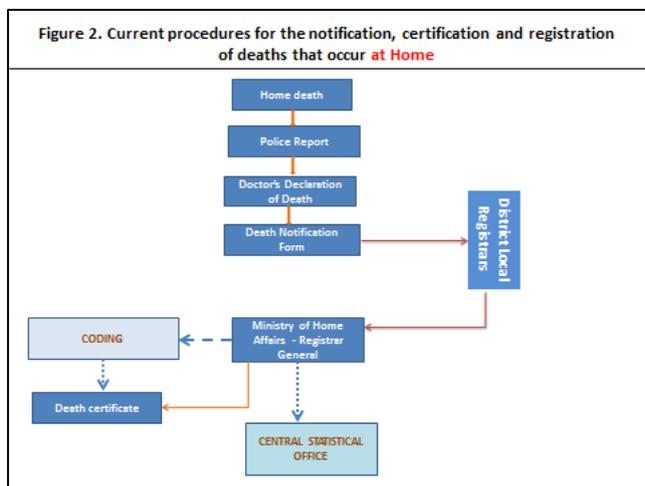
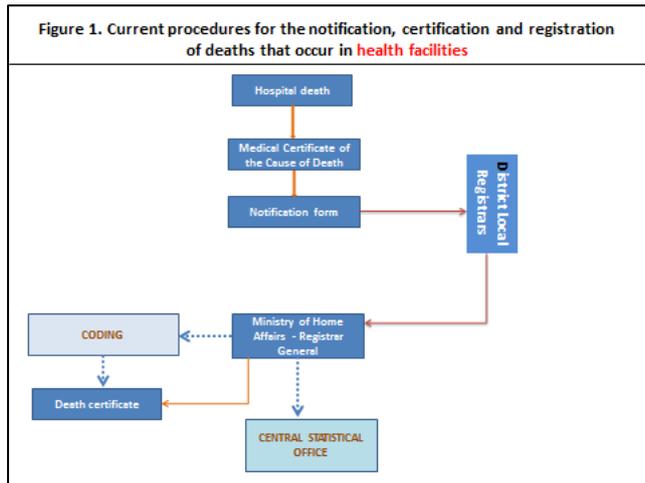
## Enabling environment

- Ethiopian Community health structure/ 38,000 health extension workers ( Human resource, H D A network
- The Ratification of Vital Event and National Identity Card , Proclamation no- 760/2012,
- Political Commitment/ Current focus of the officials
- The Establishment of VERA
- Traditional, Cultural Setting,
- 

Thank you !!!!

- DAY 1 starts Tommorrow

#### 4. Zambia: current procedures and proposed draft strategy



## Zambia Case

- 1. Have more than 1 form for a single death event.
  - One used for medical certification which includes CoD and given to relatives as a base for burial licence from local authorities
  - Other form used as death notification.Suggestion: Combine 2 forms as a 1 form  
Use as a base for burial licence, statistics

