ASSOCIATION OF MEDICAL COUNCILS OF AFRICA

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AMCOA CAPACITY BUILDING WORKSHOP

INTEGRATED HEALTHCARE REGULATION AND LEADERSHIP IN BUILDING RESILIENT HEALTH SYSTEMS

WORKFORCE DATA: STRATEGIES, TOOLS, MOBILITY AWARENESS, AND PROJECTIONS FOR REGULATORS

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INTRODUCTION

- Workforce data is foundational for building resilient and equitable health systems.
- Accurate data informs strategic decisions in health workforce planning, regulation, and policy development.
- In Africa, health workforce challenges are compounded by weak data systems and high mobility.
- Regulators hold untapped data crucial for national planning.

Objective: *Highlight importance, share tools, mobility patterns, and data-driven planning strategies.*

WHY HEALTH WORKFORCE DATA MATTERS

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Analysis of basic health workforce data is essential to plan for educational programmes, shape regulatory policies, identify health workforce gaps, forecast training and employment needs, and justify funding requests.

Health workforce data analysis can also be used to evaluate the impact that policy decisions have on the health workforce.

WHY HEALTH WORKFORCE DATA MATTER

More specifically, it:

- **Tracks inflow, outflow, and attrition.**
- **Enables evidence-based health workforce planning and investment.**
- **Reveals geographic imbalances and underserved regions (e.g., *rural vs. urban*).**
- **Supports alignment of workforce supply with current and future demand.**
- **Strengthens policy development for recruitment, retention, and distribution.**
- **Provides insights into skills mix and training needs of the health workforce.**
- **Helps monitor and address workforce shortages and surpluses.**

WHY HEALTH WORKFORCE DATA MATTER

More specifically, it:

- **Informs strategies to manage health emergencies and system shocks.**
- **Enhances coordination among regulators, ministries, and training institutions.**
- **Reduces reliance on anecdotal evidence and allows for targeted interventions.**
- **Supports evaluation of policies and incentive schemes for effectiveness**

GLOBAL WORKFORCE CHALLENGES

- **Health systems worldwide face critical health workforce challenges, prompting stronger data management, mobility monitoring, and forward-looking regulation.**
- **The World Health Organization (WHO) estimates a global shortfall of health workers in the millions – initial projections of an 18 million shortage by 2030 have been revised, but a deficit of about 10 – 15 million remains likely.**
- **Such shortages, concentrated in low- and middle-income countries, threaten progress towards the attainment of Universal Health Coverage.**
  - ***25% global disease burden, only 1% of health workers.***
  - ***Severe outbound mobility.***
- **Need for scale-up in training, better distribution, and retention.**

AFRICAN WORKFORCE CHALLENGES

- **Sub-Saharan Africa faces a shortage of over 1.4 million health workers.**
- **Urban-rural and private-public disparities persist.**
- **Paper-based or siloed HR data systems remain common.**
- **Limited capacity in health training institutions.**
- **Skilled professionals migrate due to poor work environment [*poor infrastructure, equipment, pay etc.*] training, safety especially, due to armed conflicts.**
- **Frustrations in the system lead to burnouts, hindering retention.**

DATA TOOLS

1

In response to the increased health workforce mobility, WHO and partners developed **National Health Workforce Accounts (NHWA)** as a standardised data platform for countries to track health workforce stock, distribution, inflows, and outflows (*Walton-Roberts & Bourgeault, 2024*).

2

All WHO member states are expected to **upload detailed workforce data** (*e.g. numbers by cadre, age, gender, education, and practice status*) into this global system.

3

However, **data quality and completeness remain a challenge**; many countries have inconsistent reporting, underscoring the need for improved HR information systems and technical support to strengthen data collection.

WALTON-ROBERTS M, BOURGEAULT IL. HEALTH WORKFORCE DATA NEEDED TO MINIMIZE INEQUITIES ASSOCIATED WITH HEALTH-WORKER MIGRATION. BULL WORLD HEALTH ORGAN. 2024 FEB 1;102(2):117-122. DOI: 10.2471/BLT.23.290028. EPUB 2023 NOV 21. PMID: 38313146; PMCID: PMC10835628.

