



INDEPTH Network

Introduction to iSHARE2

Tathagata Bhattacharjee

iSHARE2 Support Team

IDMP – INDEPTH Data Management
Programme

INDEPTH Data Repository

iSHARE 2 
an **INDEPTH** project

Outline

- Introducing the iSHARE2 Support Team
- Background & History
- What is iSHARE2?
- This workshop

iSHARE2 Support Team

Africa Centre – South Africa



Kobus Herbst



Brendan Gilbert



Chiedza Munikwa



Titus Tei

Vadu – India



Sanjay Juvekar



Tathagata
Bhattacharjee



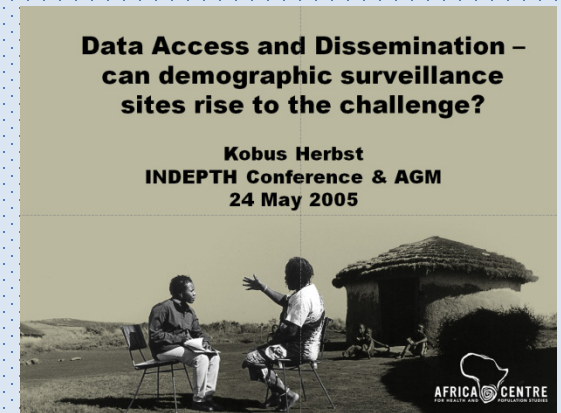
Sandeep Bhujbal

Participants

Country	Site	Data Manager
Burkina Faso	Nouna (BF031)	Cheikh Hamidou
Burkina Faso	Sapone (BF051)	Sombie Benjamin Seydou
Uganda	Kyamulibwa (UG031)	Innocent Erone

Background

- Longstanding debate in INDEPTH on data sharing
- Factors delaying data sharing:
 - Concerns about data quality
 - Concerns about capacity to manage sharing process
 - Uncertainty about what should be shared and how at Centre & Network level
 - Research agenda to guide data sharing



History - iSHARE

- iSHARE started in 2006, launched on 27 Dec 2007
 - Vadu, India
 - Kanchanaburi, Thailand
 - Wosera, Papua New Guinea
- Extended in 2008 with
 - Agincourt, South Africa
 - Magu, Tanzania
 - Dikgale, South Africa
- Subsequently joined by:
 - Chililab, Vietnam
 - Abhoynagar, Bangladesh
 - Nairobi, Kenya
- Supported through funding from Hewlett Foundation

History - IDS

- INDEPTH Data System Feasibility
 - Wellcome Trust Grant WT082083MA 2007
 - Proposal development workshop Feb 2007
 - Proposal submitted to Gates Foundation end 2007
 - unsuccessful
- INDEPTH Wellcome Trust Strategic Award 2008
 - Final defense Dec 2009
 - Unsuccessful, but ...
 - Receive proposal development funding

History – iSHARE2

- 2010 - Metadata Technology consultants review iSHARE and made recommendations for the next generation iSHARE
 - Centre-in-a-Box
 - DDI Metadata use
 - NADA Web Repository
- Revised strategic award proposal combines iSHARE and IDS
- 2011 – CiB Technical Specifications and pilot implementations at Vadu and Africa Centre
- INDEPTH Strategic Award Proposal to Wellcome Trust partially successful
- Mar 2012 Strategic Award to INDEPTH by Wellcome Trust
- Aug 2012 – Wellcome Trust funding for iSHARE2 commences
- Jan 2013 – First iSHARE2 Workshop
- Jul 2013 – Launch of INDEPTH Data Repository and INDEPTHStats

