

# Framework for Medical and Health Records Management Skills and Competency Development in Limpopo Public Hospitals to Support Healthcare Service Delivery in the Digital Era

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## **Abstract**

*Skills and competency are vital for successful performance of any business function or activity in any organisation. The medical and health records management functions and activities in the public hospitals are no exception. If medical and health records are managed without appropriate skills and competency, they become inaccessible/non-locatable, are damaged or stolen, go missing or are misfiled, altered and even falsified. This eventually results in a chaotic healthcare service or even an inability by healthcare providers to render healthcare services. This study sought to develop a framework that may be applied to map-out standard requirements for officials responsible for medical and health records management to ensure that they are sufficiently capacitated with skills and competencies to effectively support public healthcare service in the digital age in Limpopo public hospitals. Data was collected using a questionnaire, as well as observations and interviews. The study discovered that the training and capacity building of records management staff in the public hospitals of Limpopo, South Africa, is lacking to such an extent that healthcare services are compromised.*

*The study recommends a framework for medical and health records management skills and competency development to support public healthcare service delivery and ensure provision of the necessary resources.*

**Keywords:** Medical Records, Health Records, Framework, Skills and Competency, Public Health, Service Delivery

## **Introduction and Background to the Study**

This paper is concerned with the skills and competency for management of medical and health records in the healthcare institutions of Limpopo province, South Africa. The two concepts 'medical records' and 'health records' are used together rather than interchangeably in this paper since they are different and both records are managed, accessed, required and packaged together in the healthcare institutions. Besides, it is important to show the distinctions between the two concepts to the readers before going deeper into the content of the paper. Medical records and health records like Electronic Medical Records (EMR) and Electronic Health Records (EHR) are often used interchangeably though not exactly the same. It is often too difficult to show a distinction between the two since together they render documentation of patient health and medical histories for healthcare practitioners. First thing that makes a distinction is the use of the words "medical" and the word "health". Medical records covers information about diagnosis and treatment of patients medically and may be managed with

Electronic Medical Records (EMR) system. Medical records contain information about ‘medical history, diagnoses, medications, immunisations, and allergies’ of a particular patient. Health records cover detailed information about patients’ health overall and may be managed using Electronic Health Records (EHR) system (Finance online 2019; Garrett and Seidman 2011). This implies that health record is higher than the medical records since it talks to the overall information about the patients’ health and care provided. Hence, both health records and medical records need skills and competency for their proper management.

One of the key investments for proper records and archives management is identification of key training or skills gaps and funding for training and development. In the post-colonial regime in African countries, there was no systematic archives and records management programme (Asogwa 2012a; Ngoepe 2014; Nengomasha 2013). There was a lack of interest in investing in proper records management by the post-colonial regime until African countries gained independence. This lack of interest to develop proper records and archives management also led to people becoming discouraged to consider archives and records management as a career (Asogwa 2012a). For instance, the study by Adjei (2011) discovered that Accra Psychiatric hospital in Ghana experiences a lot of problems relating to mental healthcare recordkeeping for patients, that included inadequate policies and procedure, insufficient resources, unqualified officials and uncoordinated records management programs. In his study about training and development needs of medical records staff at the Korle-Bu Teaching Hospital, Adjei (2013) came to realise that “one of the key areas of neglect has been training and staff development”. The medical records service has never received any attention in terms of training and development for years in the public healthcare services of Ghana at Korle-Bu Teaching Hospital, which eventually impact negatively on the healthcare service rendered to patients (Adjei 2013).

After independence, African countries such as Uganda, Kenya, Malawi, Botswana, Zimbabwe (Mutiti 2002) and Nigeria (Asoga 2012a, 2012b) tried to establish records and archives management; however, due to a scarcity of competent and skilled staff, inexperienced personnel were promoted to

manage records and archives. For instance, the study by Adjei and Mensah (2016) revealed that at Ghana Korle-Bu Teaching Hospital, educational qualifications for medical records management officials who participated in the study were not relevant to medical records management. In their findings, 26% (29) respondents had diploma, 16% (18) had Education certificate, 5% (6) had basic education certificate, 13% (15) middle school leavers certificates, 15% (17) had senior secondary certificates and 11% (12) had other qualifications. Looking at the entire report, no single qualification is closely or exactly suitable for records management skills and competency.