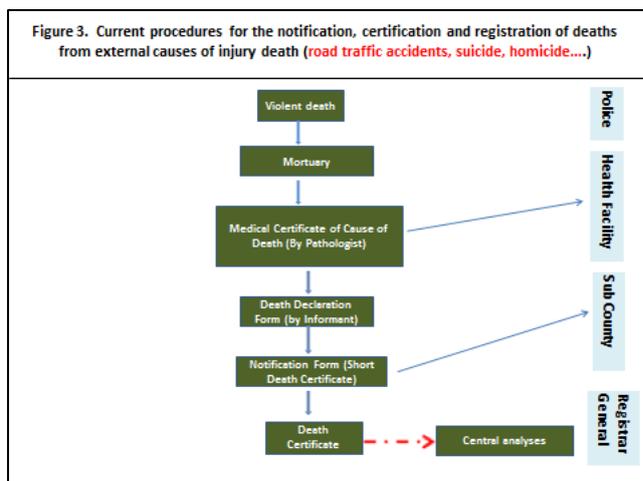
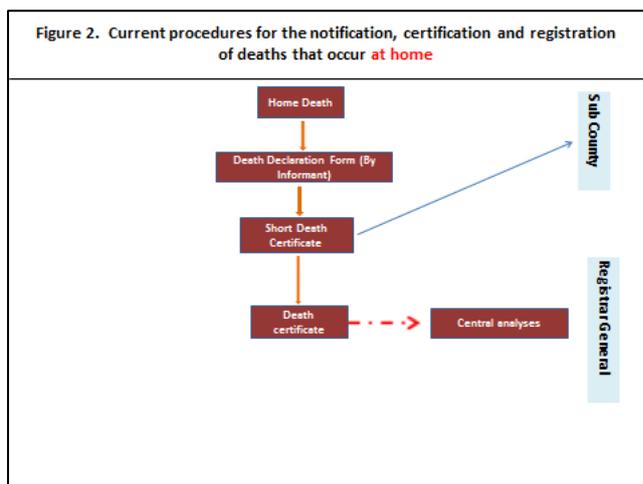
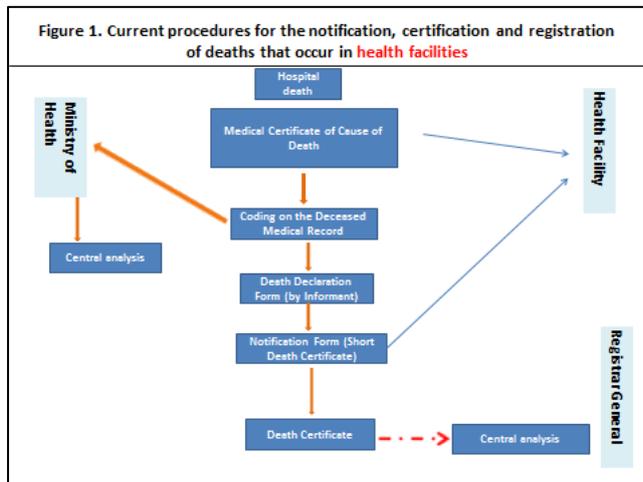
- 2. Family members are responsible for the death registration according to law. There is a punishment (go to prison) if no registration
- Law is not enforced.
- Suggestion: Change the system. Send the form directly from institution to the local registry office

- 3. There is no ICD 10 coding
- Plan is Mol will give the code. And Send to Statistical Office
- Suggestion: Training is needed

- There is no publication
- Statistical Office can publish the death and causes of death statistics.
- MoH, MoI and Statistical Office must work together for quality and coverage

- Training of doctors/certifiers
- Control mechanism for increase the quality of death certificate is needed
- Training of coders

## 5. Uganda: current practices and proposed draft strategy

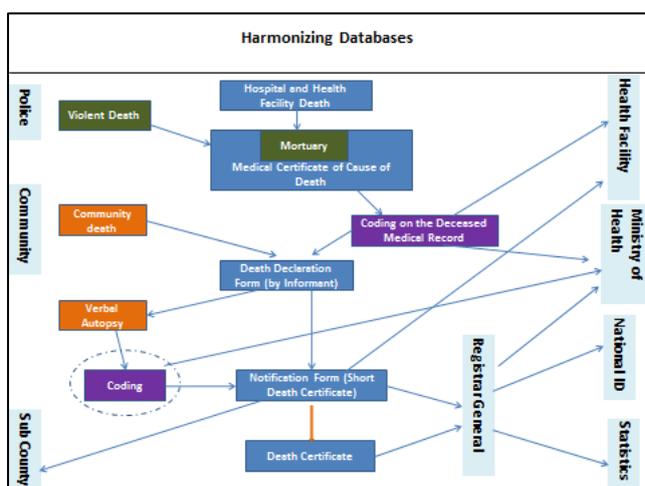


## Workflow

- Databases within MoH, national health institutions e.g. cancer registry not linked
- Databases from Hospitals, sub counties not linked to the Civil Registry
- Coding the violent deaths not done
- VA on community deaths not done
- Coding not done in all hospitals and health facilities
- Coding of community deaths not done

### Way Forward

- Introduce ICD coding in all hospitals and health facilities
  - Start with all hospitals and Health Centre IVs



