Ending disease in Africa

## The Precision Public Health Strategy

Driving data-informed health policies and interventions in the WHO African Region

Precision public health

Precision public health (PPH) is about delivering "the right intervention at the right time, every time, to the right population."[1]. It focuses on a people-centred approach, identifying communities at risk through the innovative use of technologies innovations and analytics. Applying PPH will ensure that countries will deliver on the principle of "leaving no one behind".

Precision public health is focused on innovation, harnessing data-driven evidence, targeted interventions and cutting-edge technologies to refine and amplify the impact of health strategies, customizing them to the unique needs and attributes of specific populations or individuals. This shift away from "one size fits all" interventions to precision public health approaches reflects the growing need to:
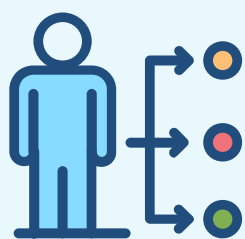
Address differences in disease burden between population groups.
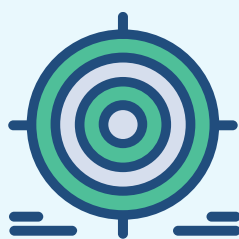
Target high-risk areas and populations.

Optimize resource allocation and efficiency.

Tailor interventions to specific populations.
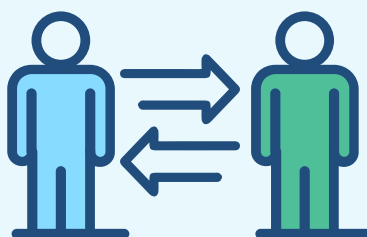
Enhance stakeholder engagement and collaboration.

Adapt to dynamic health landscapes.

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[1] Khoury MJ. Precision public health: What is it? Genomics and Precision Health [website]. Atlanta: Centers for Disease Control and Prevention; 15 May 2018 (https://blogs.cdc.gov/genomics/2018/05/15/precision-public-health-2/).

The Precision Public Health (PPH) Unit

The Precision Public Health (PPH) Unit was created to fill these gaps and deliver on the PPH4Africa initiative. It is one of two specialized offices within the communicable and non-communicable disease (UCN) Cluster, offering cross-cutting sup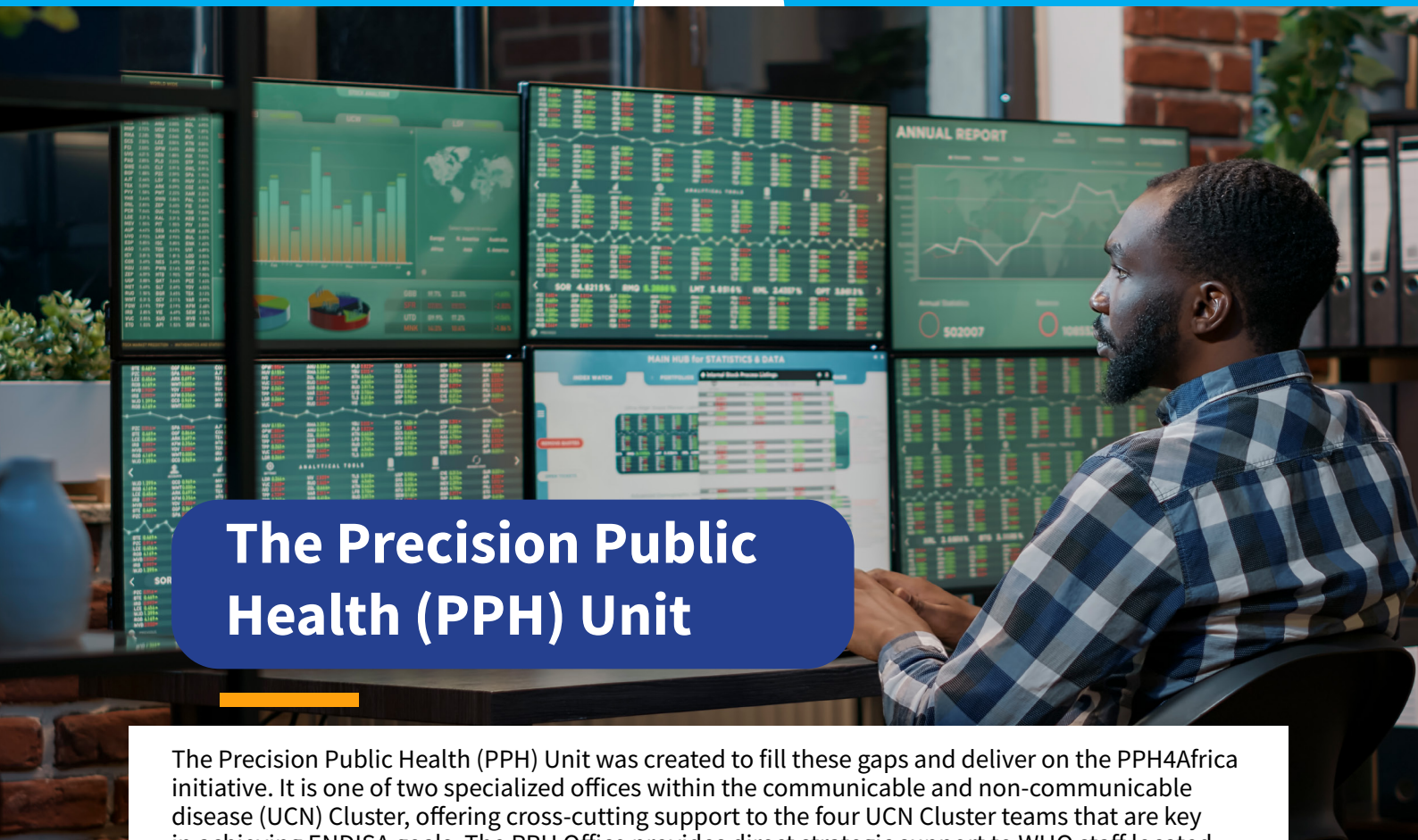port to the four UCN Cluster teams that are key in achieving ENDISA goals. The PPH Office provides direct strategic support to WHO staff located within WHO's Regional Office for Africa and staff working in WHO Country Offices, along with supporting the Region's 47 Member States.