Interest in records management as a career, deteriorated due to limited or no training opportunities in managing records, which gave rise to low staff morale, low status and poor remuneration (Asogwa 2012a; Boonstra and Broekhuis 2010; Mensah and Adjei). At Ghana Korle-Bu Teaching Hospital (KBTH) management never recognised or valued records management services due to low educational qualifications of the records management officials. These officials were also never awarded any opportunity to participate in decision-making about issues that affect their records management services and performance. Elderly staff members working in the records management unit were never being replaced when they leave the organisation for pension until the vacancy rate in the unit is 50%, which eventually brought staff morale down (Mensah and Adjei 2015).

For instance, the Australian National Archives was successful in the implementation of proper records and archives management, since they prioritised records management in their budget, with 80% of it dedicated to records management training of staff, especially in electronic records management (Asogwa 2012a). Looking at the African situation, in Yaounde city of Cameroon, the International Council on Archives (ICA) offered a two days training on “Digital Recordkeeping” from 29 to 30 November 2018 after their annual conference held in the country. The course was intended to capacitate delegates with clear understanding of challenges associated with keeping records digitally, digital records characteristics, and costs effective ways of managing digital records. The course charges were €50 per delegate, and each person who attended was

to be issued with a certificate of completion (ICA 2018). Asogwa (2012a) has the view that:

The practical situation today is that there are few or no countries in sub-Saharan Africa where archivists and records managers have acquired all the basic skills and competences in readiness for electronic records management now. The reason was that, while information technologies have brought enormous benefits to organisations, they have simultaneously introduced a number of challenges and difficulties and, consequently, increased the risks of losing data and records; risks to reliability and authenticity of e-records; loss of security and privacy, increased costs of managing record and decentralization of information; increased need for information technology specialists.

Records management professionals and employees need to be trained continuously in order to be capable and competent at all times, even as recordkeeping technology changes. It is usually due to incapable and incompetent records management officials that most of the recordkeeping systems collapse or become dysfunctional and complicated. The organisation may have an adequate and advanced recordkeeping system in place, but it may not have the necessary skills/capacity and competencies to operate and manage the records and the system (Asogwa 2012a; Ismail and Jamaludin 2009). Records management professionals and other officials need to acquire (a) records and archives competencies and (b) related skills (Ismail and Jamaludin 2009). The National Archives and Records Services of South Africa (NARSSA) (2006) gives guidance on what qualifications and experience records managers employed in government institutions, should have. According to NARSSA (2006), records managers must possess the records management equivalent of a bachelor's degree qualification in records management or information management and professional knowledge and experience of paper-based records management as well as electronic records management.

The records manager must ensure that all records management officials are trained in records management and that the organisation's staff is trained in records awareness. At the commencement of the training, records management practices need to be audited in accordance with legislative framework and the organisation's records management policy. Skills and competency requirements for records management staff need to be identified, to compile the competency framework in records management. Then the records manager must implement a training programme for records management, which must include records awareness and usage of the filing plan or referencing. If the registry procedure manual is compiled properly, in other words, it covers the entire scope of records management, including electronic records, it can be used as a training manual (NARSSA 2006b: 8-9).

### **Specific Records Management and Archiving Competency**

Lack of skills and competency for records and archives management is still a big challenge in Africa. Most records managers and archivists in Africa were not professionally trained in records management, but were recruited, despite, for instance, only having a secondary school-leaving certificate and, over time, they were promoted to the position of records manager. Proper records management needs recruitment of qualified staff, who are also experienced in records and archives management to establish and implement effective and efficient policies and infrastructure, and adequate and regular training for personnel (Asogwa 2012a; Ndenje-Sichalwe, Ngulube and Stilwell 2011). For instance, in some African government institutions, such as in Malawi, Kenya, Botswana, Tanzania and Zimbabwe, records and archives management committees are established with members who lack training, knowledge and skills about archives and records management. The worst part is that these committees are also given the power to make decisions and enforce the implementation of key records management activities such as disposal of records files, and documents (Asogwa 2012a; Ndenje-Sichalwe, Ngulube and Stilwell 2011). Training will ensure that records management professionals are capable of rendering information and able to deliver

