Health workforce policy and management in the context of the COVID-19 pandemic response

Interim guidance

3 December 2020

WHO continues to monitor the situation closely for any changes that may affect this interim guidance. Should any factors change, WHO will issue a further update. Otherwise, this interim guidance document will expire 2 years after the date of publication.

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World Health Organization

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Contents

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Executive summary

This guide consolidates COVID-19 guidance for human resources for health managers and policy-makers at national, subnational and facility levels to design, manage and preserve the workforce necessary to manage the COVID-19 pandemic and maintain essential health services.

The guide identifies recommendations at individual, management, organizational and system levels. It consolidates into a single reference document early evidence from the pandemic and health workforce policy options in published World Health Organization (WHO) COVID-19 guidance. It will be updated on a regular basis. It benefits from extensive consultation within WHO departments, regional offices, international organizations, academia and professional associations active in the response. The guidance covers the following domains:

Supporting and protecting health workers:

- infection prevention and control, including use of and access to personal protective equipment;
- decent working conditions, including occupational health and safety;
- mental health and psychosocial support;
- remuneration and incentives.

Strengthening and optimizing health workforce teams:

- building competencies through education and training;
- optimizing roles;
- leveraging community-based health workers.

Increasing capacity and strategic health worker deployment:

- improving health worker availability through hiring and redeployment;
- activating partner networks;
- rationalizing the health workforce distribution;
- ensuring a supportive work environment, including a manageable workload.

Health system human resources strengthening:

- improving health workforce information systems, including to track health worker infections;
- assessment and planning of health workforce needs;
- licensing and regulation reforms;
- strengthening governance and intersectoral collaboration mechanisms.

The specific needs of female health workers and of those with greater vulnerability due to age, ethnicity, social determinants of health or disabling conditions should be addressed, including in relation to safety issues, decent working conditions and equal opportunities.

The costs involved in scaling up and appropriately supporting the health workforce for the COVID-19 response represent an investment in building health workforce capacity that will not only support health systems in the immediate response, but also form a foundation for global health security in the future.

Background

The COVID-19 pandemic poses substantive challenges to health systems globally, balancing additional service delivery needs required to manage the pandemic while preserving and enhancing access to essential health services (*1*). Health workers are both a central component of the pandemic response and among those most vulnerable to infection and mental health impacts due to their professional exposure. Low staffing levels, particularly nurse–patient ratios, are themselves associated with the spread of pathogens in health care settings and risk of outbreaks (*2*).

Strategic workforce planning, support and capacity-building are required to guarantee health system operations. Many countries face pre-existing health workforce challenges, including shortages (estimated at 18 million globally, mostly in low- and lower-middle-income countries) (*3*), maldistribution, and misalignment of needs and skills.

The pandemic further impacts the availability and capacity of health workers to deliver essential services and meet surge needs. Health worker challenges during COVID-19 may include lack of adequate personal protective equipment (PPE) and other essential equipment; infection and quarantine; social discrimination and attacks; and dual responsibility to care for friends and family members.

Target audience and scope of this guidance

This guide outlines COVID-19 human resources for health policy options for decision-makers and managers responsible for the planning, recruitment, training, equipment, deployment, protection and management of the health workforce at national, subnational and facility levels. Some of its recommendations are directly relevant also for educators, regulators, development partners and health workers themselves.

Countries could experience one or more transmission scenarios at national or subnational level and should adjust and tailor their approach as these evolve over time. The policy options outlined in the document are designed to support countries in selecting timely, adjustable and relevant approaches based on context.

The interventions cover protecting and supporting health workers, building capacity and optimizing roles, improving availability and rationalizing distribution, reviewing and strengthening policy and regulations and ensuring consideration of gender and equity. Where appropriate, links are provided to the most closely related and relevant World Health Organization (WHO) tools and guidance.

The recommendations apply to, but are not limited to, health occupations that provide clinical services, such as doctors, nurses, pharmacists, rehabilitation professionals and community health workers. Some of the recommendations may apply also to paramedical staff, laboratory staff, support staff who have contact with patients, social care workers and others who play essential supporting roles (such as cleaners and ambulance drivers).