PPH Strategy, 2024–2033

The **Precision Public Health Strategy, 2024–2033,** is an integral component of the broader Ending Disease in Africa (ENDISA) Strategy and the UCN Cluster's vision for the region.

Goal and objectives

Use data science approaches to improve disease burden estimates for major communicable and noncommunicable diseases, and forecast trends, impact and public health needs.

Monitor trends and intensity of epidemic transmission for major communicable and noncommunicable diseases and identify sub-national units susceptible to disease outbreaks.

Quantify the impact of diseases and new interventions such as vaccines on health outcomes and health equity.

Support the development of standardized, fit-for-purpose and interoperable data systems and infrastructure to support the application of precision public health to communicable and noncommunicable disease control in Africa.

Engage local national and international partnerships and collaboration for a sustainable approach to health delivery within countries, using tailored national and subnational data to drive decision making and policy.
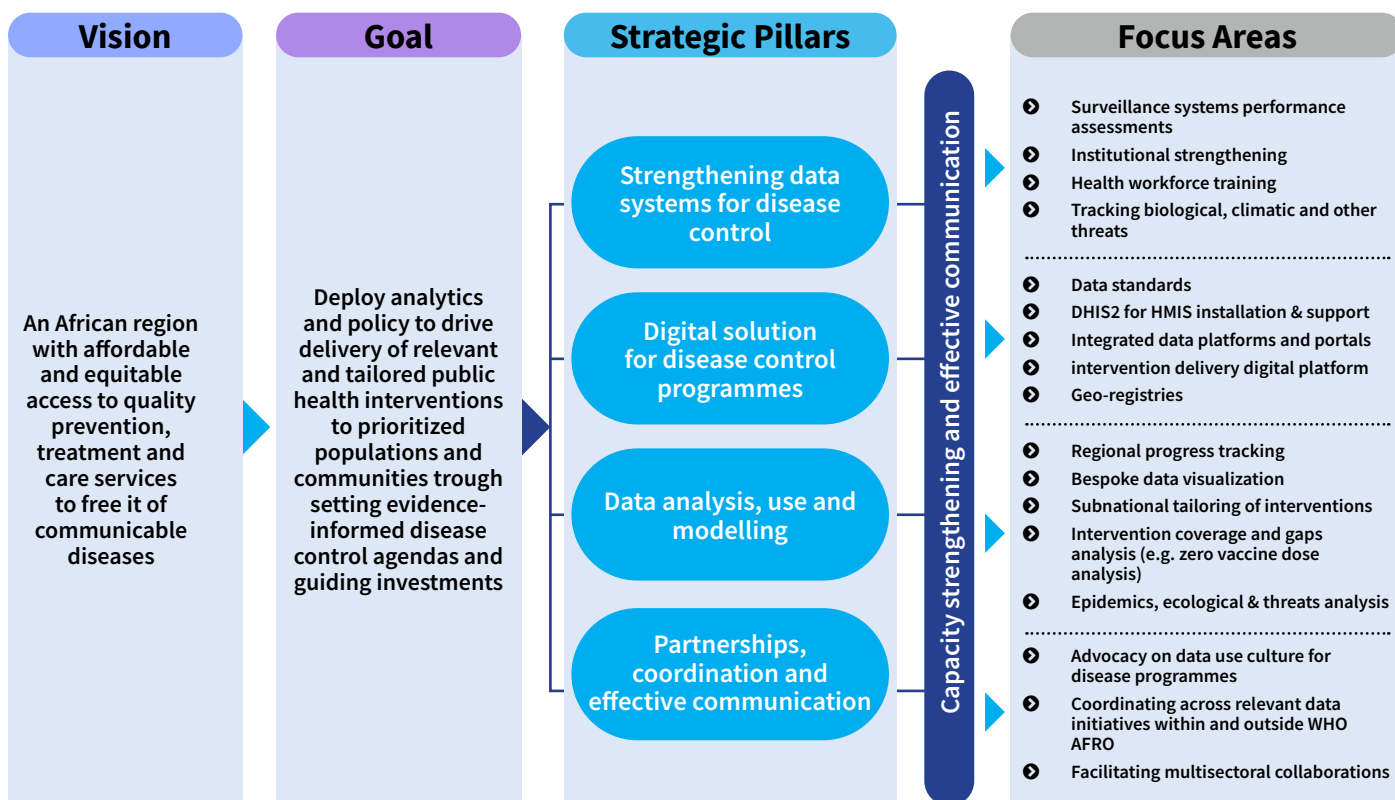
Build capacity in data capture, analysis and use at regional and country levels.

