



# PROF STANLEY O. KHAINGA

Chairman  
Kenya Medical Practitioners and  
Dentists Council



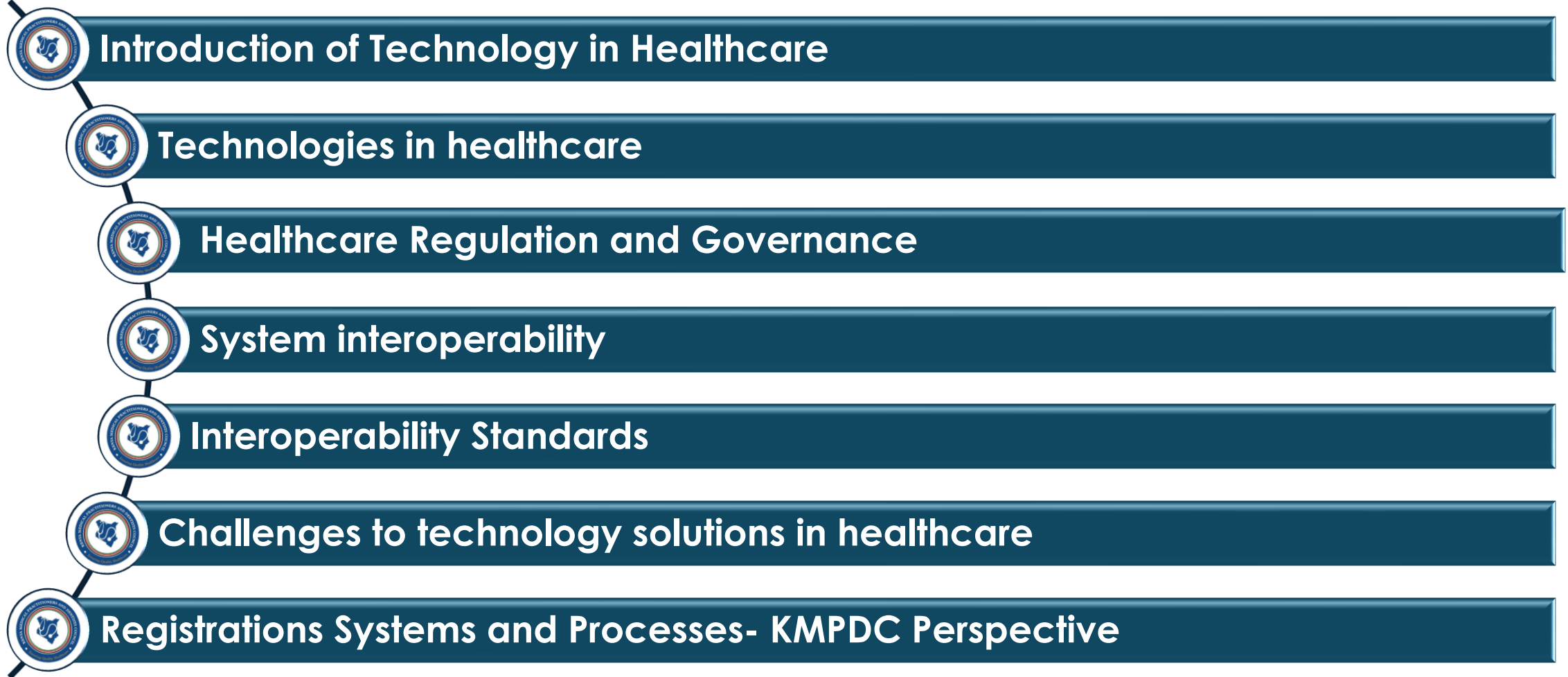
# **USE OF TECHNOLOGY & INNOVATION IN STRENGTHENING GOVERNANCE AND REGULATION**

**HOW DO WE BECOME SMART REGULATORS**

## **New Technologies in Health Regulation**

**Electronic systems in health regulation  
Registration systems and Processes**

# Presentation Outline



# 1. Introduction of Technology in Healthcare



- The healthcare sector has seen continued advancements in technology.
  - Revolutionizing the way medical services are delivered
  - Improved patient outcomes
  - Improved research and collaboration
  - enhanced operational efficiency