Methods

This guide represents an umbrella guidance document, consolidating policy recommendations from a variety of sources (existing WHO guidance on COVID-19; other WHO guidance developed for other reasons but with some relevance and applicability to COVID-19; and independent peer-reviewed publications). The intent is to provide a single point of reference for human resources for health managers and policy-makers to address human resources for health issues in the COVID-19 context and to reference relevant guidance for additional consultation. Policy enablers and capacity-building interventions to support the health workforce response to COVID-19 were identified by reviewing and consolidating relevant recommendations in published WHO guidance on COVID-19; adapting to COVID-19 existing WHO health workforce recommendations and applicable international conventions and frameworks; and appraising early experiences in countries in relation to the management of health workforce issues. Where no relevant WHO guidance or published evidence was available, the expert opinion of the contributors informed the development of the document. Most of the evidence underpinning the guidance in this document has a low or very low degree of certainty, or a degree of certainty that has not been formally assessed; this warrants caution in the interpretation of the policy recommendations contained in this document and their adaptation to the local context, and requires monitoring of the effect of adopted policies to adjust course as needed. A health system strengthening framework was used to categorize health workforce policy interventions at individual, institutional and systemwide levels (*4*).

The policy interventions considered in this document were validated through an iterative process of consultation with experts in health workforce and related domains within WHO and in key partner organizations, including civil society, academia, professional associations and other international organizations (see acknowledgements).

The document will be updated as needed in parallel with the emergence of new relevant evidence.

Interventions to support health workers at individual level

A. Infection prevention and control

Having the core components of infection prevention and control (IPC) programmes – or at least the related minimum requirements – in place at national and facility levels is essential to preparedness and outbreak response (*5*). In particular, competent IPC focal points and teams, effective implementation of IPC standard operating procedures at the point of care, and adequate equipment and staffing levels in clinical areas are critical elements to avoid pathogen transmission and spread of epidemics. Health workers must be well trained on IPC measures for COVID-19, equipped with the right personal protective equipment (PPE), and practise required safety measures to avoid infection in the workplace, household and community.

Managers and IPC focal points and teams should take the following critical measures to prevent transmission in health care:

A.1 Reinforce preventive measures, including physical distancing, frequent hand hygiene and respiratory etiquette.

A.2 Train all health and social care workers in IPC and COVID-19-specific measures, including appropriate use of, putting on and taking off, and disposal of PPE, in scenarios both with and without adequate availability of PPE (*6*). Use exercises and simulation scenarios for each task and context. Administer refresher training regularly for all health workers. Provide IPC-specific job aids in different languages for each task and service delivery location.

A.3 Stringently monitor IPC guideline compliance in all health care settings (*7*). Establish management protocols for assessing and testing health workers and ensure that they have priority access to testing and care in case of exposure (*8*) and, where applicable, are screened for COVID-19 in line with WHO recommendations (*9*).

A.4 Implement recommended IPC strategies: early recognition, source control and standard precautions for all patients; transmission-based precautions for suspected or confirmed COVID-19 patients; and administrative, environmental and engineering (for example, design and ventilation) measures (*10*).

A.5 Ensure availability of and access to IPC supplies (for example, alcohol-based handrub, soap, environmental disinfectants, PPE), quantify IPC supply needs (including appropriately sized and designed PPE), and pre-position adequate supplies at points of entry and places of care.

The risk assessment and management of exposure of health care workers tool (*9*) offers recommendations on management of health workers following exposure.