SOME DATA TOOLS AVAILABLE

WHO National Health Workforce Accounts (NHWA) is a system through which countries can share data on their health workforce and work towards improvements in the availability, quality and use of such data.

- **Facilitate collection and sharing of standardised data on health worker inflow, outflow, and density.**
- **Enable comparison between source and destination countries.**
- **Help high-income countries understand the impact of international recruitment.**
- **Support analysis of workforce sustainability and long-term planning.**
- **Provide evidence to examine country-specific contexts and health system drivers.**
- **Inform policy decisions by linking workforce data to education, migration, and employment trends.**

SOME DATA TOOLS AVAILABLE

- **iHRIS (used in Africa for digital registries)** – IntraHealth International's free, open-source software, helps countries around the world track and manage their health workforce data to improve access to services.
- Countries use it to capture and maintain high-quality information for **health workforce planning, training, management, and regulation.** https://www.ihris.org/news/categories/uganda
  - *CHAG, Ghana – Health Workforce Management*
  - *Uganda – Track Health Worker Training*
  - *Tanzania – Health Workforce Management*

SOME DATA TOOLS AVAILABLE

- **National systems/Integrated HRIS Platforms: Electronic Staff Record (UK)**
- **Health Resources and Services Administration (HRSA) databases (US)**
- **Canadian Institute for Health Information – CIHI (Canada)**

- **WHO African Health Observatory: Aggregates HRH data continent-wide**

TOOLS TO MONITOR MOBILITY AND MAKE PROJECTIONS

- **National Health Workforce Accounts (NHWA):** A standardized platform by **WHO** that enables tracking of health worker inflows, outflows, and density across countries. Supports international benchmarking, comparative analysis, and data-informed workforce policy. Crucial for understanding migration patterns and workforce sustainability.
- **Licensing Exit Data:** Capturing verification requests and migration intent from licensed professionals helps regulators track real-time mobility trends and anticipate workforce losses.
- **Bilateral Agreements:** Formal arrangements with destination countries (e.g., ***Ghana-Barbados, UK-Kenya agreements***) allow regulated, ethical migration and provide opportunities for skills transfer or return of service.

TOOLS TO MONITOR MOBILITY AND MAKE PROJECTIONS

- **WHO Workload Indicators of Staffing Needs (WISN):** A tool that calculates staffing needs based on service statistics and workload, enabling evidence-based planning for facility-level human resources.
- **Labour Market Analysis (HRH2030):** Frameworks supported by WHO and World Bank that analyse health labour supply, demand, wages, and training capacity to inform workforce development strategy.
- **Artificial Intelligence & Predictive Analytics:** Emerging tools that use existing data to forecast shortages, retirement trends, skill gaps, and future needs based on demographic, disease, and health system changes.
- **Dashboards and Visualisation Tools:** User-friendly platforms (web/mobile) that provide decision-makers with accessible, real-time data to support rapid planning and monitoring of workforce dynamics.

ROLE OF HEALTH PROFESSIONAL REGULATORS IN DATA MANAGEMENT

The five C's:

Clear, Concise, Contextual, Comparative, Control (ownership and usage)

Track licensure, registration, and practice status

Track migration, gender balance, and aging trends

Collaborate with ministries and training institutions

Lead data governance and ensure data quality and completeness

Enable projections and accreditation oversight

Align training with health service needs and projections

Invest in regulatory capacity for data analysis and visualisation

Drive evidence-informed policy, planning, and advocacy

WORKFORCE MOBILITY TRENDS

- Global migration of health workers is accelerating.
- Many health professionals work outside their country of training or origin
  - *Push/pull factors: wage differentials, further training, conditions of service, unequal opportunities.*
- High-income nations with aging populations (*notably OECD countries*) are increasingly recruiting internationally to fill staffing gaps.
- At the same time, some lower-income countries also import health workers due to insufficient domestic training capacity.
  - *for instance, Lesotho and South Africa recruit from abroad to meet patient needs (https://thedocs.worldbank.org/en/doc/)*

WORKFORCE MOBILITY TRENDS

Physician shortage: **Up to 124,000 by 2034** (Association of American Medical Colleges) in the North America.

