

## Chapter 12

# “It Has Been Quite a Journey”: Experiences and Evolution in Health Information Systems in Zimbabwe

**Njabulo Bruce Khumalo**

*National University of Science and Technology, Zimbabwe*

### **ABSTRACT**

*Zimbabwe’s health information system has developed over the years from a paper-based system using T-tally systems which had their fair share of successes and challenges. These challenges prompted the then Ministry of Health and Child Welfare, now, the Ministry of Health and Child Care and its partners to implement electronic health information management systems. This chapter therefore describes the challenges faced in Zimbabwe’s health information management and how the Ministry of Health and Child Care and its partners responded to these challenges. The study also highlights success stories in health information management in the country. The purpose of the study is achieved through a literature review covering health information management in Zimbabwe.*

### **INTRODUCTION**

The importance of health information management systems to the health sector cannot be over-emphasized. Without adequate management of health information, health delivery systems would be adversely affected. Health information forms the basis for decision making at international, regional, national and local levels, without which, outbreaks of diseases could not be detected and the required resources mobilized quickly. In order to have coordinated health information management activities, countries all over the world have had to develop and or implement health information systems. These systems, manual or electronic, have been instrumental in facilitating the gathering, storage, sharing, collation and dissemination of health information to relevant offices for decision-making purposes. However, in the process of implementing health information systems, countries such as Zimbabwe have experienced successes and challenges. Zimbabwe has gone through this process of implementing a health information management system, and an exploration of the successes and challenges could reveal lessons learnt for other countries considering implementation. Furthermore, studying experiences and evolutions in health

DOI: 10.4018/978-1-5225-2262-1.ch012

information management in the country can help reflect on what has been done well, needs to be done or even rectified to improve the health information management in the country.

Zimbabwe is currently using the District Health Information System (DHIS-2), an electronic and web-based information system. Prior to DHIS-2, Zimbabwe implemented an earlier version of the software, DHIS-1.4 and before that, the T (Tally) paper-based health information system. Navigating through these different health information systems has brought with it a number of opportunities and challenges for the Ministry of Health and Child Care (MoHCC). This chapter will explore these opportunities and challenges.

It should be noted that in 2013, the Ministry of Health and Child Welfare (MoHCW) changed its name to the Ministry of Health and Child Care (MoHCC). These two names will be used interchangeably in this chapter.

## **BACKGROUND**

### **The Health Delivery System in Zimbabwe**

The health delivery system in Zimbabwe is divided into four levels of care, that is, primary, secondary, tertiary, and quaternary. Primary care consists of small clinics or facilities that patients in rural areas usually consult first (MoHCW, 2012). Health care at this level tends to be basic, focusing on disease prevention, maternity, and some curative services; most of these facilities are run by nurses (Osika et al, 2010). Health issues that are more serious or beyond the scope of the health services offered by primary care clinics are referred to district hospitals which are at the secondary level (MoHCW, 2012). According to Osika et al (2010) secondary care consists of facilities that receive patients via referrals from the primary care facilities. The tertiary care level is made up of provincial hospitals. Osika et al (2010) state that tertiary care consists of seven provincial hospitals, and are found in all provinces of Zimbabwe except for Bulawayo and Harare, which have Central Hospitals. Provincial hospitals receive referral patients from district hospitals and tend to have specialists on staff to deal with more difficult health issues (Osika et al, 2010). Quaternary or central care is the highest level and usually handles referrals from lower level hospitals. Hospitals in the quaternary level have the largest staff of specialists and clinicians, they report directly to the Ministry of Health and Child Welfare (MOHCW) (Osika et al, 2010).

### **Health Information Systems in Zimbabwe**

The National Health Information and Surveillance (NHIS) system of Zimbabwe was designed and piloted in 1985 and rolled out nationwide in 1988. Prior to implementation of this system, there was a health information system operational during the colonial era. Matavire (2010) avers that the colonial system had no uniformity in data capturing and dealt with data mostly from major health facilities. Sanders (1990) also points out that the colonial system had all the features typical of an inappropriate, inequitably distributed developing country service, compounded by inequalities based on racial discrimination. This colonial information system was reviewed in 1984 leading to a pilot of a new paper based NHIS system in two districts in 1985. The pilot led to the production of new data entry formats and the system was rolled out nationally in 1988 (Matavire, 2010). With the implementation of this system, data was

13 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

[www.igi-global.com/chapter/it-has-been-quite-a-journey/178687](http://www.igi-global.com/chapter/it-has-been-quite-a-journey/178687)

## Related Content

---

### The Challenges of the IS/IT Projects in the Healthcare Sector

Jorge Gomes and Mário Romão (2019). *International Journal of Applied Research on Public Health Management* (pp. 67-81).

[www.irma-international.org/article/the-challenges-of-the-isit-projects-in-the-healthcare-sector/218869](http://www.irma-international.org/article/the-challenges-of-the-isit-projects-in-the-healthcare-sector/218869)

### Mapping Women's World: GIS and the Case of Breast Cancer in the US

Khadijeh Rouzbehani and Shirin Rouzbehani (2018). *International Journal of Public Health Management and Ethics* (pp. 14-25).

[www.irma-international.org/article/mapping-womens-world/196593](http://www.irma-international.org/article/mapping-womens-world/196593)

### Comparison of Machine Learning Algorithms in Predicting the COVID-19 Outbreak

Asiye Bilgili (2022). *Handbook of Research on Interdisciplinary Perspectives on the Threats and Impacts of Pandemics* (pp. 320-336).

[www.irma-international.org/chapter/comparison-of-machine-learning-algorithms-in-predicting-the-covid-19-outbreak/291926](http://www.irma-international.org/chapter/comparison-of-machine-learning-algorithms-in-predicting-the-covid-19-outbreak/291926)

### The Future of Healthcare: Political Participation of Nursing and Public Health Students

Christine Vandenhouten, Susan Gallagher-Lepak, Derryl E. Block, Sylvia May Kubsch, Jan Strom and Crystalmichelle L. Malakar (2017). *Public Health and Welfare: Concepts, Methodologies, Tools, and Applications* (pp. 1519-1536).

[www.irma-international.org/chapter/the-future-of-healthcare/165878](http://www.irma-international.org/chapter/the-future-of-healthcare/165878)

### Mantra and Homa Therapy: Computational Analysis of Different Aspects to Benefit Mankind With Healthcare 4.0 and Industry

Rohit Rastogi and Devendra Kumar Chaturvedi (2023). *International Journal of Applied Research on Public Health Management* (pp. 1-24).

[www.irma-international.org/article/mantra-and-homa-therapy/315815](http://www.irma-international.org/article/mantra-and-homa-therapy/315815)