Resources

- Guidelines on core components of infection prevention and control programmes at the national and acute health care facility level (*2*)
- Minimum requirements for infection prevention and control programmes (*5*)
- Rational use of PPE for COVID-19 and considerations during severe shortages (*6*)

- Prevention, identification and management of health worker infection in the context of COVID-19: interim guidance (*8*)
- Risk assessment and management of exposure of health care workers in the context of COVID-19 (*9*)
- Surveillance protocol for SARS-CoV-2 infection among health workers (*11*)
- Advice on the use of masks in the context of COVID-19 (*12*)
- COVID-19 IPC guidance by service delivery setting:
  - Infection prevention and control during health care when novel coronavirus (nCoV) is suspected (*10*)
  - Home care for patients with suspected or confirmed COVID-19 and management of their contacts (*13*)
  - Infection prevention and control guidance for long-term care facilities in the context of COVID-19 (*14*)

B. Decent working conditions, including occupational health and safety

Managers should ensure decent working conditions required for safety and well-being, including through addressing the increased likelihood of health workers being subjected to discrimination, violence, attacks, harassment and stigmatization during the pandemic. COVID 19 highlights the need to address occupational health and safety within health facilities, including through adequate resourcing and appointing implementation focal points to enable regular assessment and control of occupational health and safety hazards and medical surveillance of health workers. In the context of the COVID-19 pandemic, high patient load, fatigue, stress, lack of communication and poor care coordination among health workers may make health workers more prone to making critical errors that increase their and patients' risk of infection and lead to unintentional patient harm. Typical errors include those related to injection safety and medication, and incorrect patient identification (*15*, *16*).

Managers and employers should:

B.1 Provide security and take measures that prevent all forms of discrimination and violence against health workers related to COVID-19 (*17*). Communicate with the public to reduce stigmatization of and discrimination against health workers arising from suspicion of COVID-19 infection.

B.2 Brief health workers on their rights, duties and responsibilities in the context of the COVID-19 response (*18*). Tailor guidance on safe working conditions and workers' rights and responsibilities to occupational group and roles performed. Provide a blame-free environment that facilitates reporting of incidents such as COVID-19 exposure and filing harassment and discrimination complaints. Health workers have the right to remove themselves from a work situation that presents an imminent danger to their lives or health, for example being asked to work with inadequate PPE. When a worker exercises this right, they shall be protected from any undue consequences (*19*).

B.3 Ensure workers have consented to work in clinical care for COVID-19 (*19*) and avoid coercion to work in the absence of adequate PPE. Reassign health workers at high risk of severe COVID-19 infection (for example, due to pre-existing co morbidities, immunosuppression or risk category) (*9*) to tasks or roles with lower exposure risk; consider reassigning those workers with clinical skills to telemedicine roles.

B.4 Establish safety measures and train support staff and social care workers on COVID 19 precautions and procedures. All workers who come in direct contact with COVID-19 patients should have PPE and training.

B.5 Provide timely access to information and facilitate transparent dialogue with health workers to share information on the evolving situation, clinical protocols, guidelines, measures and decisions, as well as on workplace situations that expose health workers to risk of infection (*20*).

Resources

- COVID-19 outbreak: rights, roles and responsibilities of health workers, including key considerations for occupational safety and health (*18*)
- Occupational safety and health in public health emergencies (*19*)
- HealthWISE: work improvement in health services (*21*)

C. Mental health of health workers

Threats to health workers' mental health during COVID-19 include high intensity of care, increased witness to suffering and death, increased volume of clinical services leading to overburdening, tension between public health priorities and patients' wishes, overall situational anxiety, and infection risk (compounded by lack of PPE) for health workers themselves and their families. Health workers' mental health should be prioritized for both long-term occupational capacity and short-term crisis response (*22*).

Managers should:

C.1 Assess and minimize additional COVID-19-related occupational psychosocial risks for stress (*23*).

C.2 Ensure access to and provision of mental health and psychosocial support services (MHPSS) for health workers involved in the COVID-19 response, which facilitates suicide prevention through early identification. Provide basic psychosocial support for first-line distress care, with at least one trained MHPSS worker for every health facility to manage priority conditions.

C.3 Promote help-seeking and provide evidence-based resources on basic psychosocial skills for health workers. Establish approaches to discuss challenges and dilemmas, organize schedules to include breaks, minimize other work-related stress and activate peer support.

C.4 Train health leads in basic psychosocial skills and regular supportive monitoring of staff mental well-being, including protection from COVID-19-related stress (*24*).

C.5 Ensure health workers with mental health conditions originating from COVID-19 have the same rights to treatment and access to care as the general population.