a records management service programme as required (Ismail and Jamaludin 2009; Ndenje-Sichalwe, Ngulube and Stilwell 2011). The officials are also required to have the capacity and competency in the following areas: capturing information and records; organising and describing information and records; providing access to information and records; storing and protecting information and records; disposing of information and records; and providing electronic services (Ismail and Jamaludin 2009).

Overall, the records manager must have an understanding of the business systems used for rendering business services and records creation and management, such as the transaction processing systems, database management systems, management information systems, electronic document management systems, electronic records management systems and data warehouses. They also need to have an understanding of metadata (National Archives and Records Service of South Africa 2006). The records manager must also have practical knowledge of managing information and records, maintain appropriate standards, be knowledgeable about the legislative framework mandating the function of the government institution and be familiar with proper records management, which is still a scare skill in Africa (NARSSA 2006b; Asogwa 2012a; Ndenje-Sichalwe, Ngulube and Stilwell 2011). Nonetheless, international standards on records management need to be fully understood by the records and archives personnel (Asogwa 2012a), especially the records manager, as this can assist him/her in developing some of the policy guidelines and advising the top management in developing legislative framework for records management as required by parliament or the legislature.

The researcher's viewpoint is that the records manager is also responsible for the training of the overall records management staff with regard to basic understanding and knowledge of management and administration of records in different formats and media. The records management personnel also need to be properly trained on issues relating to records capturing and management (NARSSA 2006), and about the available electronic systems and technology, to understand its implementation and the impact it has on service delivery. Their skills levels also have to be assessed to inform re-skilling and deployment issues (Asogwa 2012a; NARSSA 2006;

Ndenje-Sichalwe, Ngulube and Stilwell 2011), especially among older employees, since they are more inclined to experience technophobia (Asogwa 2012a).

The researcher's view is that the records manager must have more advanced knowledge such as "database management, file/document tracking, imaging and scanning, electronic document management, workflow and electronic records management" (NARSSA 2006), that will enable him/her to develop the records management employees with basic or intermediate competencies and skills. All the records management staff need to be properly trained in effective records management (NARSSA 2006), especially electronic records management, as this is the modern way of managing records (Ndenje-Sichalwe, Ngulube and Stilwell 2011).

### **Other Records Management-Related Skills and Competency**

When records managers plan to acquire new skills, they must understand that their focus should always be on records management. They should acquire skills that will enable them to understand issues related to or affecting records management, such as information technology, information systems, data and information management and basic business process description and modelling (NARSSA 2006b). The records management professionals must also be capable of delivering their services using an electronic system and be able to analyse and develop records and information management systems. Records management professionals also need to be developed and capacitated to be competent in terms of "business and management skills, interpersonal and personal skills" (Ismail and Jamaludin 2009). The records manager and records personnel, employed in government, need to be equipped with the knowledge about the government environment, and the history and functions of the government institution in question (NARSSA 2006). The other skills required from the records managers and supervisory records management officials, include, but are not limited to, communication skills; teamwork; planning and time management; performance management; people management; project management; change management; business systems analysis and process mapping; and information systems design and process (NARSSA 2006). They may use these skills to work

as a team, to regularly plan, communicate the necessary improvements in their forums, and discharge implementation of changes as planned; properly manage staff and projects without high risk to failure. In addition, officials, especially the records manager, must have training in presentation skills, public speaking, business systems analysis, knowledge management, information strategy and policy, document management, information audits, management skills and supervisory skills (NARSSA 2006).

### **The Management of Medical and Health Records**

In healthcare organisations, an Electronic Health Records (HER) system like Enterprise Content management (ECM) is required to improve the management of medical records. The introduction of Information Communication Technology (ICT) in records management led to changes in the way people practice their records management processes and procedures in organisations (Asogwa 2012a; Boonstra and Broekhuis 2010). People now manage their records using computers and other electronic technologies, like scanners and the internet, rather than written information.