# ii) Technologies in healthcare

## 1. **Electronic Medical Records-** systems digitize patient health records:

- a) Improve access by healthcare providers
- b) Increase collaboration across departments and hospitals
- c) Improve coordination of patient care
- d) Reduce clinical errors,
- e) Facilitate data-driven decision-making.
- f) Integrate with other technologies such as AI has lead to advanced analytics

## 2. **Blockchain in Healthcare:**

- a) Ensures secure, transparent, and tamper-proof health data sharing,
- b) Streamlined supply chain management
- c) Enhanced clinical trials.

**Contd.**





## ii) Technologies in healthcare

### 3. Artificial Intelligence (AI) aids in:

- a) diagnosis
- b) personalized treatment plans,
- c) drug discovery
- d) Ensuring accurate and predictive analytics

### 4. Remote patient monitoring (RPM) –

- a) A popular trend in modern healthcare software development,
- b) Offers continuous monitoring of patient's health
- c) Ensures data is directly sent to healthcare providers.

**Contd.**



# Technologies in healthcare

## 5. Wearable technology

- a) heart monitors
- b) Provide clinicians with more ways to evaluate the well-being of their patients

## 6. Telemedicine

- Provides more ways of patients to communicate with healthcare providers.

## 7. Virtual and augmented reality - using headsets and software assist clinicians envisage the outcome

## 8. Smart pills

- a) function as pharmaceuticals
- b) offer care providers valuable insights into patient health

## 9. 3D bioprinting – enable clinicians perform more and accurate reconstruction for organs such as ears, corneas, bones, and skin are undergoing trials for 3D bioprinting.



# iii) Healthcare Regulation and Governance

There are various regulations and policy documents

- **Statutes**

1. Constitution of Kenya, 2010
2. Digital Health Act, 2023
3. Health Act, 2017
4. Data Protection Act, 2019
5. The Computer Misuse and Cybercrimes Act of 2018

- **Policy Documents**

1. AMCOA Protocol on Technology
2. Kenya Universal Health Coverage Policy 2020 – 2030
3. Kenya Standards and Guidelines for m-Health Systems (2017)
4. Kenya Health Information Systems Interoperability Framework
5. Kenya National eHealth Policy 2016-2030
6. General Data Protection Regulation (GDPR)





## iv) System interoperability

- a) Various systems in the technology ecosystem must be interoperable.
- b) Developers of solutions provide Application Programming Interfaces (APIs) that define how they interact with other systems e.g.:
- Health Workforce Registry
  - Client Registry
  - Community Health Information System (CHIS)
  - District Health Information System (DHIS2)
  - Laboratory Information System (LIS)
  - Logistics Management Information System (LMIS)
  - Pharmaceutical Information System (PIS)
  - Electronic Medical Records (EMR)
  - Electronic Health Records (EHR)
  - Enterprise Resource Planning (ERP) Systems



# v) Interoperability Standards

These systems must be interoperable and be compatible with the internationally accepted standards, namely:

**i. Clinical Messaging -**

- i. system must conform to standards of conventional nomenclature.
- ii. Guides naming conventions

**ii. Clinical Terminology** – ensures conformity to international standards, including International Classification of Diseases and medication

**iii. Systemized Nomenclature of Medicine (SNOMED)** – for clinical data coding

- a) Logical Observation Identifiers Names and Codes (LOINC) – for laboratories
- b) RxNorm – for Pharmacies

**Contd.....**



## vi) Challenges to technology solutions in healthcare

1. Cost- Technology is expensive and thus requires huge budgetary allocation
2. Cybersecurity threats- need to secure both infrastructure and solutions to safeguard the critical health-related data and information
3. System Interoperability costs
4. Existing policies and statutes
5. Manual systems across various sectors e.g., Client registry, Insurance agencies, Training institutions