Resources

- IASC interim briefing note on mental health and psychosocial aspects of COVID-19 outbreak (*24*)
- Mental health and psychosocial consideration of COVID-19 (*25*)
- Doing what matters in times of stress (*26*)
- Basic psychosocial skills: a guide for COVID-19 responders (*27*)
- Health care workers: stories and key resources (*28*)

D. Remuneration and incentives

Regular and timely health worker salary payments must be maintained (29). Remuneration should be commensurate with duties performed, working hours and other factors, such as additional professional hazards and requirements. Additional allowances may be required to compensate for higher COVID-19

workload and risks and to minimize attrition. In recent epidemics, lack of timely or adequate payment of health workers was a primary cause of strikes (*30*) that severely affected the capacity of health systems to respond to the outbreak and maintain the provision of essential health services.

Policy-makers and managers should:

D.1 Increase resources and adopt, where needed, flexible, alternative mechanisms to ensure timely payment of salaries, overtime and, where applicable, hazard-related compensation.

D.2 Make legislative and administrative social protection provisions (*31*) – paid sick leave, occupational risk insurance and time off for quarantine – commensurate with job demands for all health workers, including for contracted temporary staff (*32*). These provisions can eliminate perverse incentives that encourage staff to report to work while ill or at risk of becoming ill following exposure. Specific employment insurance or, where no such insurance schemes exist, direct compensation from employers should assure access to health care and financial compensation for occupation-acquired infection (*33*).

D.3 Provide care support for children and elderly persons to enable health workers with vulnerable family members at home to work in health facilities rather than providing direct care for their families. Additional options include accommodation close to health facilities to reduce travelling times and minimize household and community risk, and transport or relocation allowances for redeployment.

D.4 Develop incentive packages that combine financial allowances to encourage willingness to work and non-monetary incentives (mentorship, networking and continuing education).

Interventions to build capacity and optimize the role of health workers

E. Building competencies required for the COVID-19 response

All health workers involved in direct patient contact roles should be provided with the appropriate training and information regarding COVID-19, as relevant to roles and responsibilities.

Policy-makers, employers, educators and managers should:

E.1 Develop or revise national guidelines, standard operating procedures and training modules in line with the latest evidence and global resources, covering priority content areas (**Box 1**). Ensure training covers the purpose behind protective measures, not just protocols themselves (for example, why it is important to follow IPC procedures).

E.2 Use existing national and global platforms to fast-track training, credentialing for specific skills and remote e-learning delivery.

E.3 Ensure all health workers are protected from requests to deliver care beyond their competencies and skills; students and new graduates are particularly vulnerable to this risk. In the context of the COVID-19 response it is therefore necessary to exercise caution and ensure adequate mentoring and supervision when requesting or assigning students who are on experiential learning, recently graduated health workers, and others redeployed from differing practice areas to be involved in the provision of COVID-19 services. Students and new graduates must be given, like other health workers, necessary training and supplies and appropriate supervision to reinforce rapidly acquired knowledge and skills.

E.4 Activate the training capacity of international and national professional societies.

E.5 Ensure an adequate supportive supervision structure for all health workers assigned to COVID-19 tasks to reinforce and regularly update evolving IPC and clinical management protocols, engage in group problem solving, and provide correct knowledge and skills. Reinforcing mHealth and e-health capabilities may accelerate and expand uptake and maintenance of relevant skills (34).

BOX 1. PRIORITY TRAINING CONTENTS FOR HEALTH WORKERS INVOLVED IN COVID-19

- Development and delivery of training for COVID-19 practice areas should encompass the following: IPC measures, including standard and transmission-based precautions; prevention, rapid response, triage and patient care, isolation, contact tracing, and differentiated care pathway requirements for COVID-19 patients; diagnosis, laboratory testing and case management; safe burial; protection and safety of health workers; safety and risk management areas (such as medication safety, injection safety and patient identification); support functions, such as supply chain management with a focus on COVID-19 products; and incident reporting and learning systems. The specific contents of required training will vary by occupational group and roles assigned.
- Training should include COVID-19 job aids contextualized for different health occupations, to be updated regularly as emergent training gaps are identified.