Provide leadership and coordination in building regional disease networks aimed at strengthening local data science capabilities in African countries, while building capacity within established regional institutions and centres of excellence.

Figure 1 Precision Public Health Office vision, goal, strategic pillars and focus areas

Vision	Goal	Strategic Pillars	Focus Areas
An African region with affordable and equitable access to quality prevention, treatment and care services to free it of communicable diseases	Deploy analytics and policy to drive delivery of relevant and tailored public health interventions to prioritized populations and communities trough setting evidence-informed disease control agendas and guiding investments	**Strengthening data systems for disease control**	Surveillance systems performance assessments; Institutional strengthening; Health workforce training; Tracking biological, climatic and other threats
		Digital solution for disease control programmes	Data standards; DHIS2 for HMIS installation & support; Integrated data platforms and portals; intervention delivery digital platform; Geo-registries
		Data analysis, use and modelling	Regional progress tracking; Bespoke data visualization; Subnational tailoring of interventions; Intervention coverage and gaps analysis (e.g. zero vaccine dose analysis); Epidemics, ecological & threats analysis
		Partnerships, coordination and effective communication	Advocacy on data use culture for disease programmes; Coordinating across relevant data initiatives within and outside WHO AFRO; Facilitating multisectoral collaborations

(Capacity strengthening and effective communication)

Strategic pillars and focus areas

Four strategic pillars and several focus areas have been formulated to achieve the goals and objectives of the strategy, each with associated strategic actions at the regional and country levels.

Strategic pillar 1: Strengthening data systems for disease control

The focus areas are:

❯ Surveillance systems performance assessment.

❯ Institutional strengthening.

❯ Health workforce training.

❯ Tracking biological, climatic and other threats.

Strategic pillar 2: Digital solutions for disease control programmes:

❯ Data standards.

❯ District Health Information System II (DHIS2)[1] for health information management system instalment and support.

❯ Integrated data platforms and portals.

❯ Digital platforms for programme delivery.

❯ Geo-registries.

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[2] DHIS2 is a free and open-source software platform for the collection, reporting, analysis and dissemination of aggregate and individual-level data. It is widely used in countries across the African Region.

Strategic pillar 3: Data analysis, use and modelling

- Regional progress tracking.
- Bespoke data visualization.
- Subnational tailoring of interventions.
- Interventional coverage and gaps analysis.
- Epidemics, ecological and threats analysis.

Strategic pillar 4: Partnerships, coordination and effective communication

- Advocacy on data use culture for disease programmes.
- Coordinating across relevant data initiatives within and outside the WHO African Region.
- Facilitating multisectoral collaboration.

Expected Achievements

The PPH Strategy outlines four expected outcomes within the broad ambition of Ending Disease:

1. **Guidance, standards, training materials and tools with appropriate digital solutions for health systems and services are in place at the regional level and in national health systems.**

2. **Common data standards and data platforms are in place at the national level, including monitoring of common risk factors for communicable and noncommunicable diseases.**

3. **Innovations for health are implemented to improve the uptake and use of information products to promote data-to-action for timely disease control.**

4. **Regional and national strategic research agendas are developed for communicable and noncommunicable diseases based on improved disease burden data and epidemiological trends.**