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Public health and emergency workforce: a roadmap for WHO and partner contributions

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Correspondence to Dr Atiya Mosam; atiya.sph@gmail.com The COVID-19 pandemic has tested the health systems of countries around the world as they strived to respond to the rapid and burgeoning needs within their individual socio-political and economic contexts. While pandemic management rapidly stressed diagnostic and therapeutic services and supply chains, the need for a well-coordinated, effective and diverse workforce to undertake the essential public health functions (EPHFs), including responding to a public health emergency of international concern became prominent. In parallel, inadequate preparedness of many health systems to withstand unexpected health shocks and the shift of human resources to emergency responses meant widespread disruptions to routine health services with resultant effect on morbidity and mortality.^{1–3}

The ability to deliver essential clinical and public health services and respond, as required, to emergencies and hazards is a fundamental function of a health system. When this function is correctly configured the attribute of resilience is hard wired into its core: with effective delivery led by a competent workforce, with the appropriate skills, who are tasked with a range of functions from emergency response to health system stability. The COVID-19 pandemic and other public health emergencies of international concern in recent years (eg, Ebola, Zika and Middle East Respiratory Syndrome) have highlighted the limitations (or in some cases, complete lack) of public health workforce plans in many countries. With an ongoing pandemic, increasing backlogs in health services, economic scarring and political recognition of future public health threats, the need for pre-emptive policies and plans to ensure a skilled and readily available workforce to

deliver EPHFs is imperative.⁴ This includes countries assessing and using the entirety of the available public health personnel and professionals, including those outside the health sector.

In this regard, we recognise and welcome the political concord present in the Rome Declaration,⁵ the G20 Italia⁶ and a series of World Health Assembly resolutions,^{7–10} where there has been recognition of the need to build health workforce capacity to deliver EPHFs, including emergency preparedness and response, and the urgency with which actions must be put into place. These position the concept of 'workforce readiness' alongside the discussion of 'country readiness' for the next emergency.

WHO and its partners have developed a roadmap¹¹ aimed at standardising the definition, classification and scope of work for public health and emergency personnel tasked with delivering the EPHFs and responding to future public health emergencies. The roadmap includes recommended actions at national, regional and global levels along with collaborative activities to build an integrated, multidisciplinary and multisectoral public health workforce.

The conceptual approach outlined in the road map rests on three distinct but interrelated action areas: defining the functions and services of the public health workforce, developing and enhancing competency-based education for these personnel and mapping and measurement of the current and future workforce (figure 1). These functions are envisioned to occur concurrently, with progressive achievement, based on individual country context.

To enhance the ability of countries to undertake the activities highlighted in the

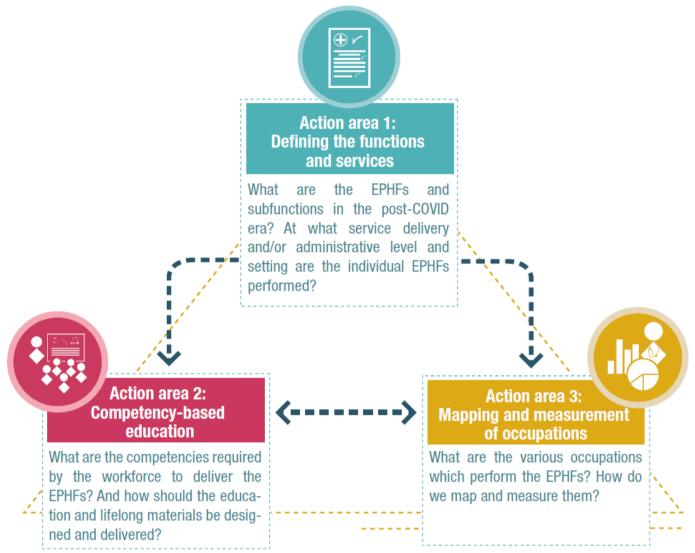


Figure 1 Conceptual approach to scoping, defining and building capacity of the workforce which delivers the EPHF (essential public health functions).

roadmap, certain high-level commitments and activities are essential. The partners urge the leadership of organisations such as the African Union, European Union, G7 and G20 to strengthen the commitments made in the aforementioned declarations and resolutions through political will and associated resource mobilisation to deliver on their earlier consensus, aims and objectives.