History – INDEPTH Data Access & Sharing Policy

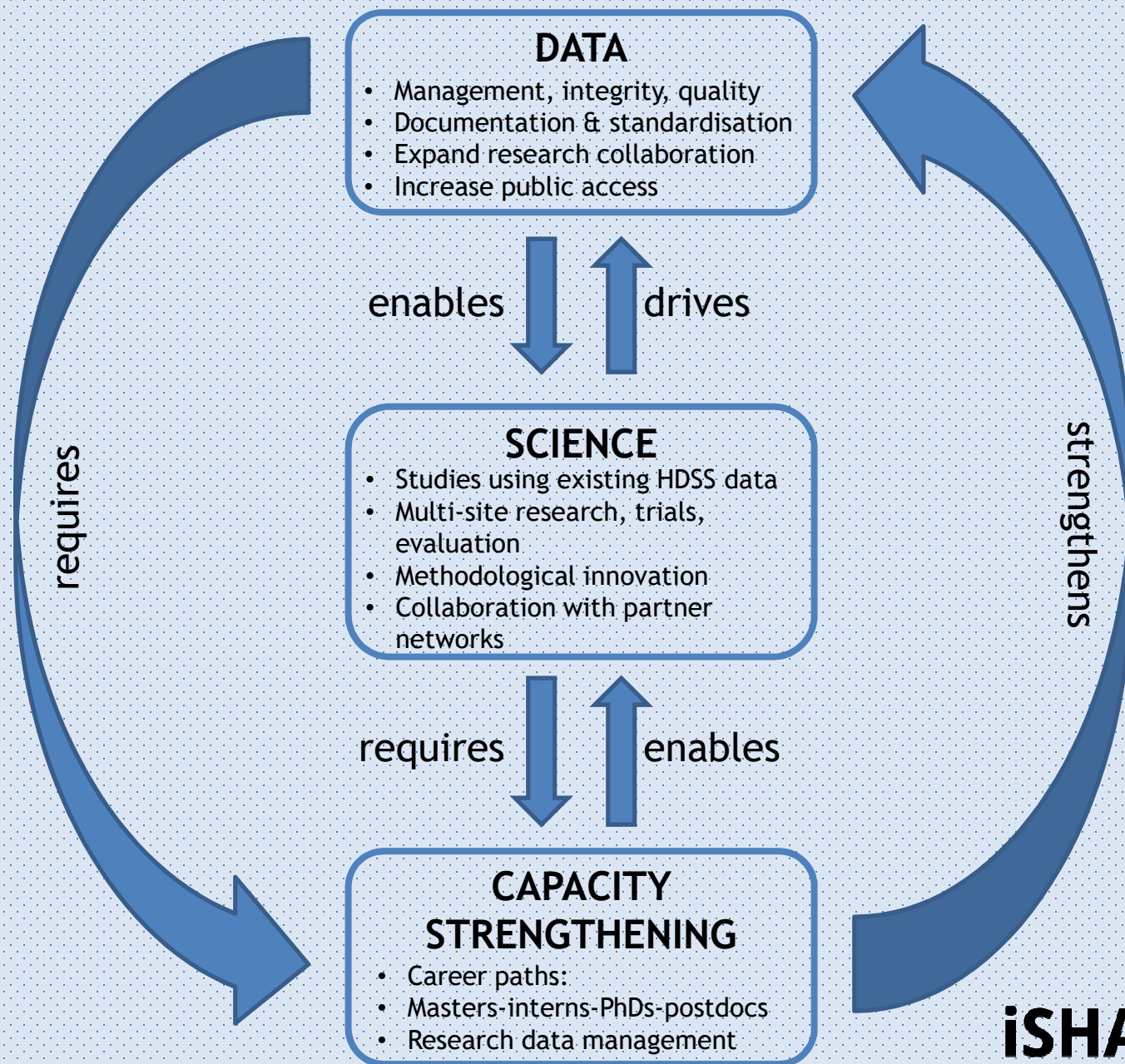
- Sustainable data sharing in public health research – INDEPTH-COHRED joint workshop Nairobi, 28-29 July, 2011 attended by 22 INDEPTH members
- Joint statement released on 6 Sept 2011
- Data Access and Sharing Committee 23-24 Nov 2011 Nairobi chair Dr Alex Esseh
- Draft policy circulated to all INDEPTH members and endorsed by INDEPTH Board
- Policy published in Int J Epidemiol Apr 2012

History – Micro Dataset Standard

- Migration Working developed a standard micro dataset for migration event history analysis
- Accra meeting Mar 2012 – finalised standard EHA micro data format
- Published Apr 2012 in Int J Epidem
- Accra Jul 2012 – STATA scripts to calculate basic demographic indicators
- Accra Sep 2012 – Standard STATA scripts and Excel template to generate INDEPTHStats indicators

What is iSHARE2?

