Technology & innovation in health information systems

A lever for health system strengthening

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Outline

- Introductory Outline Of CHIM
- Data Scarcity Challenges
- Update on recent initiatives within GHS
- Progress made so far in fostering health information system infrastructure
- The Ghana HIMS Strategy
- Other Background Strategies
- Our Challenges
- Possible Mitigating Measures
- Lessons Learnt

Introductory Outline Of CHIM

The Centre was established as the Statistics Section of the MOH in 1962 with support form WHO

In 1970/71 the Ministry of Health reorganised the unit into a body called Biostatistics and Documentation Division (BDD) of the MOH

In 1974 the name Biostatistics and Documentation Division was changed to the Centre for Health Statistics (CHS)

In 1994, as part of the restructuring of the health sector, the CHS was redefined to involve generation of information for planning and management of health services at all levels of the health system in Ghana, the name CHS was changed to Centre for Health Information Management (CHIM)

Introductory Outline Of CHIM
Roles of CHIM

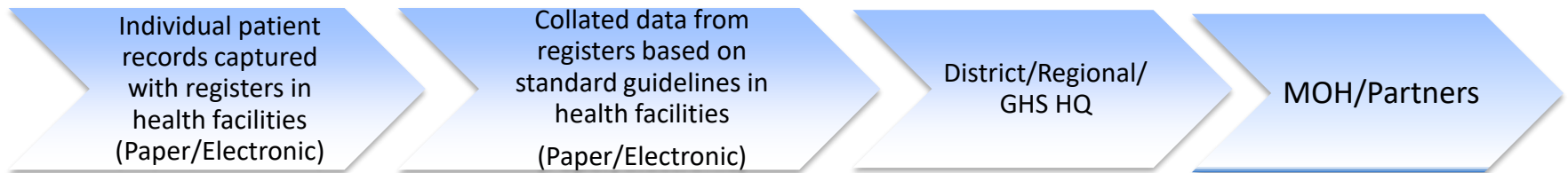Collection and compilation of basic health statistics for

- Planning, monitoring and evaluation of health services and programmes
- Assessing the efficiency of health care delivery
- Medical research

Development of Information and Communication Technology initiatives to improve health information management

Dissemination of health information to other MOH units/divisions and other agencies

Development of training programmes on health information

Flow of health data

Individual patient records captured with registers in health facilities (Paper/Electronic) → Collated data from registers based on standard guidelines in health facilities (Paper/Electronic) → District/Regional/GHS HQ → MOH/Partners

Data Scarcity Challenge

- Data quality
  - ➢Data capturing
  - ➢Transmission

- Data accessibility

Data Scarcity Challenge
Data capturing

➢ Absence of diagnosis; Made unskilled staff attempt to insert diagnosis on behalf of clinicians in order to complete the records

➢ Incomplete information/Diagnosis; Made coding and categorization difficult or more generalized.

➢ Inaccurate information about Cause of Death

➢ Illegible handwriting; Entry clerks tempted to guess meaning of undecipherable data

➢ Late submission of rep; Late receipt of data means late implementation of necessary action

➢ Poor documentation; symptoms recorded for final diagnosis

➢ Use of non-standard abbreviations

➢ Inconsistent data; Female conditions for male and vice versa, death as outcome for non-fatal conditions

Data Scarcity Challenge Data transmission

➢ Loss of some data as paper-based reports are transported across the various levels of the health system

➢ Inadequate resources such computers and internet connectivity to support the transmission of data electronically

➢ Inadequate data security mechanisms in place to reduce the risk of compromising the integrity of the data during transmission

Data Scarcity Challenge
Data accessibility

- Parallel programs for the same health intervention resulting in data silos

- Lack of proper stakeholder engagement

- Governance

Update on recent initiatives within GHS

Ghana has since 2012 successfully deployed a nationwide web-based health information management system

The system is known as the District Health Information Management System (DHIMS)

The system runs on the dhis2 platform

The system is designed to serve as a repository for data generated by all programs across the health service

Over 8200 health facilities in Ghana submit report periodically through DHIMS

Ongoing progressive rollout of a client-based system to manage public health interventions such as TB/HIV clients as well as MCH clients. Data from the client-based system will feed into DHIMS

Ghana has developed and trained health staff on a standard operating procedure for health information management

Progress made so far..