## Additional comments

- Short Death Certificate is an interim documents pending merging of the long and short death certificate
- Need for attaining a unique ID number at birth
- The data base at the Registrar General to be linked to National ID Registration and Uganda Bureau of Statistics.
- Need to create a database for still births from health facilities and community to be linked to MoH and Uganda Bureau of Statistics

### Legal Base

- Lack of clear definitions - Still births
- **Lack of legal requirement for attaining death certificate prior to burial**
- Enforcement of registration – religious and traditional leaders, funeral homes,
- Reporting of cause of death according to the ICD

#### Way Forward

- Advocacy campaign through religious and traditional leaders, funeral homes, political leaders for death registration
- Gazette an instrument to include private hospitals, health centres as registrars – safeguards and requirements to minimize fraud

### Training (Capacity)

- National Task Force – national stakeholders
- Registrars - Hospital Administrators, sub county chiefs/Town Clerks
- Medical Practitioners (certifiers) and coders
- Parish Chiefs, Notifiers
- Village Health Teams – Verbal Autopsy
- Community, Police
- IT specialists and Statisticians
- Training of Student Doctors in ICD

#### Way Forward

- Sensitization of National Task Force

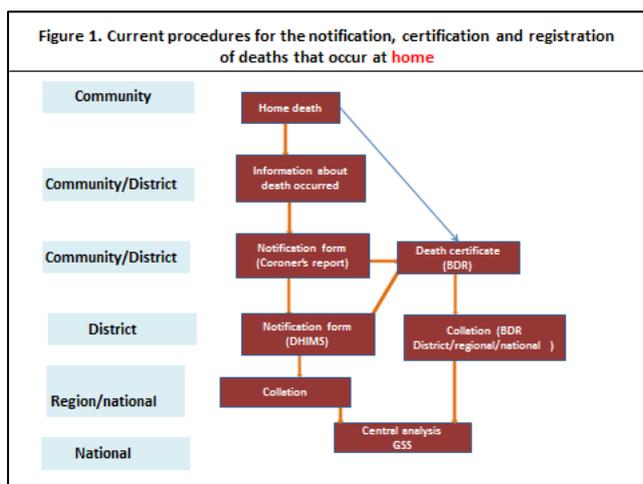
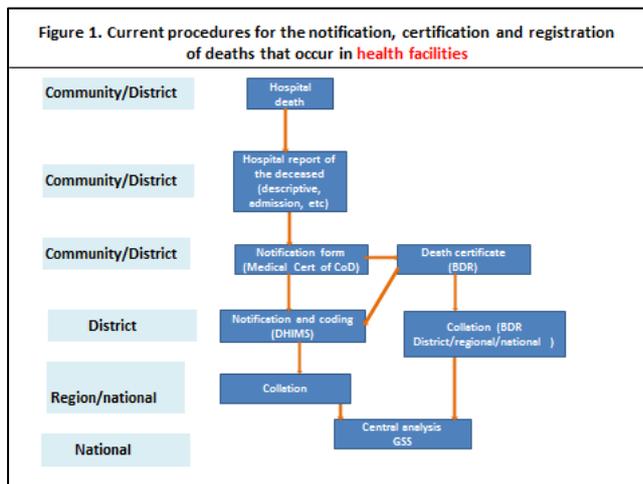
### Resources (Human, Technology)

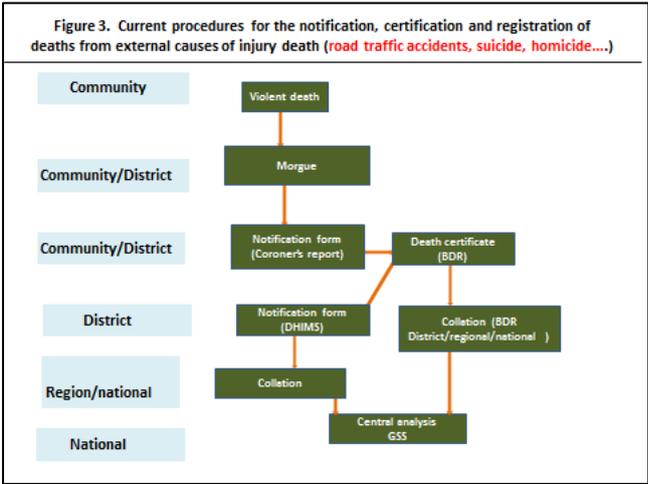
- Adoption of IRIS
- Internet Connectivity
- Tools – ICD 10 CDs and Manuals, Adapted Manuals, brochures, IEC materials,
- Computers and Laptops
- Statistical analysis software