# Registrations Systems and Processes:

## KMPDC Registration and Licensing Perspective

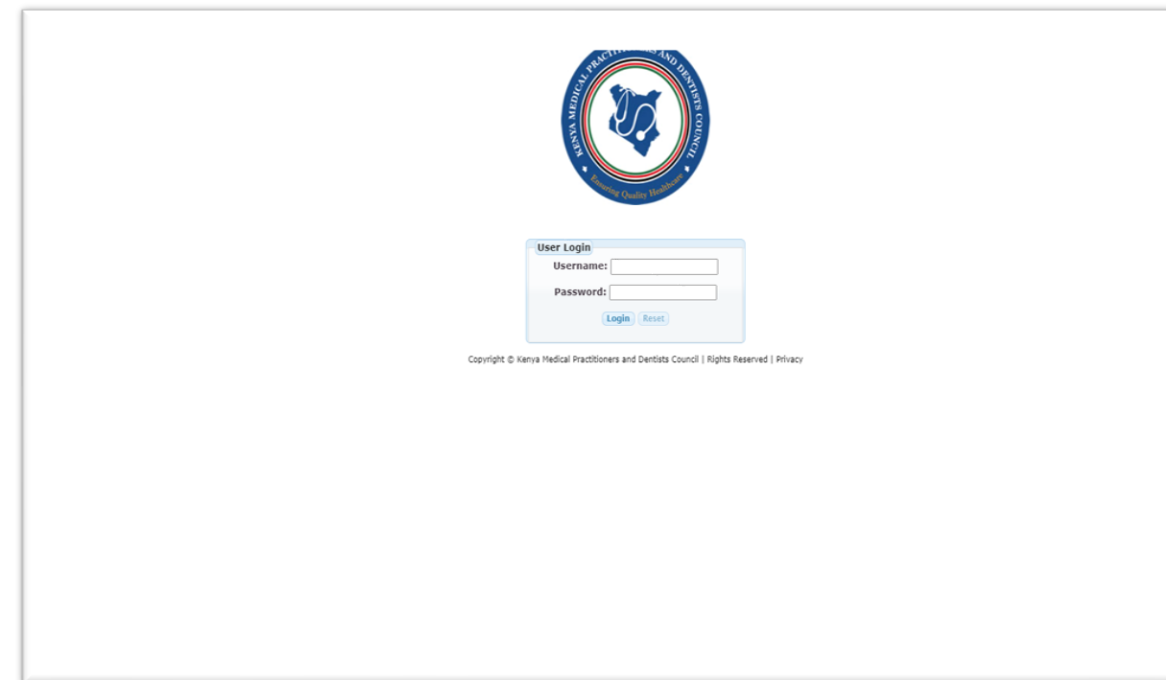
# Regulatory Human Resource Information System (rHRIS) – Manages the registration and licensing business process of our clients

## For Practitioners

1. Training details
2. Internship tracking
3. Registration
4. Licensing tracking
5. Specialization and Sub-specialization details
6. Certificate of Status
7. Disciplinary cases