- Improve the skills of staff in management of suspected or confirmed COVID-19 cases, including on IPC measures and work in high-demand areas (such as infectious disease wards, emergency wards and intensive care units), in order to cope with the surge in cases. Additional capacity-building should be provided for specialized services, including through team-based mentoring schemes, whereby senior specialists can provide on-the-job training for junior or generalist workers.
- Staff deployed for the first time to provide high-acuity care in emergency units or intensive care units (ICUs) should be provided with the needed training, targeted at safely providing care in those specialized settings.
- Beyond specific clinical skills, health workers may require training or retraining on soft skills, such as effective communication and teamwork, as well as engagement of patients, families and caregivers.

Resources

- The WHO Academy's mobile learning app for COVID-19 (*35*)
- OpenWHO courses:
  - Responding to COVID-19: real-time training for the coronavirus disease outbreak (*36*)
  - IPC for COVID-19 virus (*37*)
  - COVID-19: how to put on and remove PPE (*38*)
  - Clinical care severe acute respiratory infection training (*39*)

F. Optimizing roles

In settings facing shortages of specific skills, optimizing tasks and roles of health workers to address needs, from maintaining essential services to COVID-19 support and care of severe cases, requires policy-makers to adjust health workforce distribution, composition of teams, scope of practice, clinical management approaches and care delivery pathways. Clear and context-specific guidelines should specify roles and tasks by occupational group, including sustaining essential health services. Ministries of health, health professional regulatory boards, professional associations, training institutes, employers and workers' representatives should work together to implement successful task sharing.

Policy-makers and managers should:

F.1 In settings facing skills shortages, assign generalist health workers, those repurposed from other health delivery settings, and recent medical graduates under appropriate supervision to appropriate roles that reflect their knowledge, skills and experience.

F.2 Identify high-impact clinical interventions amenable to safe role delegation and expansion of scope of practice (**Box 2**).

F.3 Where resources are limited, identify the available health worker skills mix that is best suited to address clinical care needs (*40*).

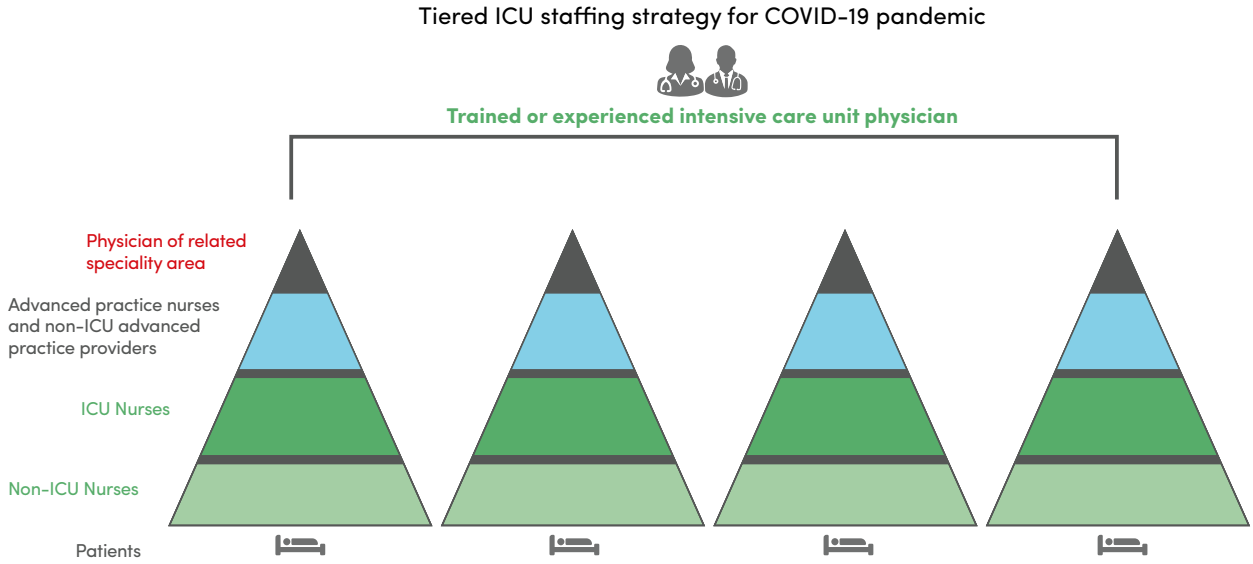
F.4 Use telemedicine to reduce physical patient–provider encounters. This option may be particularly relevant for recently graduated medical students and health workers from vulnerable groups (for example, in relation to age, ethnicity, co morbidities or immunodepression), enabling them to contribute to service delivery while minimizing exposure and infection risk.