## National Champion

- Through the National Task Force which comprises multi stakeholders
- Identify the national champion

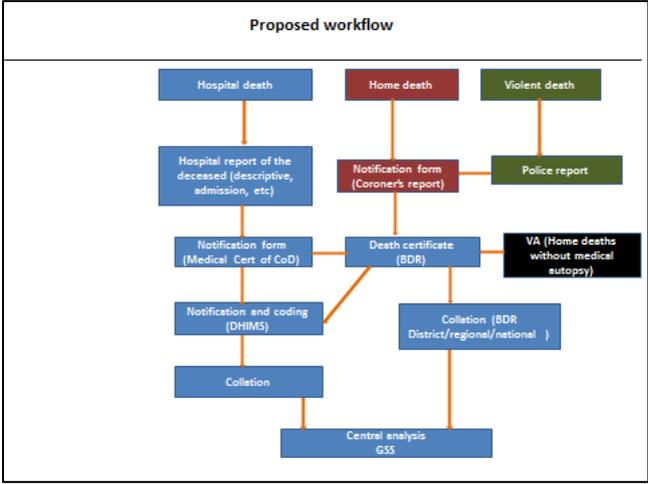
## 6. Ghana current procedures





**Ghana: proposed draft strategy**

- Gaps**
- Workflow - Weak link between MOH, BDR and GSS
  - Low registration rates in rural areas due to inaccessibility of service and non enforcement of regulations
  - Non Linkage VAs with CVRS
  - Legal base - need some amendments
  - Training
  - Resources – Human and technology
  - National champions



## Legal Base

- Review of existing laws
  - BDR law of 1965 (Act 301)
  - GHS Act 525
- Advocacy for amendment of laws - request to be made by CRSV through Min for Local Govt to Parliament

## Notes

- All deaths should have permits before burial in all cemeteries
- Non medics should be allowed to certify deaths after being trained

## Coordination/Operations

- Strengthen
    - Oversight Committee (Steering Committee) – chaired by Minister for Local Govt
    - Technical Committee (TWG – Technical Working Group) – BDR, MoH, Judicial Service, NIA, NDPC
    - Task Teams (Field Operatives) – Field agents
- TORs have been developed for all the above

## Training

- Certifiers (Physicians)
- Coders – training in use of IRIS software
- Registration Assistants – emerging technologies, VAs
- IT personnel – system administrator, programmers
- Research Assistants – coordinate VAs
- To develop curricula for trainings of all above
- Workshops and stakeholder meetings to update and improve communication at all levels