## For Health Facilities

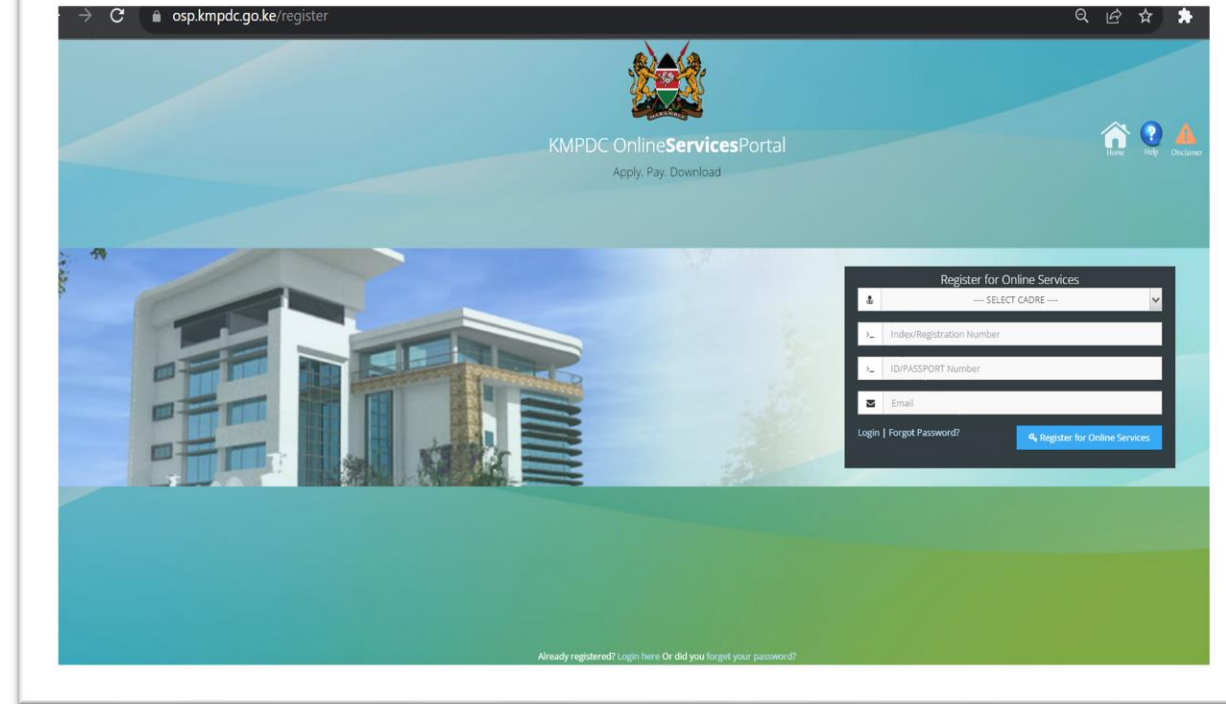
1. Registration details
2. Licensing details
3. Disciplinary cases



# Online Services Portal- [osp.kmpdc.go.ke](http://osp.kmpdc.go.ke)

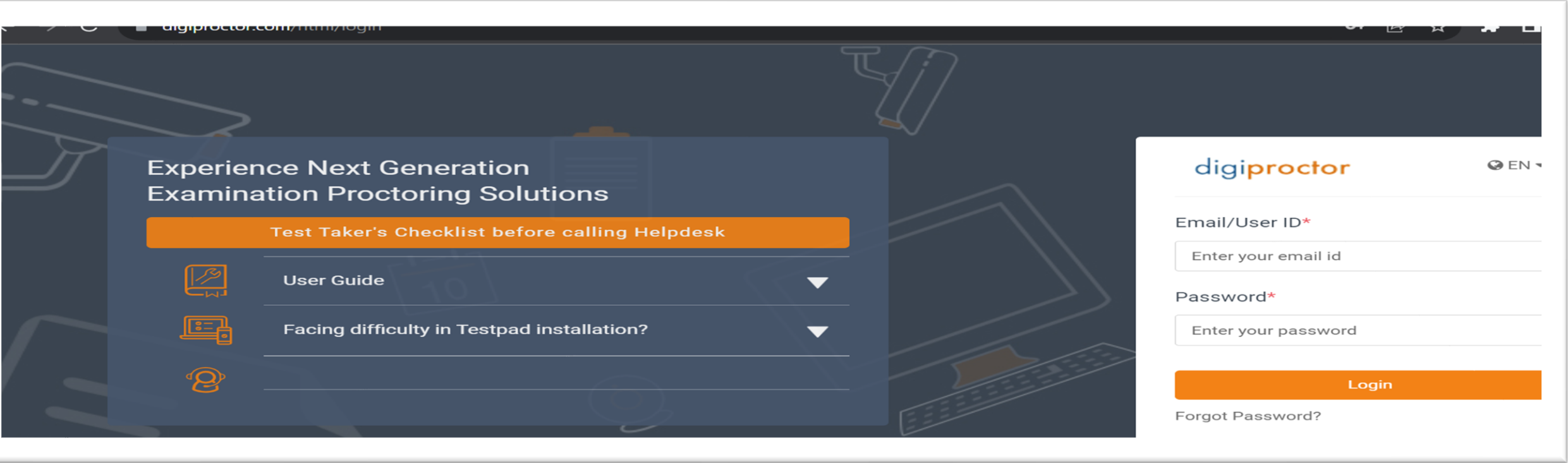
**It Manages the renewal processes for:**

