

Harmonising data collection, management and sharing – the INDEPTH Experience

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Kobus Herbst^{1,2}, Nicolas Maire⁴, Sanjay Juvekar^{1,3}, Osman Sankoh¹

1. The INDEPTH Network, Ghana
2. The Africa Centre for Population Health, UKZN, South Africa
3. KEM Research Centre, Vadu, India
4. Swiss Tropical and Public Health Institute



INDEPTH Network

Better Health Information for Better Health Policy

iSHARE 2

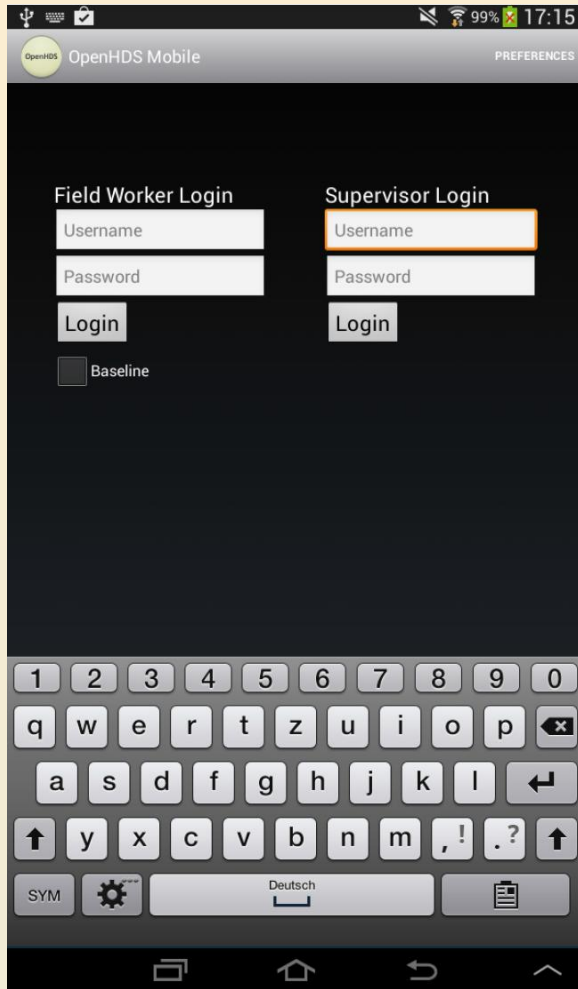
an INDEPTH project

Introduction

IDMP

INDEPTH Data Management Programme

OpenHDS



Tobias Homan, et al. Innovative tools and OpenHDS for health and demographic surveillance on Rusinga Island, Kenya. BMC Research Notes 2015, 8:397
doi:10.1186/s13104-015-1373-8



INDEPTH Data Repository

Home	What is this?	How to use it?	History	Data	Citations	News	INDEPTHStats	Acknowledgements	Feedback
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iSHARE2 4th Training Workshop

iSHARE2 4th Training workshop was conducted successfully in Dubai, UAE from 18th Nov - 25th Nov 2014. Seven centres participated in the workshop and were given a detailed knowledge for installing, configuring, maintaining and working with the different components of CiB so that they would be able manage the entire life-cycle of research data management at their respective centre's HDSS data.

As of September 08, 2015 the Library contains

41 surveys

3,181 citations

1,016 variables

Central Data Catalog

The Central Data Catalog is a portal for all surveys and datasets held in catalogs maintained by the INDEPTH Network and a number of contributing external catalogs.



[View all Surveys »](#)

INDEPTHStats

Displays yearly health and demographic indicators calculated from INDEPTH Data Repository; for researchers, government officials and policymakers. [Read More...](#)

FAQ'S

- ▶ How can I contribute to improving the catalog?
- ▶ Can you help with analyzing the data?
- ▶ Can I get help in implementing a survey catalog in my agency?