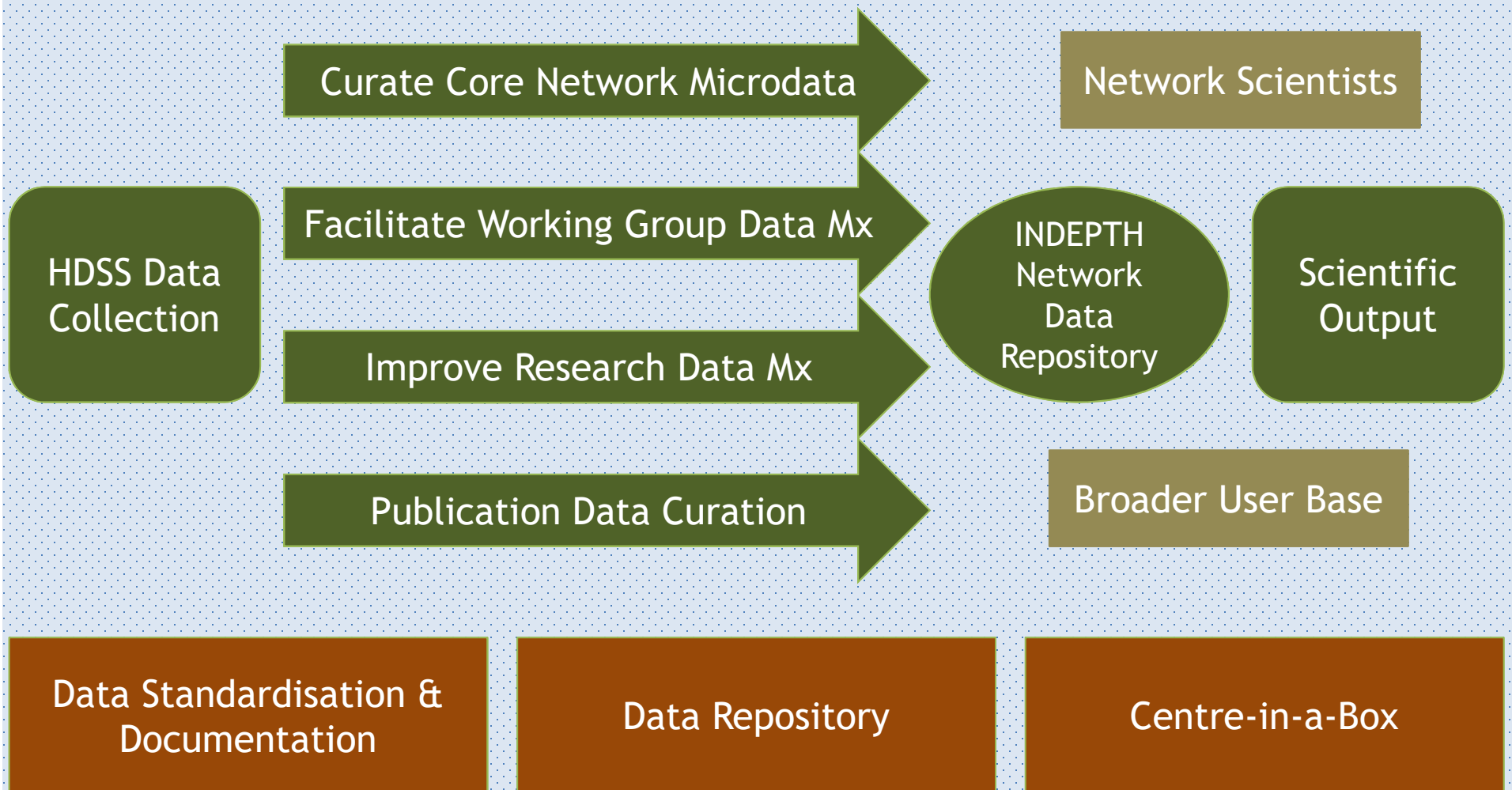




iSHARE2 Objectives

- Assist INDEPTH Scientific Working Groups and Network scientific activities to extract data from the operational databases of member centres
- Lead an expansion in INDEPTH data sharing by making available the micro datasets produced by Network scientific activities on a publicly accessible, web-hosted INDEPTH repository
- Strengthen and maintain the skills, procedures and infrastructure to assure quality and share longitudinal datasets of public health importance
- Building of data management capacity for the Network by providing course content and placements for students and trainees in research data management.