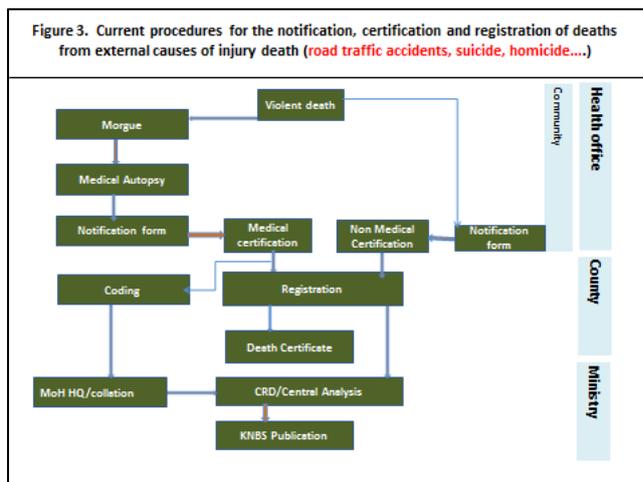
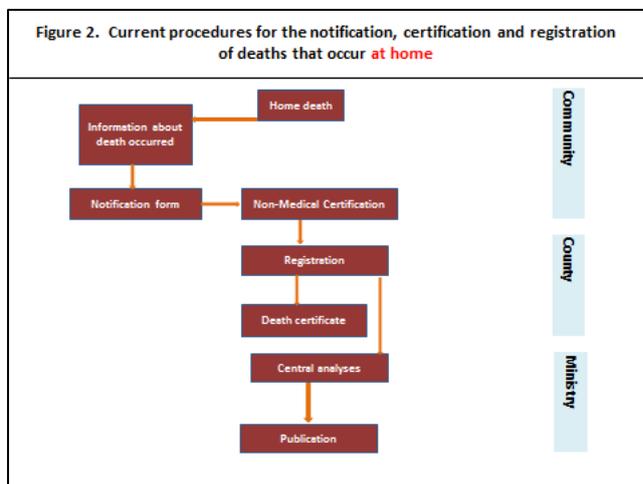
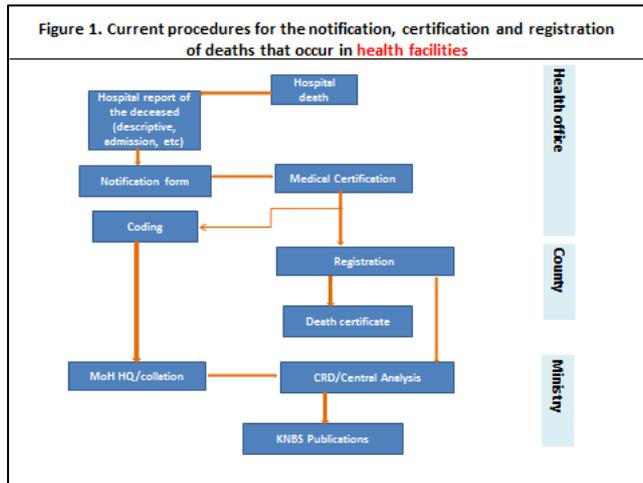
## Resources

- Human resources
  - Certifiers (Physicians)
  - Coders
  - Registration Assistants
  - IT personnel - system administrator, programmers
  - Research Assistant
- Technology- Computers, Tablets, Software
- Stationery – Forms, papers etc
- Motor bikes, fuel etc
- Budget – to be developed to cater for all activities

## National Champions

- Minister for Local Government
- Government Statistician

## 7. Kenya: current procedures



## Kenya: proposed draft strategy

### Workflow

- Death in Health facilities
  - Coders not using D1 forms but patient records
  - Challenge with the certification process by coders
- Linkage between MoH and CRD on coded causes of death
- Linking VA with civil registration department

#### **Way forward**

- Implementation of linkage of VA with CRD through MOVE-IT

### Legal Framework

- Revision of the data collection tools to be inline with International Certificate (Include duration) –This requires legislative process currently ongoing
- Certification of cause of death to include clinical officers
- Certification of all causes of death shall be done either through VA or medical certification

#### **Way forward**

- Revision of data collection tools

### Training (capacity)-Communication

- Poor certification of CoD
- Training on Verbal Autopsy
- Training of registration agents
- Data analysis and use
- Training of programmers