About **35%** of trained doctors and dentists **leave Ghana annually**.

30–70% of doctors from Malawi, Zimbabwe, Mozambique **have emigrated**.

Many African countries are both **source and destination for regional migration** (e.g., *Kenya attracting health workers from East Africa*).

IMPACTS OF MOBILITY

Brain drain from low-income countries – depletes workforce, especially in rural areas; reduces care access, increases patient load.

Creates inequities (*distribution and skills mix*) leading to service gaps in source countries.

Overreliance of high-income countries on international medical graduates.

Loss of public investment in training in resource constrained source countries.

Creates skills mismatch and ethical dilemmas – WHO Global Code of Practice: ethical recruitment guidelines.

UK CASE STUDY: WORKFORCE DATA & REGULATORY INITIATIVES

Demonstrates data-driven planning and reform in health workforce management.

Focus on NHS data systems, mobility awareness, and strategic regulatory actions.

UK – DATA SYSTEMS AND MONITORING

01

Electronic Staff Record (ESR) tracks over 1.85 million NHS staff.

02

GMC and NMC provide data on licensure, graduate entry, and IMGs.

03

Data systems support real-time decision-making and national planning.

04

Revealed overdependence on temporary and international staff.

UK – WORKFORCE PLANNING AND PROJECTIONS

NHS Long Term Workforce Plan (2023) forecasted 260,000–360,000 staff shortfall by 2036.

Used modeling tools to simulate supply-demand scenarios.

Informed a national 'Train, Retain, Reform' strategy to expand domestic workforce.

UK – TRAINING AND EDUCATION EXPANSION

MEDICAL SCHOOL PLACES TO DOUBLE TO 15,000/YEAR BY 2031/32.

GENERAL PRACTITIONER TRAINING SLOTS TO INCREASE BY 50%.

NURSING INTAKE TO RISE BY 65–80% BY 2030, ESPECIALLY IN MENTAL HEALTH.

INTRODUCED APPRENTICESHIP AND 4-YEAR MEDICAL DEGREE PATHWAYS.

UK – MOBILITY AND INTERNATIONAL RECRUITMENT

1

Significant reliance on IMGs: 52% of GP trainees in 2023 were international.

2

Adheres to WHO Code of Practice – no government recruitment from 'red list' countries.

3

Caution over sustainability of reliance on foreign-trained professionals.

4

Data on inflows drives ethical and balanced recruitment strategies.

UK – REGULATORY REFORMS AND LICENSING

- GMC introducing Medical Licensing Assessment (MLA) for all graduates to standardise the evaluation of all UK and international medical graduates before full licensure – a step intended to streamline and ensure consistency in standards as the number of trainees grows and mobility increases.
- NMC updated test of competence and eased English requirements.
- Licensing aligned with projected workforce needs and global mobility trends.
- Standardisation ensures quality across UK and international graduates.

GHANA'S CASE STUDY

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- Desktop review of our electronic database for doctors and dentists.
- Two critical findings:
  - *Overconcentration of practitioners, especially specialists in urban areas (Accra and Kumasi) affecting access to specialist care in the districts.*
  - *Over 4000 practitioners left the country between 2021 and 2024 using requests for Certificates in Good Standing as a proxy indicator for out migration.*