There has been a significant improvement in the completeness and timeliness of reporting health data

Significant improvement in data quality

Efficiency in analyzing data across programs due to the improve accessibility of data

Improvement in data use by managers for monitoring and decision making

HIMS strategies

We set out to;

Rationalization of national data sets to

Integrate all health service data from all types of facilities, irrespective of type and ownership

Development of GHS HIMS Strategic Direction Guidelines & Policies,
to clearly define the interoperability parameters, using the DHIMS platform as the standard

Take inventory of all eHealth initiatives within the Health Service to ensure effective monitoring and integration

Build local capacity for health information management

Have a full scale rollout of client-based health information systems in all health facilities in Ghana to improve data quality and accessibility
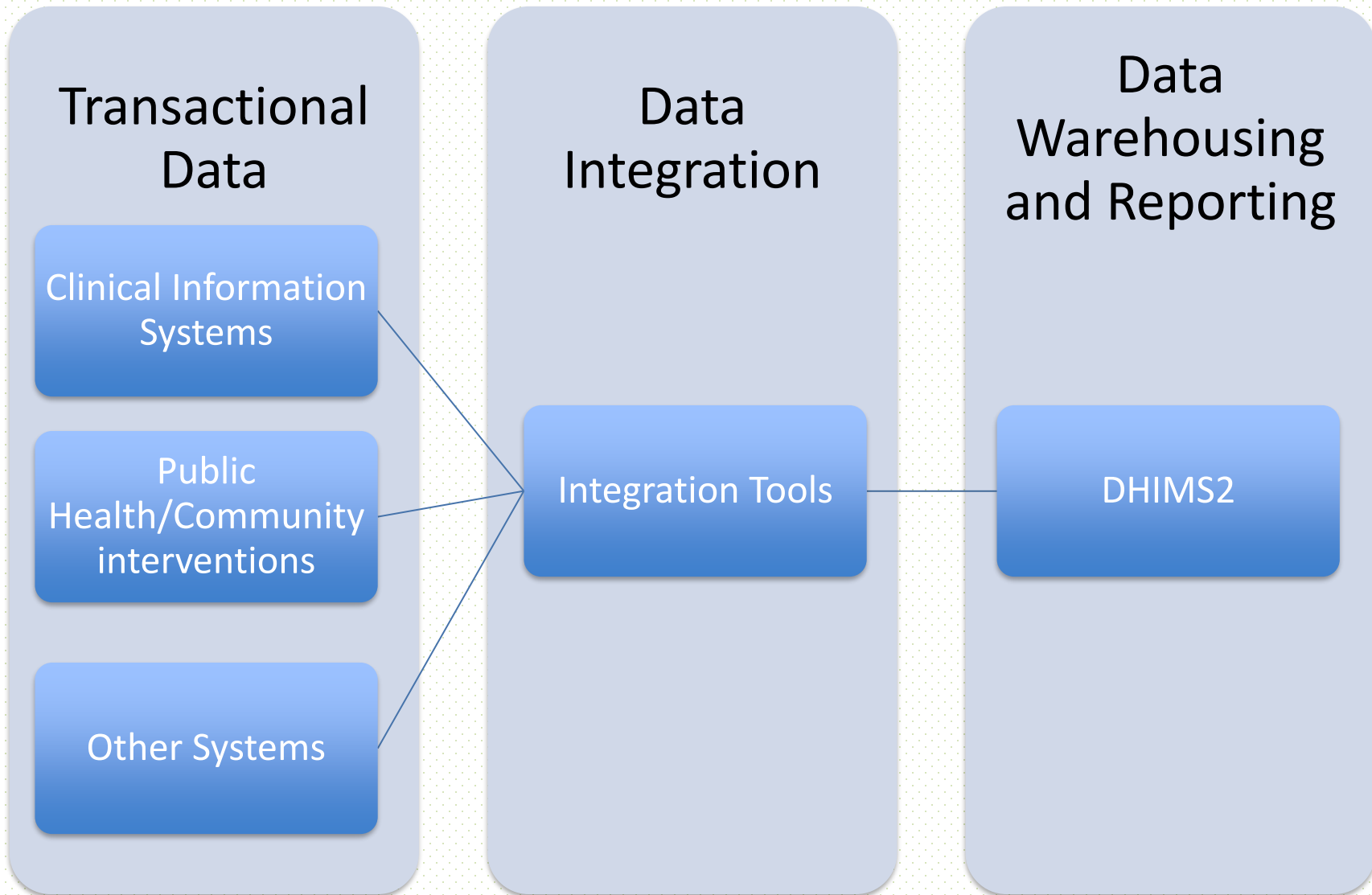
Our Challenges

Challenges

- Gaining trust of various stakeholders
- Inadequate local support for system initiatives
- Manager commitment at all levels
- Partial contribution to system by teaching hospitals

Lessons Learnt

- Develop a good integration platform

- Demonstrate ability to make data quality and make the quality data easily accessible

- Do not be confrontational

- Provide support for all the programs

- Be ready to engage engage & engage

Thank You

Merci

Obrigado

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FOR YOUR KIND ATTENTION