1. Medical practitioners
2. Dental practitioners
3. Health Facilities
4. Internship Management

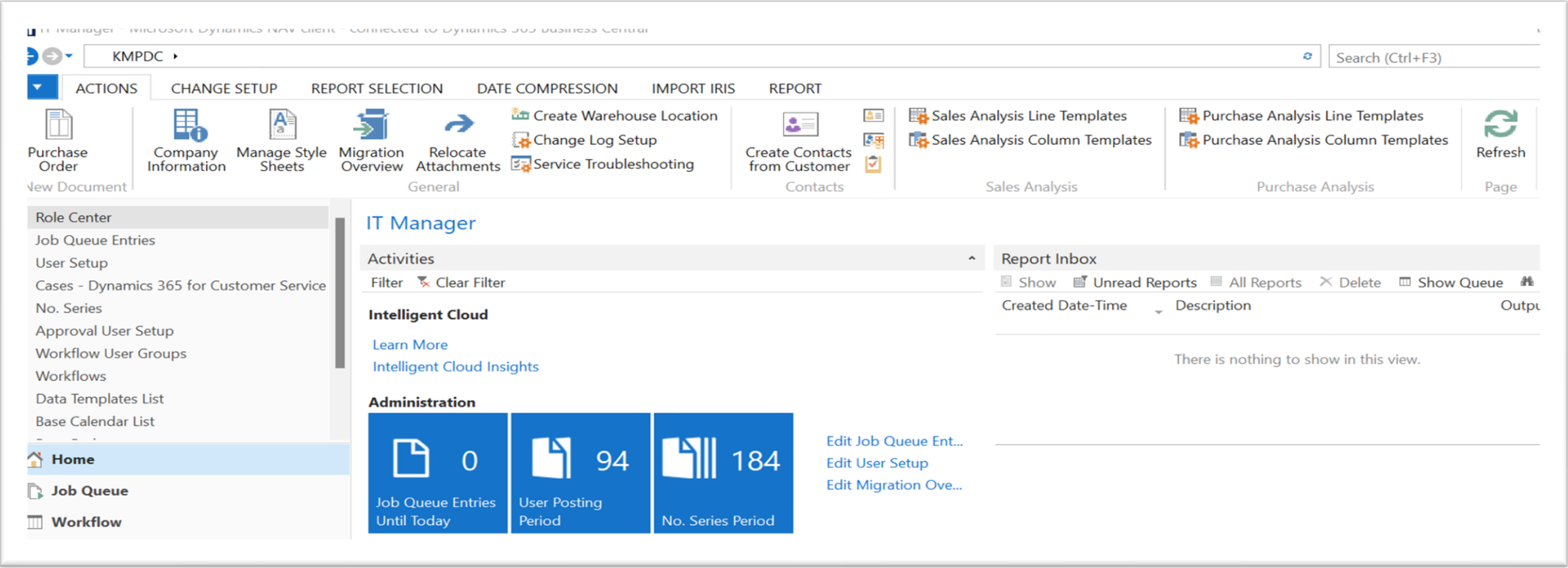




# Digiproctor Examination System Online Examination for foreign trained doctors



# Enterprise Resource Planning (ERP)System – harmonizes the departmental operations



# Regulatory Registration and Licensing statistics

<http://kmpdc.go.ke/Registers/Dashboard/Dashboard.php>

KMPDC DASHBOARD AS AT 12/03/2024			
LOCAL PRACTITIONERS			
REGISTRATION		LICENSURE	
Total Registered Local Practitioners	17040	Total Licenced Local Practitioners	10645
Medical	15481	Medical	9692
Dental:	1559	Dental:	953
Male_Medical.	9650	Male_Medical.	5565
Male_Dental.	852	Male_Dental.	491
Female_Medical.	5783	Female_Medical.	4127
Female_Dental.	707	Female_Dental.	462
--			
FOREIGN PRACTITIONERS			
REGISTRATION		LICENSURE	
Total Registered Foreign Practitioners	1426	Total Licenced Foreign Practitioners	689
Medical	1330	Medical	631
Dental:	95	Dental:	58
Male_Medical.	909	Male_Medical.	434
Male_Dental.	48	Male_Dental.	23
Female_Medical.	421	Female_Medical.	197
Female_Dental.	47	Female_Dental.	35
.			
COMMUNITY ORAL HEALTH OFFICERS			
REGISTRATION		LICENSURE	
Total Registered COHO	623	Total Licenced COHO	418
Male	327	Male	231
Female	296	Female	187
-			



# Realtime registers of our registered and licensed clients

Available on this link -  
<https://kmpdc.go.ke/registers-practitioners-php>

## KENYA MEDICAL PRACTITIONERS AND DENTISTS COUNCIL REGISTERS

All medical and dental practitioners working in Kenya MUST be registered and licensed by the Kenya Medical Practitioners and Dentists Council. The same applies to all Health Institutions (public, private and mission hospitals, medical, dental centers & clinics, nursing and maternity homes and standalone funeral homes).

The Medical Council aims to ensure that Kenyans are being given quality healthcare by registered AND licensed practitioners and Health Facilities. You can therefore search our registers below to ensure the person treating you is a genuine medic, and that the health facility is duly registered and licensed to operate by the Council.

Please note:

**ACTIVE** means the medic or health institution has been licensed to operate within that calendar year.

Feel free to [CONTACT US](#) if you have any questions.