Due to the complexity of the human mind-set, or traditional ways of thinking, and the work culture within the organisation, the EHR is complex to implement and the identification and implementation of an electronic patient records system needs effective change management strategies. If there is no proper records management education or skills development and training of staff in the healthcare institutions, when electronic records management system is introduced officials may be reluctant to adopt or implement it since operating the system may be challenging or impossible to them without the necessary skills and competency. However, the implementation of ICTs is the best solution to the challenges relating to healthcare records management in the healthcare sector (Weeks 2013).

Medical records management is a vital function for the successful delivery of healthcare service delivery to an extent that when it fails, it is either impossible to render healthcare services or service may be rendered improperly (Luthuli 2017; Marutha 2018; Marutha and Ngulube 2012). The competency and skills of the official responsible for the management of medical records is also

fundamental to successful management of these records to make sure they are kept and maintained in good order at all the times (Luthuli 2017; Marutha 2018). Lack of appropriate skills and competency are some of the key contributing factors to mismanagement of records, particularly medical records (Marutha 2016; Adjei 2013). Mismanagement of records usually results in records not being properly classified or secured, misfiled or going completely missing (Luthuli 2017:51; Marutha and Ngoepe 2017). As a result, records become difficult or impossible to locate, which eventually leads to healthcare providers waiting too long to receive the medical history of patients or not being able to access the medical records (Olufemi and Olatunde 2016; Luthuli and Kalusopa 2017; Luthuli 2017; Marutha 2016). Alternatively, some of the records may be accessible, but the information recorded is incomplete, concealed, altered, amended, and/or information was added. These challenges manifest due to the conditions under which records are kept and the strategies used to manage them. This may delay the service or even result in poor healthcare service to patients (Luthuli 2017; Marutha 2011; Marutha and Ngoepe 2017). This study focused on developing a framework to assist in mapping medical records management skills and competency development to support public healthcare service delivery in the current digital age.

The purpose of this paper was to conceptualise a framework for medical and health records management skills and competency development with the view to support public healthcare service delivery in Limpopo Province of South Africa. Healthcare providers struggle to access patients medical/health history since management of patients medical and health records are not being properly discharged due to among other things, lack of skills and competency. The objectives of the study were to propose a framework that may be applied for medical and health records management skills and competency development in the digital age in Limpopo, South Africa

### **Research Methodology**

The questionnaire for this quantitative study was directed to records management practitioners in 40 hospitals in Limpopo province, South Africa. The total number of practitioners was 622, to which a sample

of 306 (49%) was drawn. The stratified random sampling method was used to select participants working in the records management units in the respective hospitals, because they were responsible for management and access control to medical and health records. The stratified random sampling was applied by separating participants into groups that are not overlapping according to their districts and post levels. Then participants were selected randomly as stratified per respective hospital in each district. The subgroups or subdivision of such population is known as stratus (Burton, Croce, Masri, Bartholomew and Yefremian 2005; Bless and Smith 1995; Fink 2013; Johnson and Christensen 2008; Fuller 1993; Krathwohl 2009). The paper used stratified random sampling since it assists the study to cover the entire population as categorised (Fuller 1993). It gives the study an opportunity to reduce standard errors in the data collection since stratified random sampling method controls variance proportions (Sapsford 1999). In stratified random sampling, all elements in the population have an equal opportunity of being included in the study sample to participate, and that is why it is classified as a

probability sampling method (Oppenheim 1992). One of the other key benefits in this kind of sampling method is that it brings about population representativeness that is enhanced and in different stratus sampled elements are balanced (Brewerton and Millward 2001). The response rate to the questionnaire was 71% (217). The sample drawn was adequate, as guided by the Raosoft sample size calculator, with a confidence level of more than 95% and 4% margin of error.