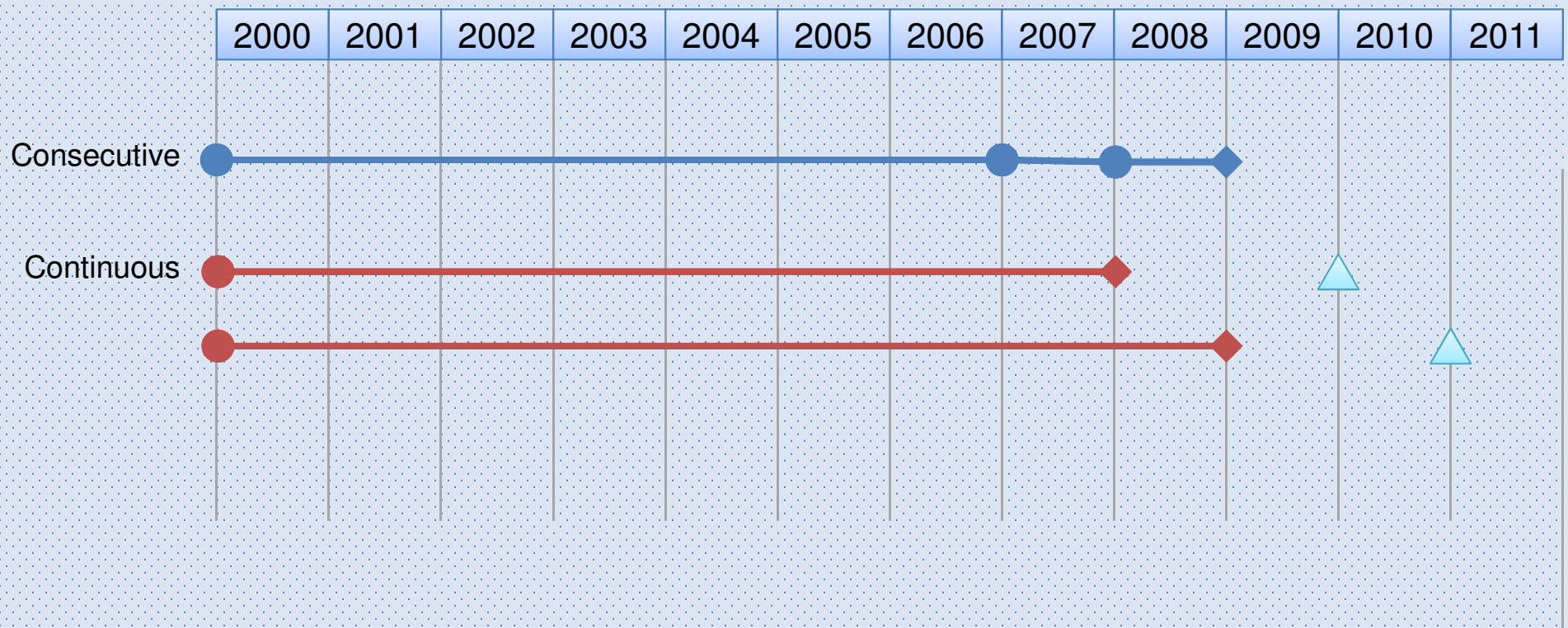
Approach



Data Standardisation

- Codification of Member Centres & Sites
 - CCNNS
 - CC – is the ISO 3166-1 alpha-2 code of the country where the site is situated.
 - NN – Sequential number uniquely identifying a centre within the country
 - S – Sequential site identifier for multi-site centres
 - Special Network Identifier: GH001

Dealing with Longitudinal Data Releases



Data Documentation

- DDI Standard – XML-based metadata
- DDI Lifecycle & CodeBook
 - Document description, incl bibliographic citation
 - Study description
 - File description
 - Variable description
- Nesstar Publisher

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Nesstar Publisher v4.0.8 - AfricaCentre.Nesstar - [My Projects]

File Edit Documentation Variables Data Publishing Tools Help

English

Projects:

- My Projects
 - AfricaCentre
 - Document Description
 - Study Description
 - Identification
 - Version
 - Overview
 - Scope
 - Coverage
 - Producers and Sponsors
 - Sampling
 - Data Collection
 - Data Processing
 - Data Appraisal
 - Data Access
 - Disclaimer and Copyright
 - Contacts
 - Other Study Materials
 - Datasets
 - ZA031.1.v1
 - File Description
 - Key Variables & Relations
 - Variables
 - Data Entry
 - Variable Groups
 - External Resources