#### **Way forward**

- Training of certifiers/coders

## Resources

- Inadequate programming skills and numbers
- Inadequate ICT infrastructure

### **Way forward**

- Recruitment of programmers
- Enhancing DHIS-2 to capture coded deaths

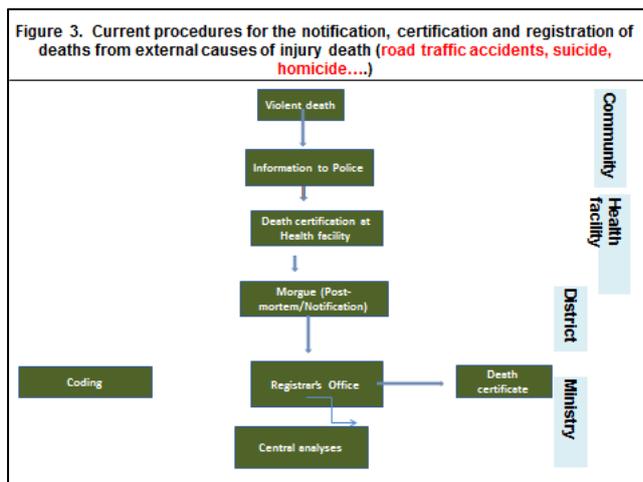
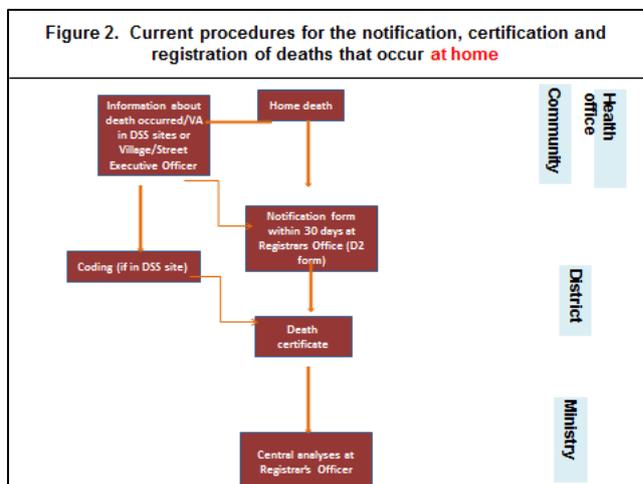
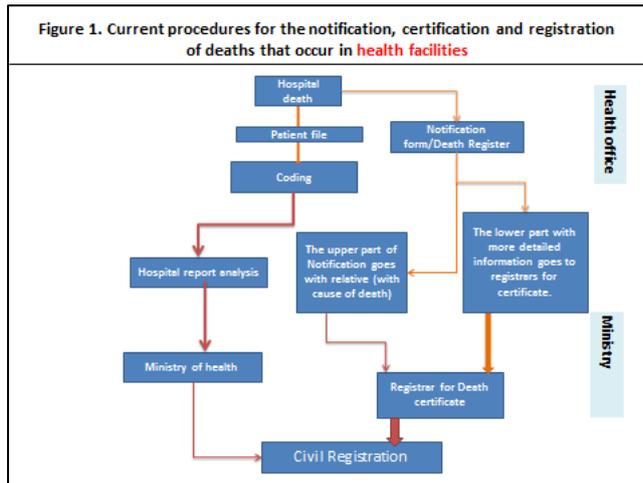
## National Champions

- There are no national champions for CRVS

### **Way forward**

- Identify a national champion for CRVS

## 8. United Republic of Tanzania: current practices



## United Republic of Tanzania: proposed draft strategy

### Work flow

#### Challenges on the work flow

- Poor link between MoHSW, CR and NBS
- Coding is not done on the Cause of death Certificate but on Patients files(case notes records)
- Poor coding due to limited information for death that occur in the community
- Community is not motivated for Registration.

### LEGAL BASE

- Birth and Death registration Act 108 of 1920 Rev. 2009
- The legal framework under which civil registration systems work is not coordinated .  
Eg. Ministry of Health is not legally mandated to share data generated with NBS & CR.

#### **Solution:**

- We must implement an open Government initiative that allows sharing of information within government systems.

### TRAINING/CAPACITY-COMMUNICATION

Training curricula are not adequately packed/ designed to equip certifiers and coders with the required skills to perform their duties.

Lack of adequate experts for coding and certification

#### **Solution:**

- Adapt training manuals for coders and certifiers of the cause of death.
- In-service training to all key stakeholders
- Incorporate ICD training in Pre service curricula.

## RESOURCES(HUMAN & TECHNOLOGY)

- Lack of relevant and skilled personnel on coding and certification.
- Lack of retention mechanisms for Health professionals
- Lack of enough coders to meet the requirements
- Lack of hardware and software to support the system

### **Soln:**

- Train more coder to meet the requirement.
- Invest in Technology(use of mobile phone & computers)

## NATIONAL CHAMPIONS

There is no National champions for ICD System.

### **Soln:**

- Identify National Champion
- Identify and recognize the available coders
- Increase their numbers through effective utilization of the available resources.
- Offer In-depth training with full package of coding and Certification system.