## Presentation of Results

### Records Management Skills and Competencies in the Healthcare Institutions

The respondents were requested to state whether they strongly agreed, agreed, were unsure, disagreed or strongly disagreed with certain statements about their skills and competencies. The results are presented in Table 1. A large number of the respondents either disagreed or strongly disagreed with the statements on skills and competence as most of them lacked the ability to manage medical and health records effectively.

**Table 1: Rating of Skills and Competencies (N=217)**

Skills and Competencies		Ratings				
		Strongly Agree	Agree	Unsure	Disagree	Strongly Disagree
(1) I am familiar with and can implement the principles of records management.	NO	17	52	13	77	58
	%	7.8	24.0	6.0	35.5	26.7
(2) I can manage medical and health records throughout its life span.	NO	38	42	11	68	58
	%	17.5	19.4	5.1	31.3	26.7
(3) I can effectively manage medical and health records electronically throughout its life span.	NO	8	31	40	74	64
	%	3.7	14.3	18.4	34.1	29.5
(4) I have adequate experience in electronic records management.	NO	6	34	30	72	75
	%	2.8	15.7	13.8	33.2	34.6
(5) I am competent and skilled for all records management operational and functional requirements.	NO	29	52	12	63	61
	%	13.4	24.0	5.5	29.0	28.1

**NOTE:** NO = Number    % = Percentage

These findings are not surprising as majority of the respondents obtained a certificate 61.3% (133) and none of them had either a bachelors,

masters or doctoral degrees in medical and health records as shown in Table 2.

**Table 2: Respondents’ Highest Level of Records Management Qualifications Achieved (N=217)**

Highest Level of Records Management Qualifications Achieved	Responses	
	Number	Percentage
• Certificate	133	61.3
• Higher certificate	27	12.4
• Diploma	8	3.7
• Undergraduate degree	14	6.5
• Honours degree	1	0.5
• Master’s degree	0	0
• Doctoral degree	0	0
• No response	34	15.7

**In-House Records Management Training and Workshops**

The researcher also established whether the institutions were conducting in-house records management training and workshops. Out of all respondents, 35.9% (78) said yes; 56.7% (123) said no and 7.4% (16) did not reply. When the researcher established whether the institution was conducting in-house records awareness workshops to all staff in the institution, 22.1% (48) answered yes, 70% (152) no and 7.8% (17) did not answer. According to the document analysis on records management inspection reports, most, if not all, of the hospitals were not conducting in-house records awareness workshops in their institution. The researcher also established whether the in-house records awareness training and workshops are conducted regularly and, to that, 2.8% (6) said yes, 32.3% (70) said no and 65% (141) did not reply. Those who did not reply possibly included respondents who said in-house records awareness training and workshops were not being conducted. This report is presented in table 3.

**Records Management Work Experience**

The records management experience, in general, was also established, to which 5.1% (11) of the respondents responded that they had less than 1 year

of experience; 18% (39) said they had 1 to 2 years of experience; 48.8% (106) stated that they had 3 to 5 years of experience; 26.3% (57) had more than 5 years of experience and 1.8% (4) did not answer the question. This report is presented in table 4.

The findings with respect to medical and health records management work experience, 3.7% (8) said they had less than 1 year of experience; 14.7% (32) had 1 to 2 years of experience; 46.1% (100) had 3 to 5 years of experience and 25.3% (55) had more than 5 years of experience, whereas 10.1% (22) did not answer the question.

When the respondents were asked their electronic records management work experience, 85.7% (186) stated they did not have any experience in electronic records management; 1.8% (4) stated they had less than 1 year of experience; 1.4% (3) stated 1 to 2 years of experience; 0.5% (1) said 3 to 5 years of experience; 0% (0) said more than 5 years of experience and 10.6% (23) did not answer the question.

The researcher also wanted to find out what respondents may consider to be solutions to the lack of skills and competency for records management. Respondents stated that all officials need to be provided with regular in-house training (79.3% (172)); external training on basic to advanced records management course (86.6% (188)). Other officials

stated that institutions need to offer bursaries to study relevant degrees for records management (82.5% (179)). Additionally, respondents stated that the institutions also need to start with the appointment of records managers who are already developed to take charge of the responsibility to develop all the other junior officials focusing on proper records management vision.