File Information

File Location
<D:\ACDIS\Projects\SHARE\Data Documentation\AfricaCentre.Nesstar>

File Size
86.69 MB

Last Modified
2012-12-04 16:00

Title
Africa Centre INDEPTH Core Dataset 2000-2010 (Residents only)

ID number
INDEPTH.ZA031.1.v1

Version
v1: Original version extracted on 4 July 2012

Version Date
2012-07-04

Version Notes
v1 : Original version

Abstract

The health and demography of the South African population has been undergoing substantial changes as a result of the rapidly progressing HIV epidemic. Researchers at the University of KwaZulu-Natal and the South African Medical Research Council established The Africa Centre for Health and Population Studies in 1997 funded by a core grant from The Wellcome Trust, UK. Given the urgent need for high quality longitudinal data with which to monitor these changes, and with which to evaluate interventions to mitigate impact, a demographic surveillance system (DSS) was established in a rural South African population facing a rapid and severe HIV epidemic. The DSS, referred to as the Africa Centre Demographic Information System (ACDIS), started in 2000.

ACDIS was established to 'describe the demographic, social and health impact of the HIV epidemic in a population going through the health transition' and to monitor the impact of intervention strategies on the epidemic. South Africa's political and economic history has resulted in highly mobile urban and rural populations, coupled with complex, fluid households. In order to successfully monitor the epidemic, it was necessary to collect longitudinal demographic data (e.g. mortality, fertility, migration) on the population and to mirror this complex social reality within the design of the demographic information system. To this end, three primary subjects are observed longitudinally in ACDIS: physical structures (e.g. homesteads, clinics and schools), households and individuals. The information about these subjects, and all related information, is stored in a single MSSQL Server database, in a truly longitudinal way—i.e. not as a series of cross-sections.

The surveillance area is located near the market town of Mtubatuba in the Umkanyakude district of KwaZulu-Natal. The area is 438 square kilometers in size and includes a population of approximately 85 000 people who are members of approximately 11 000 households. The population is almost

Data Repositories

- A place where a search engine can locate data on a particular topic
- A user interface for prospective data users to:
 - Explore available data
 - Obtain detailed documentation
 - Access the actual data
- Provides an endpoint for a dataset citation (a url that doi's can point to)
- Control versioning of data sets

Why an INDEPTH Data Repository?

- Why not?
 - Suitable repositories exist that will gladly host INDEPTH data
- Opportunity to build capacity for data curation in LMIC
- No repository currently specialises in longitudinal surveillance data
- Ability to implement INDEPTH's Data Access & Sharing policy
- Can configure the repository to facilitate access to data for Network research objectives as well

Data Repository

- Based on World Bank Data Repository NADA, used by:
 - International Household Survey Network
 - Many national statistical offices
 - DataFirst