[Click here for more...](#)

NEWS



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[Get Started - How to use this site](#)

[Data - From the field to INDEPTHStats](#)

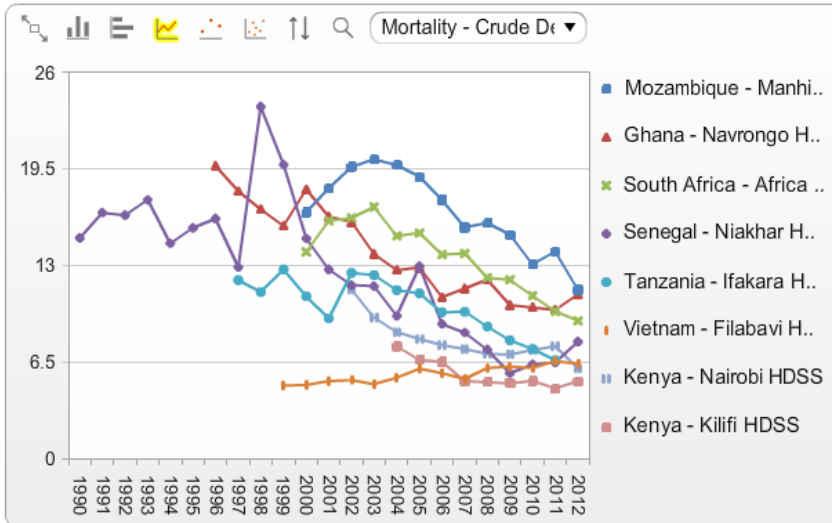
[Visit the INDEPTH Data Repository](#)

[Get Started - How to use INDEPTHStats App](#)

Male

Female

Both Sexes



All HDSS

- Mozambique - Manhica HDSS
- Senegal - Mlomp HDSS
- Senegal - Niakhar HDSS
- South Africa - Africa Centre HDSS
- South Africa - Agincourt HDSS
- South Africa - Dikgale HDSS
- Tanzania - Ifakara HDSS
- Tanzania - Magu HDSS
- Tanzania - Rufiji HDSS
- Uganda - Iganga/Mayuge HDSS
- Vietnam - Chillab HDSS
- Vietnam - Filabavi HDSS

OpenHDS

Implementation

- INDEPTH Centres
 - Cross River
 - Ifakara Health Institute
 - Manhica
 - Nanoro
- INDEPTH associate members
 - Rusinga Island
- Other disease surveillance sites
 - Majete
 - Bioko Island
- Implementation in progress (Ethiopian sites):
 - Arba Minch, Butajira, Dabat, Gilgel Gibe, Kersa, Kilite Awlaelo

Major Developments

- Household level visits catering for more than one household per dwelling
- Internationalisation, including support for multiple languages, scripts and calendars
- Extensibility of core data collection for site specific questionnaires
- Data Migration tool chain
- Collaborative infrastructure to enable mutual support and learning
 - Common code repository
 - Issue/bug tracker
 - Mailing list

Lessons Learned

- Complexities of Data Migration
 - Non-standard systems
 - Data cleaning
 - Support for non-core variables
- Ongoing requirement for software maintenance
 - OpenHDS build on a number of open source components with their own release cycle requiring re-integration of components
- Need to decrease the dependency on the Swiss TPH team by further strengthening capacity and exchange in the INDEPTH OpenHDS community