## Discussion of the Results

In this section, the findings of the study from the literature and empirical data are discussed. Lack of skills and competency in records and archive management are still a great challenge in Africa. Historically, most records managers and archivists in Africa were not trained professionally in records management (Asogwa 2012; Ndenje-Sichalwe, Ngulube and Stilwell 2011). This also applied to the records management officials operating in the Limpopo healthcare institutions, as most of the employees were not familiar with and did not implement the principles of records management, as confirmed by 35.5% (77) of respondents. The majority of employees in the healthcare institutions had no confidence that they could manage medical and health records throughout its life span, as confirmed by 31.3% (68) of respondents. Moreover, the majority (34% (74)) employees also lacked confidence and knowledge of how to effectively manage medical and health records electronically throughout its life span. This may be due to the fact that the majority of employees had no adequate experience in electronic records management, as confirmed by 34.6% (75) of respondents. The majority of employees employed in these healthcare institutions were not competent and skilled in all records management operational and functional requirements, as confirmed by 29% (63) of respondents. Respondents added that the best way to improve skills and competency in records management officials is to ensure that all officials are trained through regular in-house training (79.3% (172)), and external basic to advanced records management course (86.6% (188)). Furthermore, offer bursary to study relevant degree for records management (82.5% (179)). They further added that some of the things need adequate budget and appointment of qualified record manager with proper

records management vision to improve the situation, and capacitating his or her records management staff.

In sub-Saharan Africa, records managers and archivist training and experience are still not adequate enough to eradicate the prevailing challenges such as poor records management applications, a lack of records management policies and applicable legislation, the absence of an effective organisational framework, and scant development of ICT skills and competencies (Asogwa 2012; Nengomasha 2013). The records management professionals and other officials need to acquire records and archives competency and related skills (Ismail and Jamaludin 2009). For instance, the highest qualification achieved by most of the respondents in all the health institutions in the province is a certificate, as confirmed by 34.1% (74) of respondents. This may be a senior certificate and/or a certificate attained through a short learning programme, organised by the healthcare institutions. The highest level of records management qualification achieved by the majority of the respondents was also a certificate, as confirmed by 61.3% (133) of respondents. The highest level of certificate qualification in records management achieved was very basic, as confirmed by 79.3% (172) of respondents. This means that only a few achieved the intermediate and advanced certificate courses. This finding is not exclusive to the Limpopo healthcare institutions. Hence, the records management professionals and employees need to be trained regularly to be capable, competent and current, specifically because recordkeeping technology or techniques change from time to time. It is usually due to incapable and incompetent records management officials that most of the recordkeeping systems collapse or become dysfunctional and complicated. The organisation may have a good and advanced recordkeeping system, but without the necessary skills/capacity and competencies of officials to operate and manage the records and system, the system will be worthless (Asogwa 2012; Ismail and Jamaludin 2009). In the healthcare institutions in Limpopo, the situation was a concern, since the institutions were not conducting in-house records management training and workshops, as confirmed by 56.7% (123) of respondents. The institutions were also not conducting in-house records awareness workshops to all staff, as attested



by 70% (152) of respondents. This was also confirmed by the records management inspection reports, in which most, if not all, of the hospitals were not conducting in-house records awareness workshops in their institutions. In the case of the few institutions that claimed to have been conducting in-house records awareness training and workshops, these were not conducted regularly, as confirmed by 32.3% (70) of respondents.

On the other hand, effective records management needs qualified personnel, who are also experienced with records and archives management, to establish and implement policies and infrastructure, and ensure adequate and regular training for personnel (Asogwa 2012; Ndenje-Sichalwe, Ngulube and Stilwell 2011). Regarding work experience, the majority of medical and health records management staff employed in healthcare institutions, in Limpopo, had adequate experience, because most had 3 to 5 years of experience, as confirmed by 46.1% (100). The records management experience, in general, for the majority of employees was 3 to 5 years, as confirmed by 48.8% (106) of respondents.

