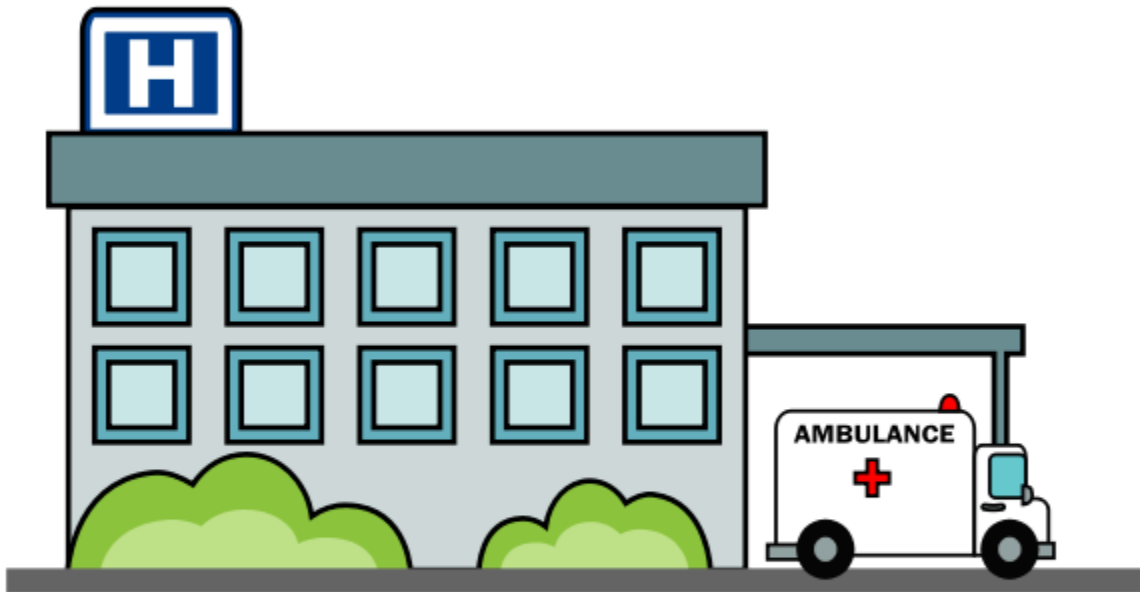


NGOMA DZA VHATEI TOP 10 IT CHALLENGES
UTHUKELA DISTRICT MUNICIPALITY HOSPITAL



GROUP MEMBERS

Mukhola Thuso
Muguvhana Mbambala
Mohlala Surprise
Maphaha Livhuwani

TABLE OF CONTENTS

TABLE OF CONTENTS	2
TOP 10 IT CHALLENGES	3
1. Outdated Hardware and Infrastructure	3
2. Insufficient Network Security	3
3. Limited Data Storage and Backup Solutions	3
4. Connectivity and Bandwidth Constraints	3
5. Inadequate IT Support Staff	3
6. Lack of Integrated Hospital Management Software	3
7. Insufficient Training for Hospital Staff	3
8. Weak Data Management and Compliance Practices	4
9. Vulnerability to Cybersecurity Threats	4
10. Lack of a Scalable IT Infrastructure	4

TOP 10 IT CHALLENGES

1. Outdated Hardware and Infrastructure

- **Issue:** The hospital relies on old computers and printers, leading to frequent breakdowns and inefficient performance.
- **Impact:** This causes delays in patient record processing, affects administrative efficiency, and increases repair costs.

2. Insufficient Network Security

- **Issue:** The existing network lacks robust security measures like firewalls, encryption, and access control.
- **Impact:** The risk of data breaches and unauthorized access to sensitive patient information is high, compromising patient privacy and compliance with data protection regulations.

3. Limited Data Storage and Backup Solutions

- **Issue:** The hospital lacks centralized data storage and backup capabilities, leading to frequent issues with missing files and data loss.
- **Impact:** This results in delays in patient treatment and affects the reliability of medical records, which are critical for quality patient care.

4. Connectivity and Bandwidth Constraints

- **Issue:** Limited network bandwidth and poor connectivity affect data transfer speeds and system responsiveness.
- **Impact:** Slow connections hinder effective communication between departments, reduce productivity, and disrupt patient care operations.

5. Inadequate IT Support Staff

- **Issue:** Only five ICT support staff oversee the entire hospital's IT infrastructure, which is inadequate for the hospital's scale.
- **Impact:** IT issues may take longer to resolve, leading to increased downtime and disruptions in critical hospital operations.

6. Lack of Integrated Hospital Management Software

- **Issue:** Key hospital functions such as patient management, billing, and supply chain are managed separately without an integrated system.
- **Impact:** Disconnected systems lead to inefficiencies, duplication of work, and delays in accessing vital information across departments.

7. Insufficient Training for Hospital Staff

- **Issue:** Many hospital staff members are not adequately trained on IT systems, leading to operational errors and reliance on IT support for basic issues.
- **Impact:** This affects productivity, increases IT support demand, and lowers staff confidence in using technology effectively.

8. Weak Data Management and Compliance Practices

- **Issue:** The hospital lacks effective data management practices and protocols, making compliance with health data regulations challenging.
- **Impact:** Poor data handling can result in regulatory non-compliance, risking legal repercussions and patient trust issues.

9. Vulnerability to Cybersecurity Threats

- **Issue:** The hospital's IT environment is vulnerable to cybersecurity threats due to outdated security protocols and lack of employee awareness on security best practices.
- **Impact:** Cyber threats, such as malware or ransomware attacks, could disrupt hospital operations, compromise data, and incur high recovery costs.

10. Lack of a Scalable IT Infrastructure

- **Issue:** The current IT setup does not allow for easy scaling, which limits the hospital's ability to accommodate growth or new technologies.
- **Impact:** Inflexible infrastructure hinders the hospital's capacity to expand services, adopt new tools, or improve patient care processes effectively.

REFERENCES

Gupta, A. & Hammond, W.E., 2019. *Healthcare Information Systems: Challenges of the New Millennium*. 3rd ed. Cham: Springer.

Barker, R. & Wang, Y., 2021. *IT Infrastructure and Its Management in Healthcare*. 2nd ed. London: Academic Press.

Wu, R., Kelly, T.J. & Redley, B., 2020. 'Cybersecurity in Healthcare: Addressing Emerging Threats', *Journal of Health Informatics*, 12(3), pp. 233-247.