Challenges

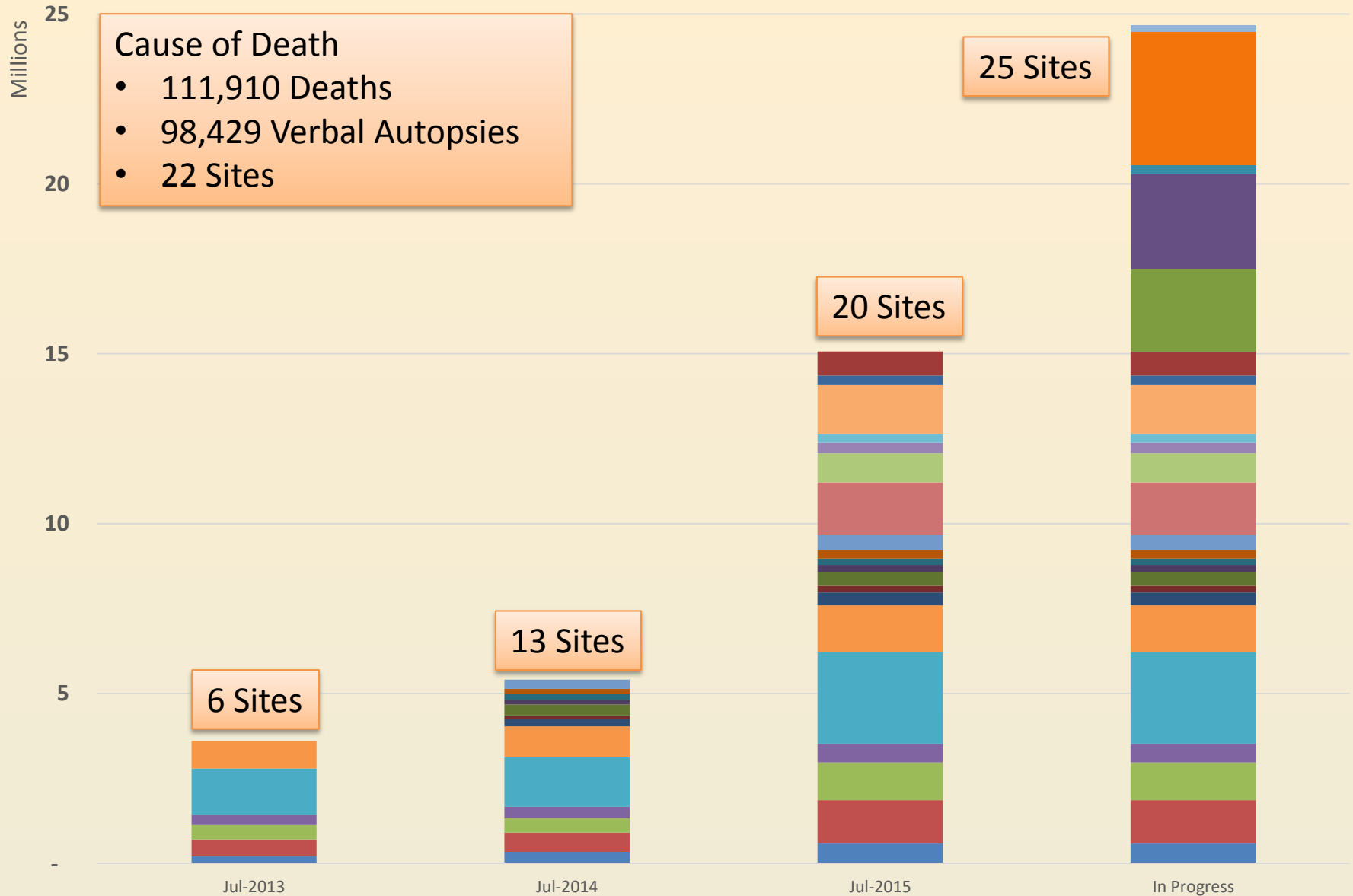
- Maintaining a technical and implementation support capacity
 - Central capability in the short to medium term
 - Strengthening INDEPTH centres' technical capacity in the longer term to decrease dependence on central support
- Need to work hard at maintaining standard database structure and common code-base because this is the real strength of OpenHDS