Finally, the records management professionals must also be capable of delivering their service using an electronic system. The records management professionals also need to be developed and capacitated to be competent in terms of “business and management skills, interpersonal and personal skills” (Ismail and Jamaludin 2009). This was not the case at the Limpopo healthcare institutions, because the majority of employees in the healthcare institutions did not have any experience in electronic records management at all, as confirmed by 85.7% (186) of respondents.

## Conclusion and Recommendations

The healthcare institutions need to identify and map out key performance areas for each post before developing current officials and recruiting people who are suitably qualified to improve the service. The posts requirements for the healthcare records manager, deputy manager and senior administrative officer should be, at a minimum, a suitable degree in records management or information management with extensive experience in records management.

The chief registry clerk should, at least, hold a relevant diploma in records management or information management, with two years relevant experience in records management. The registry clerks, should have a senior certificate or higher certificate in records management and related knowledge and experience. The queue and file movement controllers should have a senior certificate, with at least knowledge of records management and its importance, with at least recommended customer care certificate. The institutions must also provide professional training for currently appointed staff, who does not meet the post qualification requirements, and relocate those who may not be trainable or are not willing to acquire the knowledge as required for the post occupied.

However, a well-structured medical and health records management unit, with suitably qualified officials must enable the institutions to conduct in-house records management training and workshops to capacitate officials in terms of proper records administration, handling, safety and security. The institutions must also be able to conduct an in-house records awareness workshop to all staff in the institution. The in-house records awareness training and workshops must be conducted regularly in the institutions. This must familiarise the majority of employees with the principles of effective records management and the implementation of thereof. The training must give the majority of records management employees at the healthcare institutions more confidence to manage medical and health records throughout its life span. Employees must have confidence in and knowledge of how they can effectively manage medical and health records electronically throughout its life span. To accomplish this, employees must be given adequate training and/or experience in electronic records management. Hence, employees employed at healthcare institutions must be competent and skilled in the operations and functions of all records management requirements.

Finally, figure 1 presents a framework to which medical and health records management skills and competencies may be developed or improved. The framework is discussed in four dimensions, namely a skills audit, skills development, a competency review and reskilling and maintenance.

### A. Skills audit

In an endeavour to develop skills and competencies, the organisation needs to conduct a skills audit. During the skills audit, the organisational records management functional needs are supposed to be outlined, to track the required skills and competencies for each functional activity. The skills and competency requirements must then be identified and grouped according to the operational level, in other words, managerial/supervisory and practitioner, as illustrated in figure 1. Then, existing staff or officials need to be audited to determine the skills and competencies they have acquired and those that are still lacking, to map better performance in their respective functional responsibilities. Competencies and skills categories need to be identified and allocated according to the job requirements for each level. For instance, the records manager and supervisors need skills and competencies to train and support records management practitioners; to plan, support and monitor records, and create effective workflow streams; and also to conduct records management awareness workshops for healthcare practitioners in the institutions. This will enable them to take proper care of records as they render healthcare services, since, as part of the process, they have to create new medical and health records, while still using old medical and health records created in the course of previous consultations and admissions. The records management practitioners need skills and competencies that will help them to administer records and support healthcare providers with access to records.

### B. Skills development

This is the second stage. After identification of skills and competency gaps, in line with records management functional activities, at both managerial and practitioner level, the organisation should provide training for different officials, based on the gaps and needs discovered during the skills audit.

### C. Competency review

After providing training and development to officials, officials' performance will need to be reviewed to check whether the training served the intended purpose of improving skills and competencies. This may be done by checking whether officials have

improved in how they are working in terms of the processes and procedures in their day-to-day work activities such as the pace and quality of their outputs.

### D. Reskilling and maintenance

After the competency review, there may still be those officials who are still struggling with their functional responsibilities. These officials need further training and development. In fact, training and development need to be provided on a lifelong basis, to an extent that people are trained from time to time in the form of refresher courses and workshops. The other purpose will be to update officials with new ways of working and on latest technology in the field.