Furthermore, we urge public health associations, institutions, schools and all relevant stakeholders to enhance cooperation and coordination within and between regions to identify areas of synergy, co-creation of global public goods, joint implementation and then codifying learnings and dissemination of best practices. The establishment of a unified and standardised set of skills and competencies to govern public health practice across the world will serve to ensure that the wellbeing of the public is always at the forefront of every endeavour and it will provide communities with a trustworthy and globally accountable workforce to whom they can turn during health-system shocks when uncertainty and misinformation through fear and a lack of trust threaten the very wellness that this workforce is expected to protect.

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Collaborators The development of this roadmap was coordinated by Tapas Sadasivan Nair (WHO), Saqif Nowak Mustafa (WHO), Teena Kunjumen (WHO), Khassoum Diallo (WHO), Siobhan Fitzpatrick (WHO), Sohel Saikat (WHO) and Huan Xu (WHO), with expert inputs from the technical working group members—Philip Adongo (ASPHA), Patrick Anthony Drury (WHO), Mehreen B Hunter (CPHM (CMSA)), Rania Kawar (WHO), Atiya Mosam (CPHM (CMSA)), Fatai Ogunlayi (FPH), Robert Otok (ASPHER), Carl Reddy (TEPHINET), Cris Scotter (WHO EURO) and Neil Squires (UKHSA)—under the strategic oversight of John Middleton (ASPHER), Duncan Selbie (IANPHI) and James Campbell (WHO).

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REFERENCES

- 1 World Health Organization. *Pulse survey on continuity of essential health services during the COVID-19 pandemic: interim report, 27 August 2020.* World Health Organization, 2020.
- 2 World Health Organization. Second round of the National pulse survey on continuity of essential health services during the COVID-19 pandemic: interim report, 22 April 2021. World Health Organization, 2021.
- 3 World Health Organization. Third round of the global pulse survey on continuity of essential health services during the COVID-19

pandemic: November–December 2021: interim report, 7 February 2022. World Health Organization, 2022.

- 4 World Health Organization. Building health systems resilience for universal health coverage and health security during the COVID-19 pandemic and beyond: WHO position paper, 2021.
- 5 Rome Declaration, 2021. Available: https://global-health-summit. europa.eu/rome-declaration_en
- 6 G20 Italia. Declaration of G20 health ministers, 2021. Available: https://www.g20.org/wpcontent/uploads/2021/09/G20_Italia_2021_ Health_Declaration_final_05092021_OFFICIAL.pdf
- 7 WHA69.1. 'Strengthening essential public health functions in support of the achievement of universal health coverage'. Available: https:// apps.who.int/gb/ebwha/pdf_files/WHA69-REC1/A69_2016_REC1en.pdf#page=27
- 8 WHA69.19. 'Global strategy on human resources for health: workforce 2020'. Available: https://apps.who.int/gb/ebwha/pdf_files/ WHA69-REC1/A69_2016_REC1-en.pdf#page=67
- 9 WHA74.7. 'Strengthening WHO preparedness for and response to pandemics'. Available: https://apps.who.int/gb/ebwha/pdf_files/ WHA74/A74_R7-en.pdf
- 10 WHA74.14. 'Protecting, safeguarding and investing in the health and care workforce'. Available: https://apps.who.int/gb/ebwha/pdf_files/ WHA74/A74_R14-en.pdf
- 11 World Health Organization. Building the public health and emergency workforce: a roadmap. World Health Organization, 2022. Available: https://www.who.int/news-room/events/detail/2022/05/18/defaultcalendar/phewf_roadmap_launch