INDEPTH Data Repository

Highlights

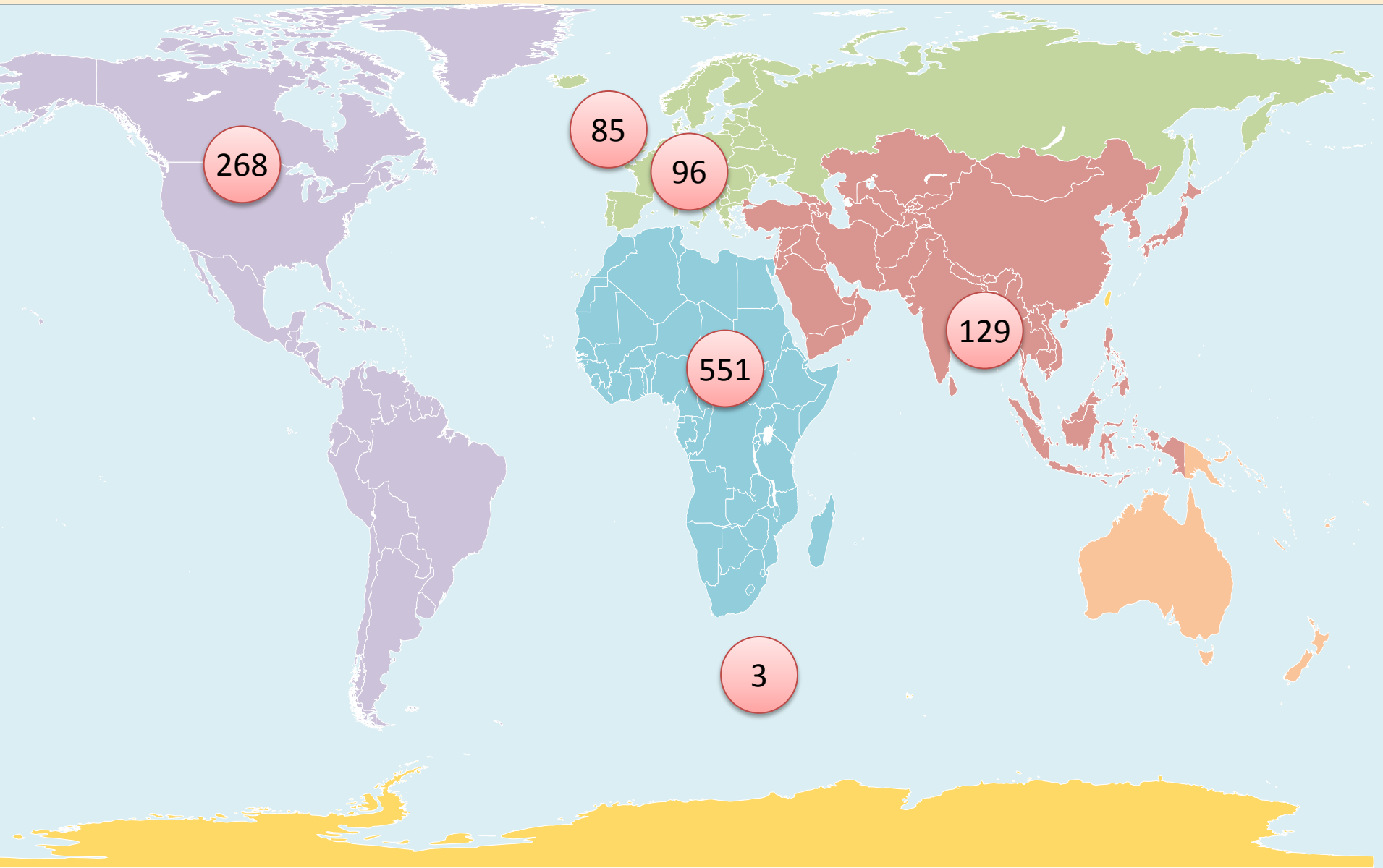
- INDEPTH Cause Specific Mortality - Oct 2014
 - 22 sites, 111 000 deaths
- July 2015 Core Data Update
 - 27 sites participated, 20 datasets shared
- Recognition by PLoS as a repository to host publication data sets
- Publication of iSHARE procedures and design in *J Empir Res Hum Res Ethics*

INDEPTH Repository : Shared Individual Level Data



- | | | | | | | | | |
|------------------|-----------------|-----------------|------------|-----------------|-----------------|---------------|---------------|-----------------|
| ■ Vadu | ■ Nairobi | ■ Magu | ■ ChiliLab | ■ Agincourt | ■ Africa Centre | ■ Ouagadougou | ■ Taabo | ■ Gilge Gibe |
| ■ Kilite Awlaelo | ■ Dabat | ■ Mbita | ■ Karonga | ■ Rufiji | ■ Filabavi | ■ Kersa | ■ IRD - Mlomp | ■ IRD - Niakhar |
| ■ Dikgale | ■ Iganga/Mayuge | ■ Ifakara Rural | ■ Kisumu | ■ Ifakara Urban | ■ Kilifi | ■ Kombewa | | |

Who are downloading?