It is evident that without proper records management skills and competencies, healthcare service delivery will always suffer in the healthcare institutions. This could be because records are not handled and administered properly after being created by the healthcare provider. This may result in medical and health records no longer existing or barriers to accessibility. Eventually, healthcare providers may not be able to access them and they may even not be able to render healthcare services or, if they do, they do it poorly. It is hoped that the proposed framework, in Figure 1, would help healthcare institutions to develop training programmes for records management in an endeavour to improve their records management staff skills and competencies.

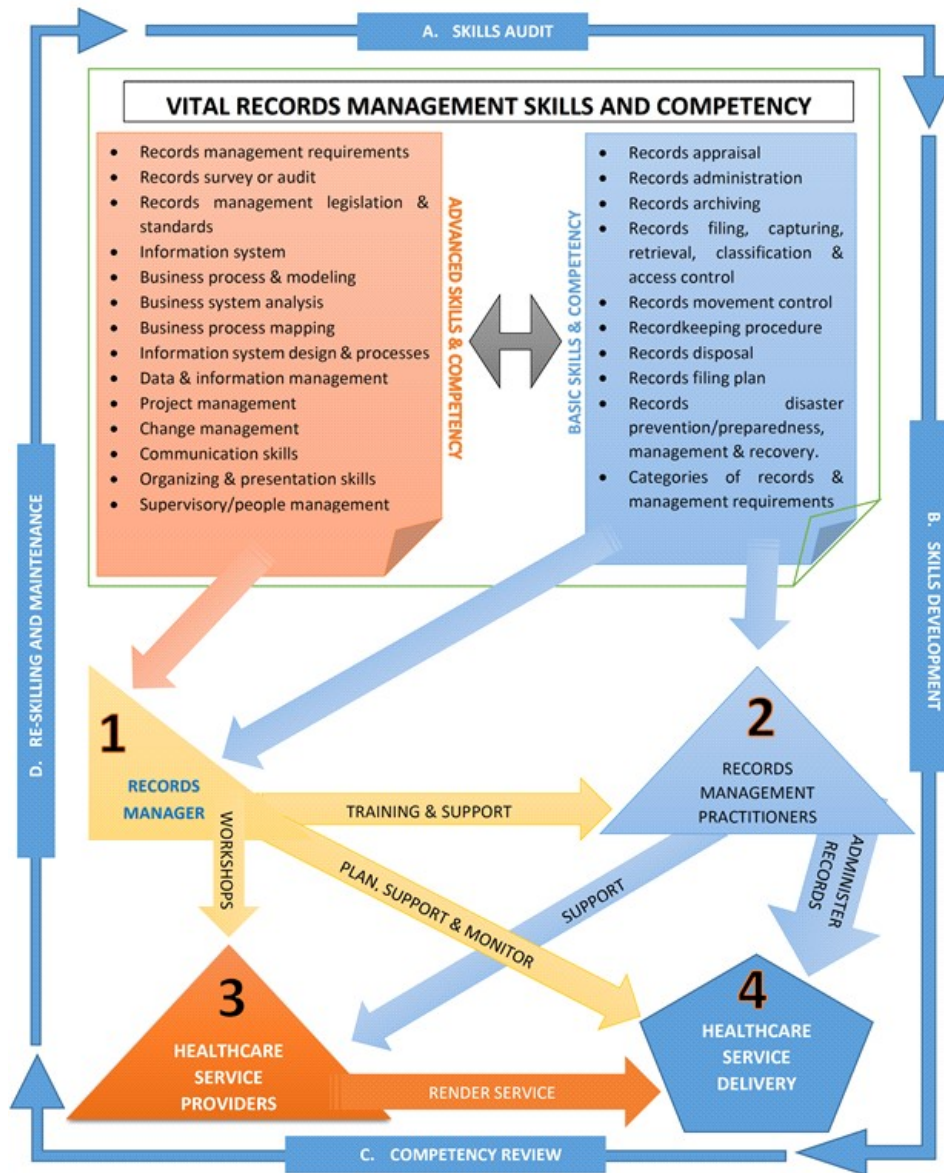
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### Appendix



**Figure 1:** A framework to map medical and health records management skills and competency development to support healthcare service delivery in the healthcare institutions

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