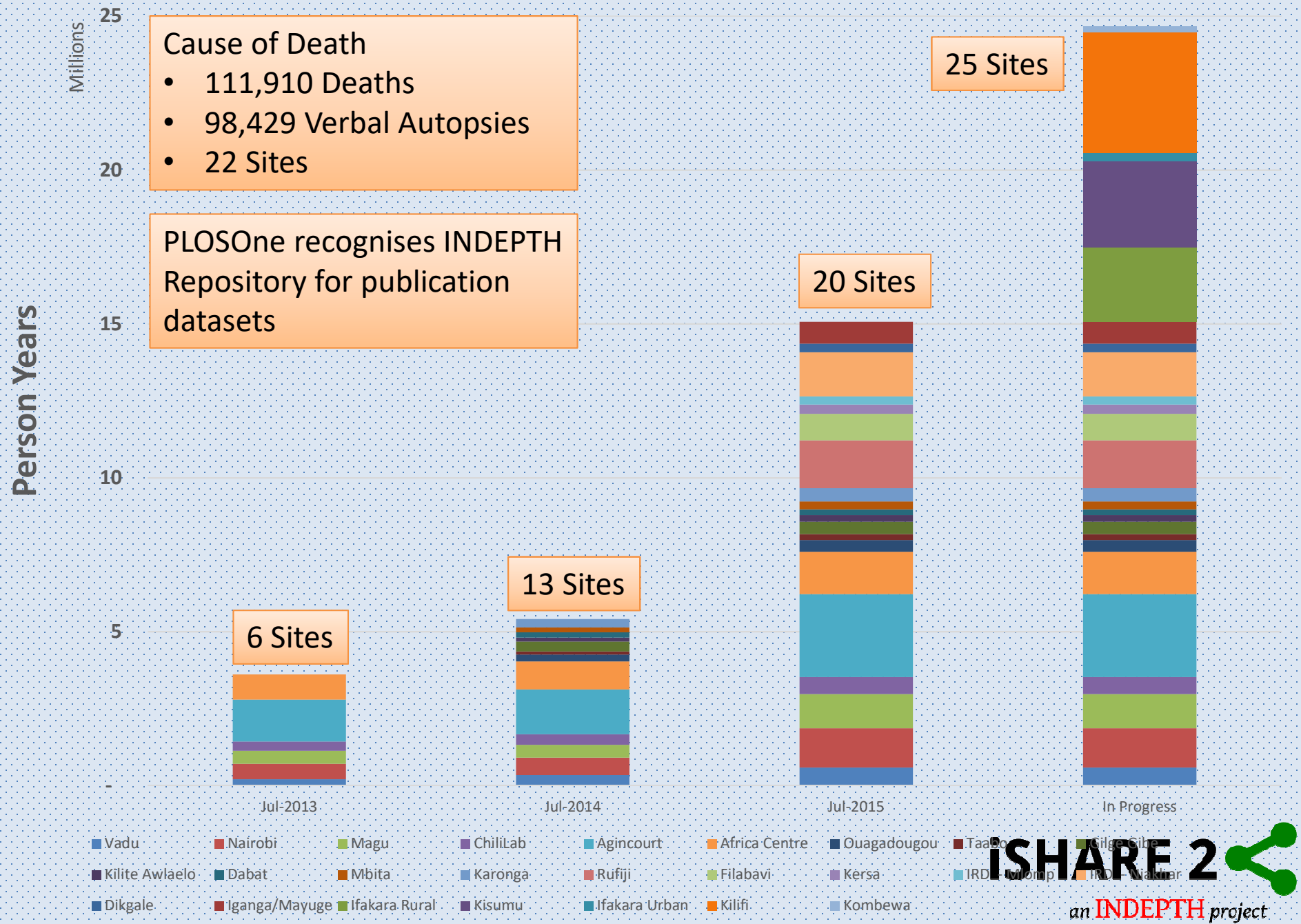
iSHARE2 Workshops

- Pune, India: January 2013 – 9 sites
- Mtubatuba, South Africa: October 2013 – 6 sites
- Dubai, UAE: March 2014 – 7 sites
- Dubai, UAE: November 2014 – 7 sites
- Dubai, UAE: May 2016 – 7 sites
- Pune, India: July 2016 – 5 sites
- Dubai, UAE: May 2017 – 3 sites

iSHARE2 Refresher Workshops

- Dubai, UAE & Agincourt, SA: May 2014 – 7 sites
- Dubai, UAE: June 2015 - 18 sites
- Dubai, UAE: May 2016 – 24 sites
- Dubai, UAE: May 2016 - <n> sites