### — REGISTERED PRACTITIONERS' REGISTERS

#### Local Practitioners' Registers

- Registered Medical & Dental Practitioners' Master Register
- Local Licensed Practitioners' Master Register
- Medical and Dental Practitioners' General Practice Register
- Medical and Dental Practitioners' Registrar Register
- Medical and Dental Practitioners' Senior Registrar Register
- Medical and Dental Practitioners' Specialist Practice Register
- Community Oral Health Officers' Internship Register
- Community Oral Health Officers' Practice Register
- Medical and Dental Practitioners' Internship Register

#### Foreign Practitioners' Registers

- Licensed Temporary Foreign Medical and Dental Practitioners' Register
- Licensed Temporary Foreign Medical and Dental Students' Register

### + REGISTERED HEALTH FACILITIES' REGISTERS



# Toll free ShortCode 20547 Verification

•Service to enable the members of the public search and confirm the authenticity of Practitioners (Medical and Dental Practitioners, Foreign doctors on Temporary License, Community Oral Health Officers), Health Facilities and Medical Camps they are seeking services from. These messages are sent as short message services (SMS) from any phone to Shortcode 20547.

To verify the status of a practitioner, send an SMS to 20547 with the following format:

P#Full Name of Practitioner or P#Registration number of the practitioner

For example:

P#John Doe or P#A0000

To verify the status of a health facility, send an SMS to 20547 with the following format:

H#Full Name of Facility or H#Registration number of the facility

For example:

H#Kenya Health Centre or H#000000

To verify the status of a medical camp, send an SMS to 20547 with the following format:

MC#license number of medical camp

For example:

MC#0000



# Continous Professional Development (CPD)

- Continuing Professional Development (CPD) is defined as **training** that leads to **broadening of knowledge and skills**, and the enhancement of personal qualities resulting in **continuous improvement** in the **performance of professional duties**.
- The underlying principle of CPD is the **lifelong learning** expected of all Practitioners, from the point of entry into undergraduate training, throughout the professional continuum, until their point of exit from the profession.