F.5 Appropriately staff and resource hotlines and mHealth applications and inform the public how to access treatment, home care by community-based health workers, telemedicine, online health assessment tools and temporary facilities (*41*).

BOX 2. EXAMPLES OF ROLES AND TASKS THAT CAN BE DELEGATED

- Community-level nurses and community health workers, with rapid training and sustained supervision by public health specialists, may support basic health and IPC promotion, contact tracing and referral.
- Teams led by specialists can be supported by medical doctors without a specialization or even health associate professionals with relevant skills in the treatment of hospitalized patients with moderate COVID-19 infection.
- In intensive care settings facing ICU-capable health worker shortages, ICU teams led by an experienced intensivist can be supported by specialists or staff of other (preferably related) areas who were previously involved in ICU or have other forms of high-dependency expertise, or early career professionals pursuing a specialization in this field or in closely related areas (**Figure 1** provides an illustrative example of this concept).
- Non-ICU health professionals working in the ICU can be given rapid training in oxygen provision, use of ventilators, and management of sepsis, pneumonia, blood pressure and pain control (*42*).
- Other ICU health workers, such as physiotherapists and nurses, may take on additional tasks, considering individual competencies and the risks associated with specific interventions. Harnessing the potential of advanced nursing practice (*43*) may entail experienced intensivist nurses leading, supervising and mentoring nursing staff with other specialties or experienced general nurses.
- Auxiliary nurses who normally are not permitted to dispense medicine on medical wards may, under supervision, be allowed to dispense non-restricted oral medicines (such as antibiotics or analgesics) (*43*).
- Community pharmacist roles can be optimized by allowing them to dispense vaccinations and to provide medicines normally supplied by hospital pharmacies to outpatients, such as maintenance treatments for cancer patients (oral cytostatic agents).

Figure 1. Optimizing the skills mix in an ICU setting



Source: Adapted from Society of Critical Care Medicine (*44*).

The pyramid reflects an illustrative team composition, with a few highly experienced ICU specialists coordinating and supervising larger numbers of physicians of related specialty areas and advanced practice nurses and providers. WHO surge calculation tools (*45*) may assist in identifying quantitative requirements in a given context.

G. Role of community health workers and other community-based providers

The community-based health workforce (comprising community health workers, social care workers, and other formal and informal community-based providers, including traditional medicine practitioners) may contribute to the COVID-19 response by taking on enhanced roles (*46*), building participation and trust (*47*), and serving as engagement channels with communities to facilitate uptake of public health measures to combat the pandemic.

Policy-makers and managers should:

G.1 Determine the role (*48*) of community health workers in delivering priority COVID-19 prevention, detection and response tasks and in maintaining other essential health services (**Box 3**).

G.2 Link community health workers to the health system for support, supervision and mentorship, supply provision, patient referral, data collection, reporting, monitoring and use (*49*).

G.3 Include community health workers in PPE projections (*29*) and provide appropriate PPE and training to community health workers and other occupational groups delivering home-based or community-level services, based on their role and hazard exposure. Tailor IPC guidance so that it is practical and implementable in the community; train community health workers to promote PPE acceptability.