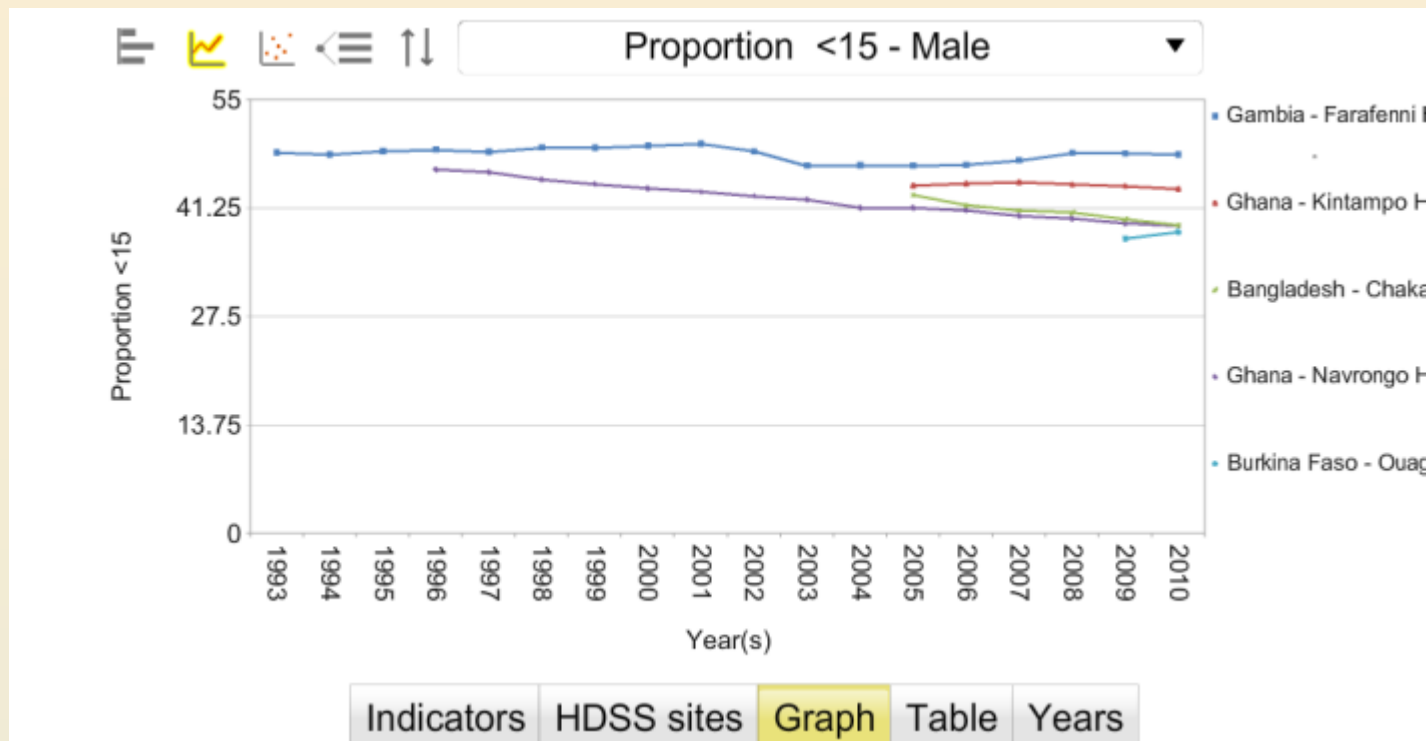
Future Plans

- IDMP workshop in April 2016
 - New Centre's joining iSHARE
 - Update of existing core datasets
 - Update of cause-specific mortality datasets
 - Expanding core dataset with education variable
- Final workshop in 2017