# Previous Continuous Professional Development (CPD) Process – manual diaries

**MEDICAL PRACTITIONERS AND DENTISTS BOARD**  
CPD DIARY

NAME: Dr. S. Late Magon REG. NO: B098

**For use by the practitioner**

DATE & VENUE	<u>12/4/2013 - PANDYA BOARD ROOM</u>	
ACTIVITY/ EVENT	<u>MANAGEMENT OF TRAUMA IN PRIMA 2nd TEG TH</u> <u>By Dr. ROP DO</u>	
CPD PROVIDER	<u>KDA</u>	
LEVEL & POINTS		
SIGNATURE & OFFICIAL STAMP		

**For use by the Board**

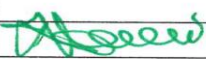
VERIFICATION – BOARD AUTHORISED OFFICER

NAME	
DESIGNATION	
DATE & SIGNATURE	

**MEDICAL PRACTITIONERS AND DENTISTS BOARD**  
CPD DIARY

NAME: Dr. S. Late Magon REG. NO: B098

**For use by the practitioner**

DATE & VENUE	<u>17K-19K OCT 2013</u>	
ACTIVITY/ EVENT	<u>KDA ANNUAL SCIENTIFIC CONFERENCE + EXHIBITION IN MOGASA</u>	
CPD PROVIDER	<u>KDA</u>	
LEVEL & POINTS		
SIGNATURE & OFFICIAL STAMP		

**For use by the Board**


VERIFICATION – BOARD AUTHORISED OFFICER

NAME	
DESIGNATION	
DATE & SIGNATURE	

**MEDICAL PRACTITIONERS AND DENTISTS BOARD**  
CPD DIARY

NAME: Dr. S. Late Magon REG. NO: B098

**For use by the practitioner**

DATE & VENUE	<u>20/9/2013</u>	
ACTIVITY/ EVENT	<u>Training to Anterior teeth - Mombasa</u> <u>By Dr. Diana ROP</u>	
CPD PROVIDER	<u>KDA</u>	
LEVEL & POINTS		
SIGNATURE & OFFICIAL STAMP		