GHANA'S CASE STUDY

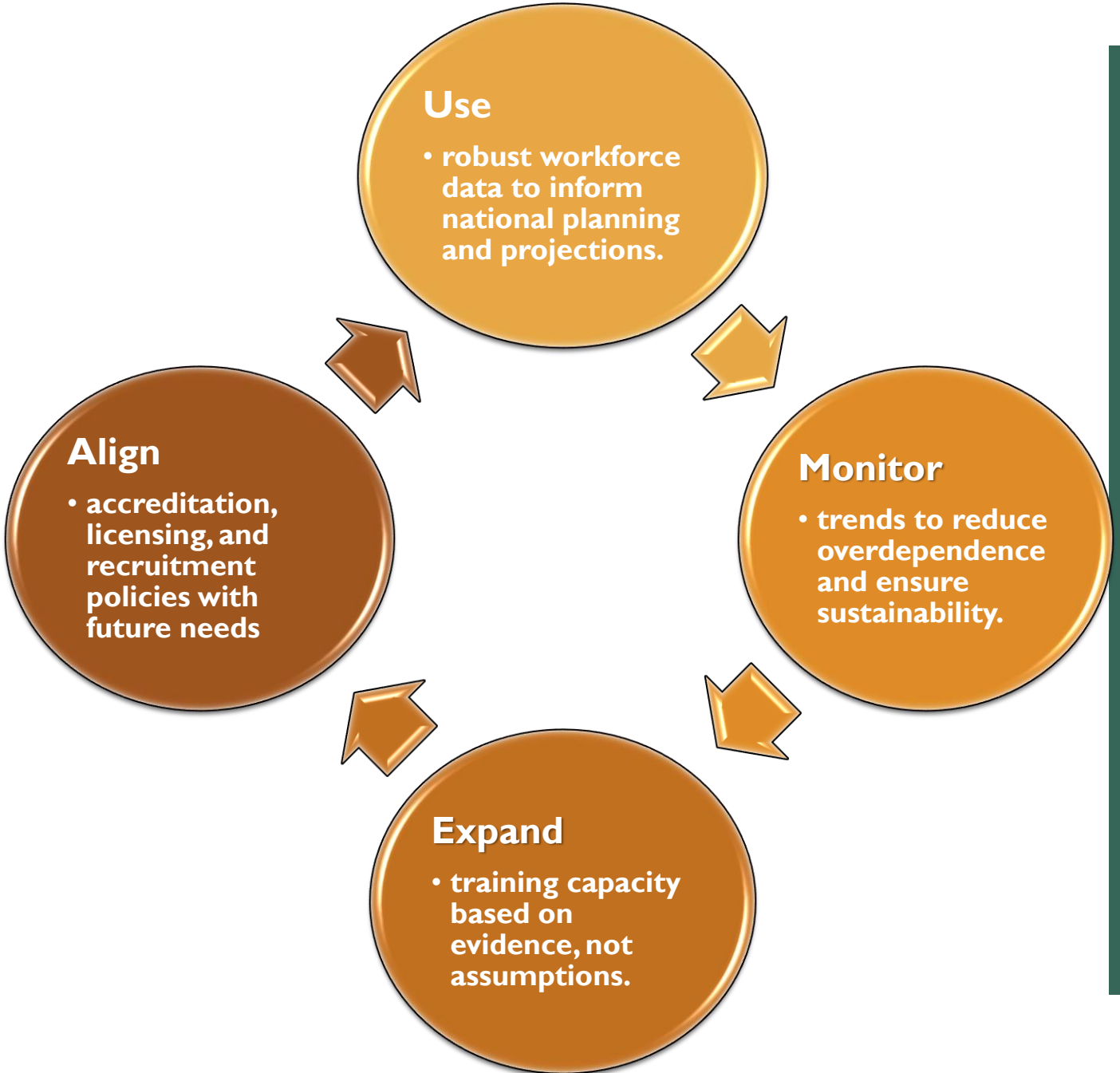
- Stakeholder engagement: service providers (GHS, CHAG, Teaching Hospitals, Quasi-Govt., Private sector etc.), Ghana College of Physicians and Surgeons, West African College of Physicians and Surgeons.
  - ***To decentralise training of Specialists, flexible training modules, mandatory one-year housemanship training at District level (hospitals require the presence of Specialists for accreditation).***