INDEPTHStats

Highlights

- July 2015 Update
- INDEPTHStats App for Android and iOS



Acknowledgements

welcometrust

Strategic Award

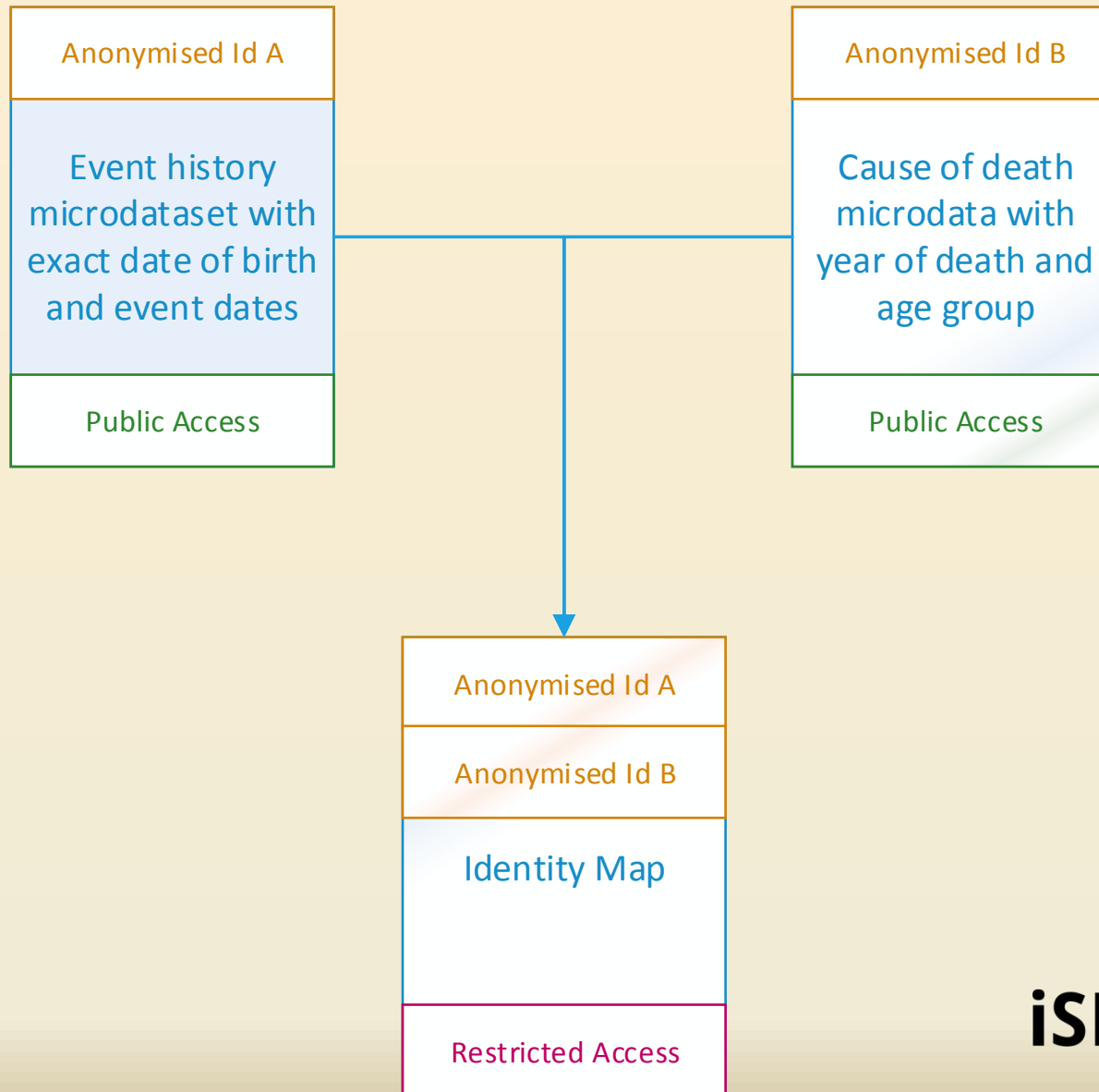
THE WILLIAM AND FLORA
HEWLETT
FOUNDATION