**For use by the Board**

VERIFICATION – BOARD AUTHORISED OFFICER

NAME	
DESIGNATION	
DATE & SIGNATURE	

**MEDICAL PRACTITIONERS AND DENTISTS BOARD**  
CPD DIARY

NAME: \_\_\_\_\_ REG. NO: \_\_\_\_\_

**For use by the practitioner**

DATE & VENUE		
ACTIVITY/ EVENT		
CPD PROVIDER		
LEVEL & POINTS		
SIGNATURE & OFFICIAL STAMP		

**For use by the Board**

VERIFICATION – BOARD AUTHORISED OFFICER

NAME	
DESIGNATION	
DATE & SIGNATURE	

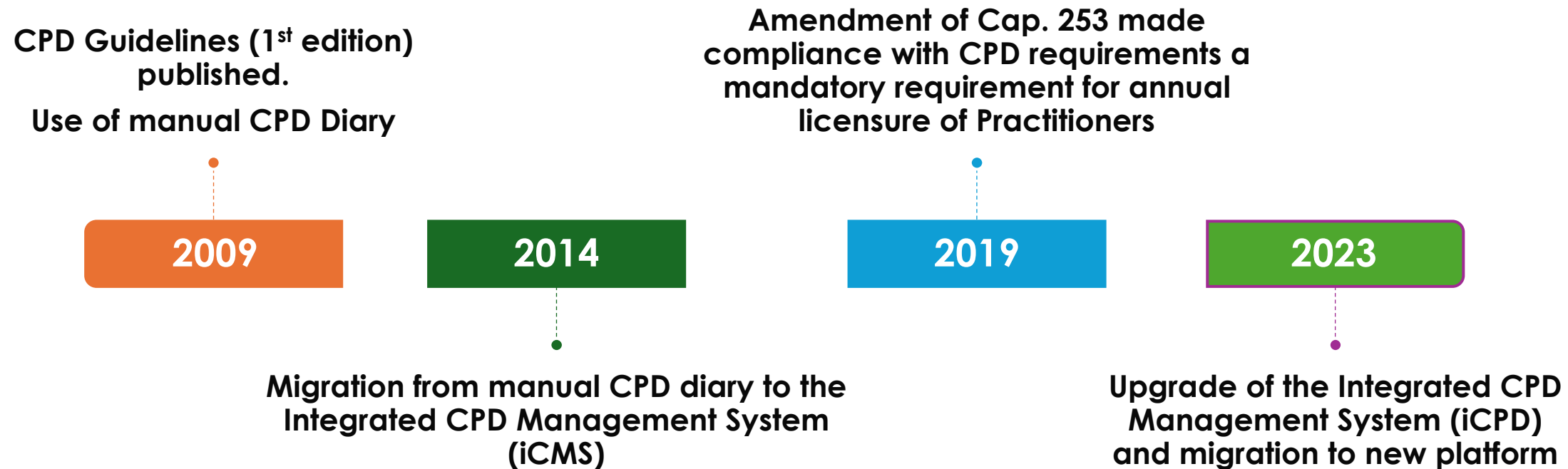


# Phase 1 of the Integrated CPD Management System

The screenshot displays the homepage of the iCMS Medical Practitioners and Dentists Board. The header features navigation links (Home, About iCMS, Forum, FAQ, Contactus), a search bar, and the board's logo. The main banner promotes the 'iCMS INTEGRATED CPD MANAGEMENT SYSTEM' as part of the 'NATIONAL CPD PROGRAM', with a central image of a doctor and the text 'An EASY path to a BETTER MEDICAL CAREER'. A sidebar on the right encourages users to 'Join Us Today' by activating an account to earn CPD points. Below the banner, a 'Latest Activities' section lists online and offline CPD events, such as 'CPD MEETING' and 'Advanced Life Support in Obstetrics Training'. The footer includes a 'Gmail for Work' advertisement.




# Phase 2 of the Integrated CPD Management System



# Current Integrated CPD Management System

Call: +254727666444    cpd@kmpdc.or.ke    Home    Developer    About Us    Contact Us    Help & Support

**ICPD** INTEGRATED CPD MANAGEMENT SYSTEM  
A National CPD Program



CPD ACTIVITIES    COURSES    PROVIDERS    ACCOUNT ACTIVATION    RESOURCES

SEARCH

### Search CPD Activities

SEARCH

[VIEW ACTIVITIES](#) [CREATE ALERT](#)


### Featured CPD Activities

**Fundamentals of Bioethics**  
Fundamentals of Bioethics  
Venue: Virtual  
Sep 18, 2023   CPD   Short courses   Credits: 10.00   [Proceed to activity](#)

**Liver Transplantation: Basic Concepts**  
Liver Transplantation: Basic Concepts  
Venue: New KTRH Conference Hall  
Sep 11, 2023   CPD   Grand rounds/ C...   Credits: 3.00   [Proceed to activity](#)

**NCD ACADEMY DAY TWO**

ADVERTISEMENT



**Quality Patient Care does not just happen!**  
Keep Updated about the latest CPD Activities on ICPD  
[GET ALERTS](#)

### Resources

### Login

Have an account?

[Signin](#)   [Forgot Password?](#)

[REGISTER NOW](#)

### Keep Informed

Get the latest updates on ICPD



**Thank you very much  
Zikomo kwambiri  
Asante sana**







Kenya Medical Practitioners and Dentists Council,  
KMPDC Complex,  
Hurlingham, junction of Woodlands Road and Lenana Road.  
P. O. Box 44839 – 00100, Nairobi, Kenya  
Tel: +254 727 666444 | +254 111 052222  
e-mail: [info@kmpdc.go.ke](mailto:info@kmpdc.go.ke) | [ceo@kmpdc.go.ke](mailto:ceo@kmpdc.go.ke)  
Website: [www.kmpdc.go.ke](http://www.kmpdc.go.ke) | Twitter: @KmpdcOfficial  
CPD queries: [cpd@kmpdc.go.ke](mailto:cpd@kmpdc.go.ke) | [cpd@icpdkenya.org](mailto:cpd@icpdkenya.org) |  
[standards@kmpdc.go.ke](mailto:standards@kmpdc.go.ke)