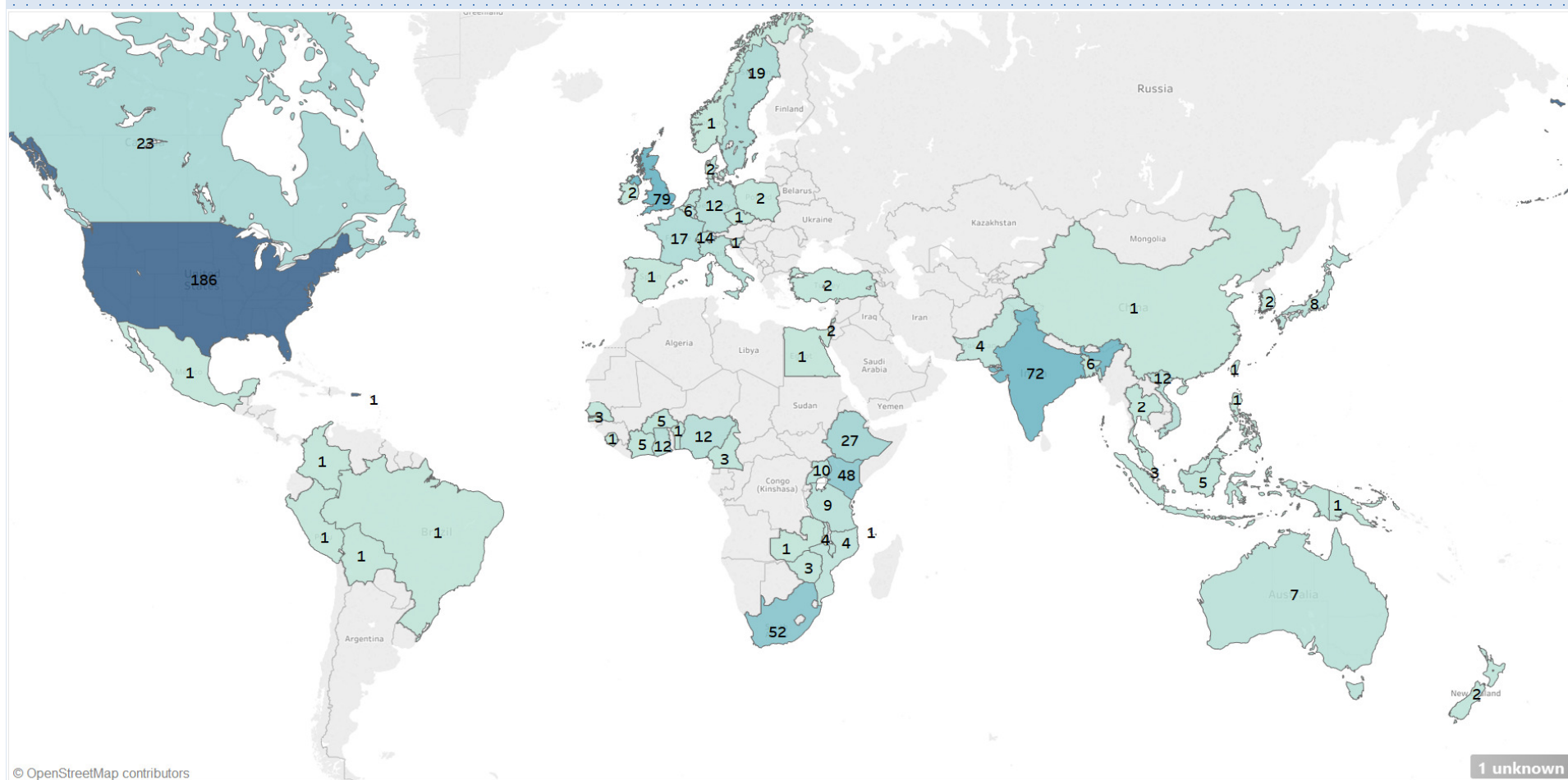
INDEPTH Repository : Shared Individual Level Data