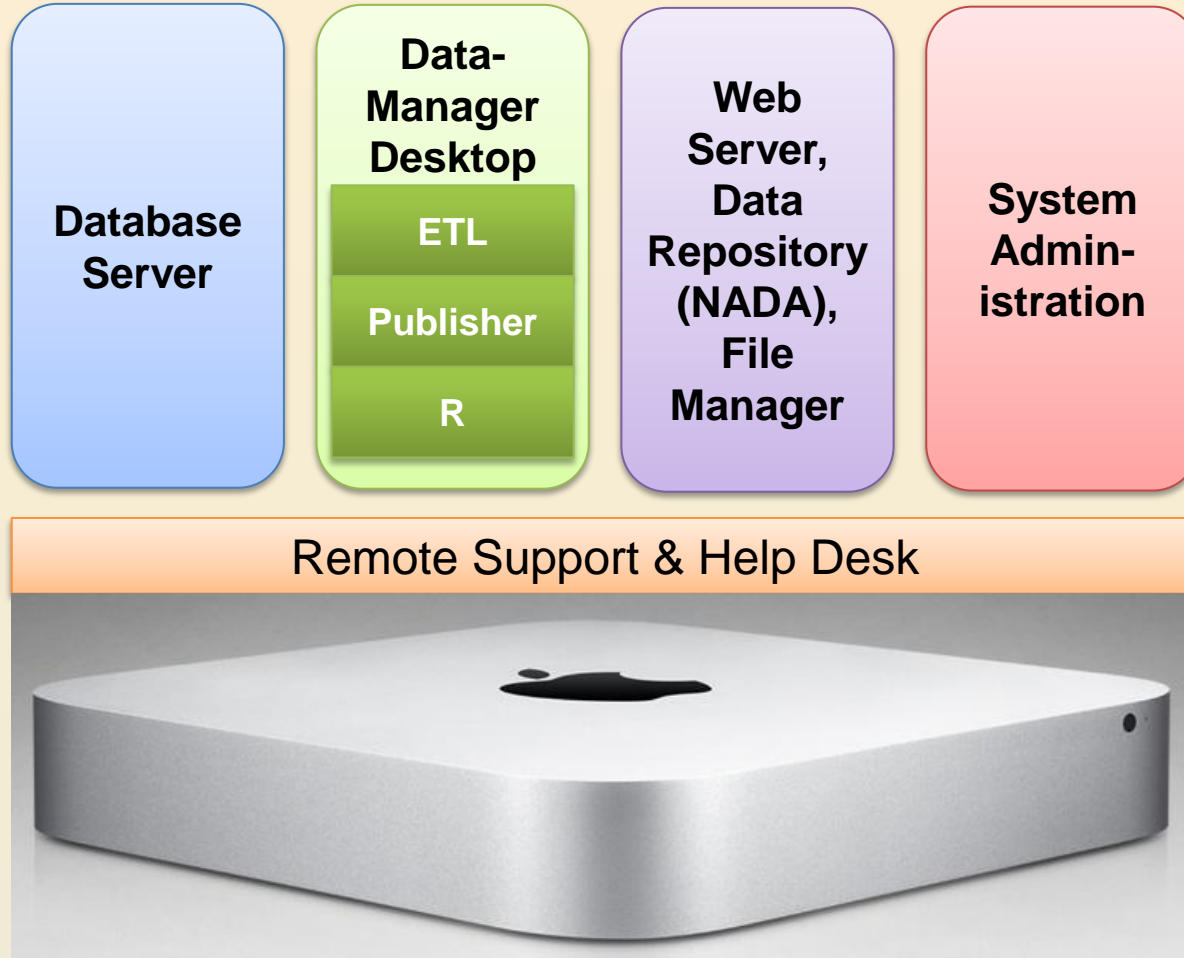
BILL & MELINDA
GATES *foundation*



Disclosure Risk Reduction



Centre-in-a-Box



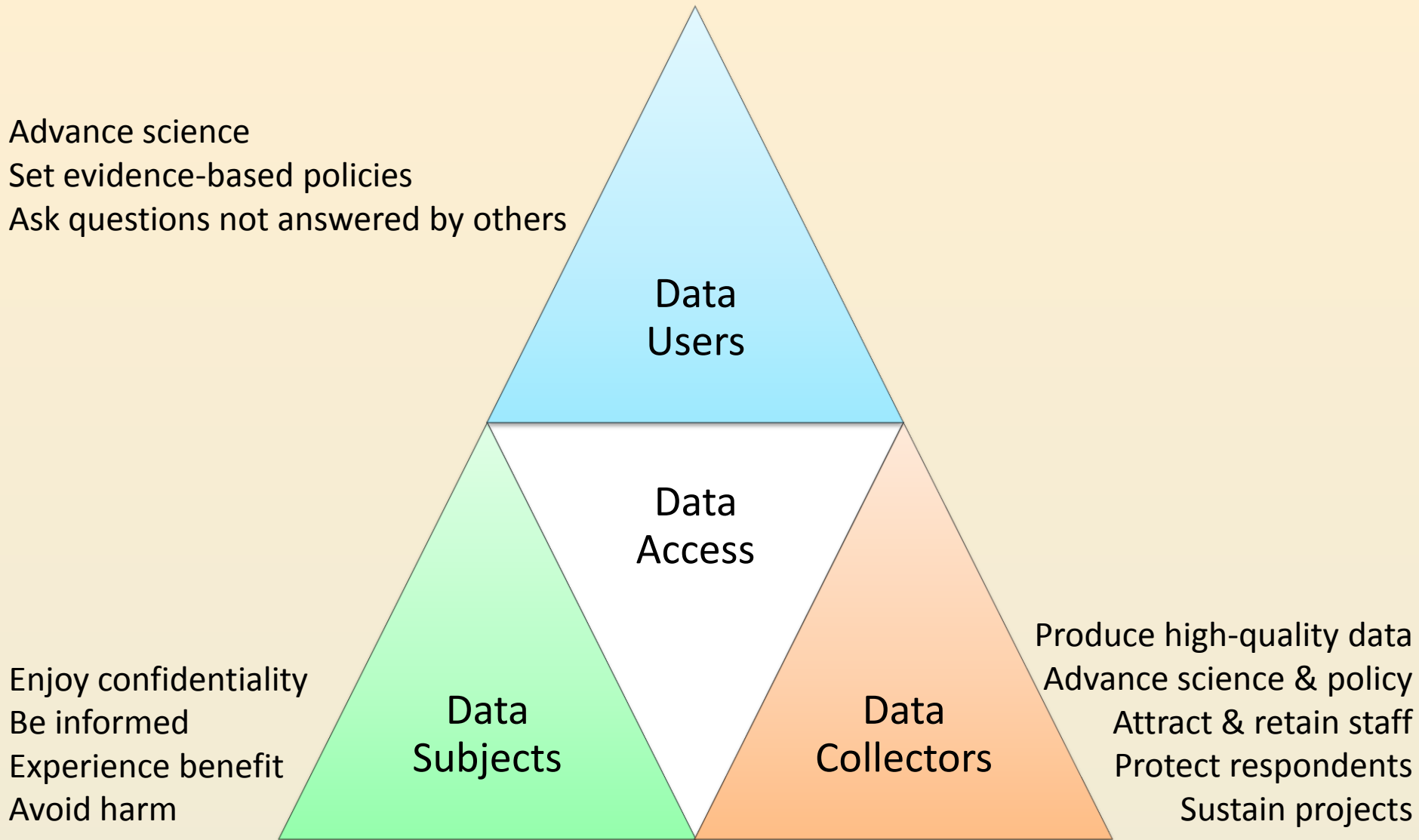


Table 1 Common event attributes for the INDEPTH data specification

Attribute	Variable name	Description
Record number	RecNr	A sequential number uniquely identifying each record in the data file
Centre identifier	CentreId	An identifier issued by INDEPTH to each member centre of the format CCCSS, where CCC is a sequential centre identifier and SS is a sequential identifier of the site within the centre in the case of multiple site centres
Individual identifier	IndividualId	A number uniquely identifying all the records belonging to a specific individual in the data file. For data anonymization purposes, this number should not be the same as the identifier used by a contributing centre to identify the individual, but the contributing centre should retain a mapping from this identifier to their identifier
Country identifier	CountryId	ISO 3166-1 numeric code of the country in which the surveillance site is situated
Location identifier	LocationId	Unique identifier associated with a residential unit within the site and is the location where the individual was or became resident when the event occurred. For data anonymization purposes, this identifier should not be the same as the identifier used internally by the contributing centre, but the contributing centre should retain a mapping of this identifier to their internal location identifier
Date of birth	DoB	The date of birth of the individual
Event	EventCode	A code identifying the type of event that has occurred (Table 2)
Event date	EventDate	The date on which the event occurred
Observation date	ObservationDate	Date on which the event was observed (recorded), also known as surveillance visit date
Event count	EventCount	The total number of events associated with this individual in this data set
Event number	EventNr	A number increasing from 1 to EventCount for each event record in order of event occurrence