- **Diaspora engagement: MOUs with GDDA-UK, GPSF of North America**
  - ***Flexible terms of registration and licensing***
  - ***Sub-Specialty Service delivery/knowledge transfer (transplants, robotic surgery, etc.)***
  - ***Faculty for undergraduate and postgraduate training (linking medical and dental training schools and Colleges). Expansion of local training*** **- two (2) new medical and two (2) dental schools**. Creating opportunity for **360 persons** to pursue their dreams of becoming doctors or dentists in Ghana.
  - ***Collaborative research***

GHANA'S CASE STUDY

Results

- Increasing number of Specialist trainees outside the cities and Teaching Hospitals (***similar to that of COSECSA: achieving high retention (93%) of trained surgeons within the continent through decentralised training models***).
- Increasing number of practitioners in the regional and district hospitals – redistributing specialist workforce.
- Increasing number of diaspora practitioners returning to Ghana (***e.g over 100 specialists in the diaspora are supporting training in Ghana, Medical Fiesta with GPSF-USA and GCPS, and the upcoming maiden Dental Fiesta in May, 2025 by the GDDA-UK and GCPS***).
- Reframing the **brain-drain** narrative to a **bi-directional win-win approach**.



UK AND GHANA – KEY LESSONS FOR REGULATORS

STRATEGIES FOR EFFECTIVE WORKFORCE DATA MANAGEMENT

Develop and implement national HRH observatories and databases.

Build interoperable systems linking regulators, ministries, and training institutions.

Institutionalise data-sharing protocols across sectors.

Provide continuous capacity building for data analysts and health planners.

Create incentives for health workers and employers to update records regularly.

Use policy dashboards and data visualisation tools to track and present trends.

USING DATA FOR PROJECTIONS

- Licensing reforms based on anticipated gaps.
- Use predictive analytics to estimate attrition, training needs, and regional gaps.
- Align Education & Demand: Match training outputs with projected service needs based on population growth, burden of disease, and health system goals.
- Demographic Analysis: Use data on workforce aging, gender distribution, and cadre mix to plan succession and inform recruitment and training priorities.
- Geospatial Mapping: Identify underserved areas and adjust workforce deployment plans accordingly.
- Trend Forecasting: Apply tools and historical data to anticipate future needs and guide enrolment, funding, and infrastructure decisions.
- Collaborative Planning: Share projections with government, academia, and partners to align strategies and pool resources.

REGULATORY LEVERS FOR CHANGE

- Accreditation and curriculum **reforms**.
- Licensing exams and verification systems – **standardise evaluation of competencies and facilitate mobility** through mutually recognised qualifications.
- **Training** the **appropriate cardre** to meet local needs.
- **Monitoring** workforce flows to adjust policies.
- Leverage the **Diaspora**: develop return pathways, simplify licensing and credentialing of returnees, regulate use of telemedicine and diaspora platforms.

POLICY IMPLICATION AND ACTION POINTS

- **Invest in Digital Systems:** Build national, interoperable data platforms for real-time HRH monitoring and tracking.
- **Ethical Recruitment Protocols:** Establish agreements that balance migration with domestic workforce needs, promoting mutual benefits.
  - ***A move away from brain-drain to a bi-directional win-win approach.***
- **Expand Local Training Capacity:** Support more postgraduate and specialist training within Africa to retain talent and reduce outflow.
- **Data-Driven Governance:** Create mechanisms for regulators to contribute directly to national workforce planning and policy formulation.
- **Intelligence Hubs:** Position regulatory bodies as central nodes for health workforce information, analysis, and early warning.
- **Build regional and global cooperation to manage mobility and credential recognition.**

CONCLUSION

- Good data = better decisions.
- Strong workforce = creates resilient health systems.
- **Data Empowers Action**: Accurate, timely data is foundational to health workforce planning.
- **Regulators as Catalysts**: African regulatory bodies are key players in transforming HRH governance/workforce sustainability.
- **Future-Focused Strategies**: Regulatory creativity, and innovation, collaboration, and strong leadership are essential for health workforce sustainability.
- **Call to Action**: African Regulators **must** use workforce data to inform reforms, ensure equity in health workforce distribution, and strengthen health systems continent-wide.

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Thank You