Types of Datasets on Repository

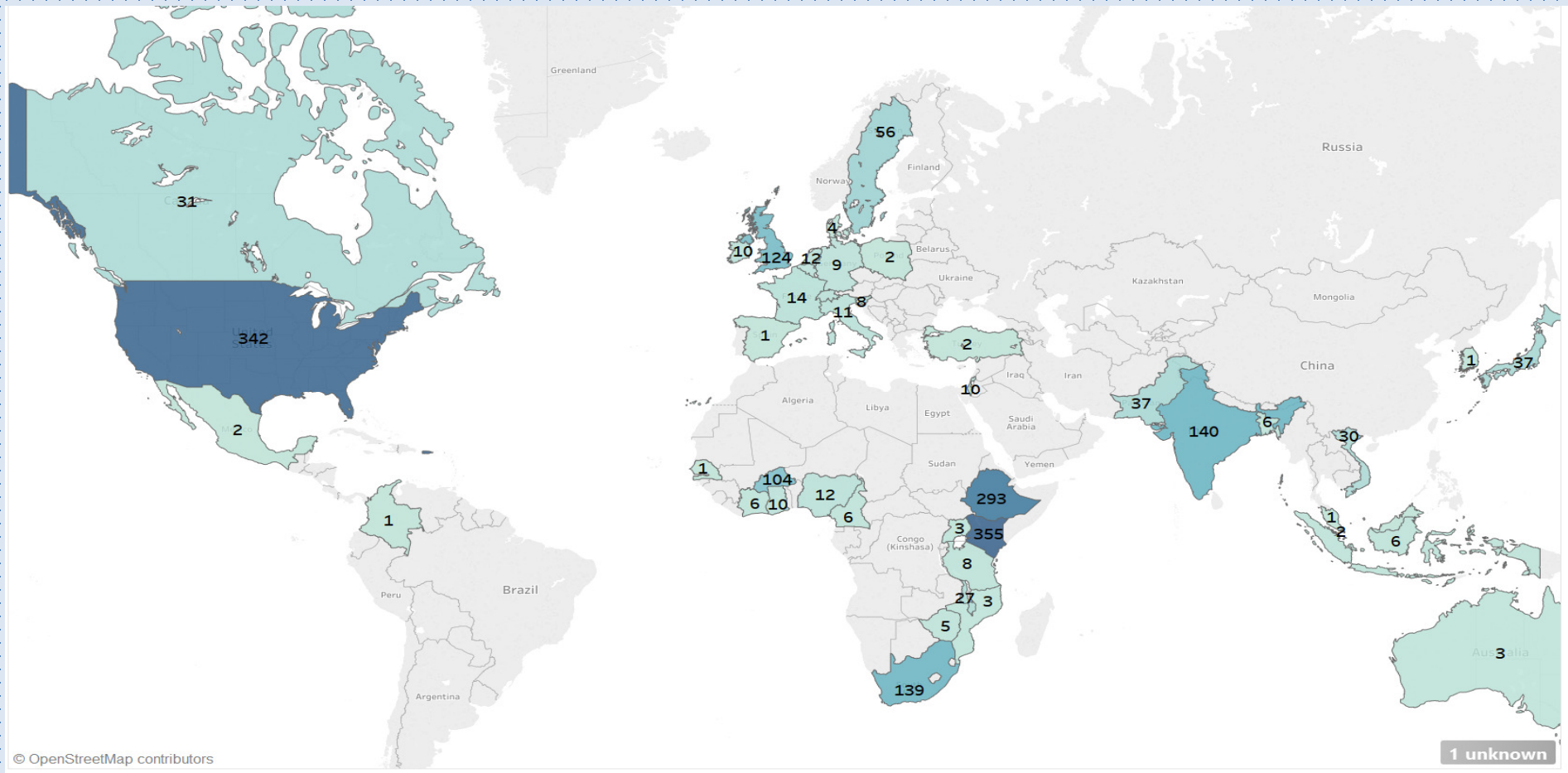
- INDEPTH HDSS Core Mirco Dataset
- Other Datasets:
 - Epidemiology and Treatment of Epilepsy in sub-Saharan Africa
 - INDEPTH Network Cause-Specific Mortality - Release 2014
 - Participation in Africa Centre's HIV surveillance between 2003 and 2012
 - Agincourt Under Five Mortality 2015
 - The evolving demographic and health transition in four low- and middle-income countries
 - MADIMAH
 - HAALSI

Registered Users on INDEPTH Data Repository



Total Registered Users: 728 + 1 Unknown as on 2017-01-18

Data Download Statistics



Total Downloads: 1893 + 1 Unkown as on 2017-01-18

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Download Statistics

Top 5 Institutions

- Institute for Health Metrics and Evaluation (IHME)
- University of Gondar
- Population Division, DESA, United Nations
- Karolinska Institutet
- University of Gothenburgh

Centre-in-a-Box

Database
Server

Data-
Manager
Desktop

ETL

Publisher

R

Web
Server,
Data
Repository
(NADA),
File
Manager

Remote Support & Help Desk



CiB Significance

- Standard Operating and Software Environment
 - Only Database System varies between Centres
 - Standard, quality-controlled procedures to extract, analyse and present network data sets
- Portable Hardware
 - Can be used by any data analysis workshop
 - Consistent and easy preparation for joint analysis
- Incorporate CiB training in Research Data Management MSc
 - Build sustainable capacity in Network

THE WORKSHOP

Learning Outcomes

- For member centre's Data Managers:
 - A detailed knowledge for installing, configuring, maintaining and working with the different components of CiB which will be useful for participants to manage the entire life-cycle of research data management at their respective centre's HDSS data.
 - Deploying a ready-to-use CiB for each participating centre.
- For member centre's Demographers / Scientists / Leaders:
 - Centre leaders orientated with iSHARE2 purpose, activities, responsibilities and roles of different personnel at centres.
 - Calculating the standard INDEPTH indicators from the core micro data set.

Seventh iSHARE2 Workshop

Workshop Schedule as in the shared .pdf file

Acknowledgements

wellcometrust

Strategic Award

THE WILLIAM AND FLORA
HEWLETT
FOUNDATION



BILL & MELINDA
GATES *foundation*



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*Thank
you*