G.4 In settings where formal alternatives are unavailable, consider the potential for community members to support health workers to attend to non-clinical responsibilities, both at the health facility level (for example, administrative tasks and record keeping) and at the household level (for example, support for family caregiving, groceries or meals, child care and transportation). A single, low-risk household member can be designated to serve as a caregiver for a person with COVID-19 (*13*, *50*, *51*).

BOX 3. POTENTIAL ROLES OF COMMUNITY HEALTH WORKERS DURING COVID-19, INCLUDING DELIVERY OF ESSENTIAL HEALTH SERVICES

Prevention

- Promote skill building in preventive measures, including hand hygiene, respiratory etiquette, physical distancing, appropriate use of masks, water, sanitation and hygiene interventions, and IPC-related measures, including appropriate use of IPC equipment and hygiene station use.
- Support risk communication and community engagement activities (for example, creating community-level COVID-19 action plans and IPC monitoring committees).
- Leverage behaviour change strategies and mobile technologies to educate communities regarding signs, symptoms and transmission routes.
- Build community awareness and trust, address myths and misconceptions, and combat stigmatization of affected families and communities.

Detection

- Support community surveillance and case identification and contribute to data collection.
- Conduct contact tracing.
- Facilitate access to testing and delivery of results.

- Conduct COVID-19 rapid tests (when available) or support safe sample collection and rapid transport to laboratories for analysis.
- Support community-level triage according to national protocols.

Response

- Undertake outreach and follow-up.
- Assist with home care and routine home visits.
- Provide nutrition support.
- Support linkage and delivery of medicines and oxygen.
- Monitor patients and support rapid referral of individuals who require hospitalization, reinforcing links between the health system and communities.
- Ensure continuity of other essential health services.

Sources: 1, 48, 52.

Resources

- Community-based health care, including outreach and campaigns, in the context of the COVID-19 pandemic (*48*)
- Guideline on health policy and system support to optimize community health worker programmes (*49*)
- mhGAP community toolkit (*53*)

Interventions targeting the organizational environment

H. Improving health worker availability

Policy-makers, managers and educators should quantify surge requirements based on caseload and weigh the following approaches to mobilize additional health workforce capacity:

H.1 Identify critical COVID-19 workforce needs, modelling human resources for health requirements by quantifying task and time expenditures, combined with epidemiological context and population data.

H.2 In settings anticipating numerical shortages, identify where to source additional health workers and redeploy existing ones (**Box 4**). Implement temporary measures to expedite and streamline the recruitment and deployment process.

H.3 Rapidly repurpose health workers from other parts of the health system where demand is diminished due to confinement measures or restriction of non-essential services. For non-clinical roles, identify where community volunteers can perform non-medical support tasks.

H.4 In settings facing acute short-term shortages, and until sustainable surge solutions are implemented, request full-time staff to work overtime and part-time staff to expand hours within appropriate boundaries, altering annual leave plans.

H.5 Train and repurpose non-health government and other workers to health sector tasks (for example, facility security, data collection, hotline response, IPC, distribution of critical supplies, patient admission, and monitoring of physical distancing measures).

BOX 4. POSSIBLE STRATEGIES TO AUGMENT THE POOL OF HEALTH WORKERS

Create surge and longer-term funded positions to recruit additional health workers with relevant skills to meet growing demand. New hires could come from a variety of sources, including:

- licensed retirees still possessing relevant skills – their age may place them in a vulnerable group, thus they should be assigned on a priority basis to caring for non-COVID-19 patients (*54*);
- unemployed but qualified health workers;
- medical residents for appropriate supervised roles;
- relevant private sector (for-profit and not-for-profit), research institution or military health workforce temporarily deployed to the public sector COVID-19 response;
- national medical reserve corps, military and veteran health care providers and medically certified emergency medical teams from nongovernmental organizations and national Red Cross and Red Crescent.

The WHO human resources for health surge toolkit assists countries and health facilities to model anticipated needs based on stage of the outbreak, health worker profiles, population data, and percentage of the population requiring hospitalization.

Resources

- COVID-19 surge planning tools (*45*)
- Strengthening the health system response to COVID-19:
  - Maintaining the delivery of essential health care services while mobilizing the health workforce for the COVID-19 response (*55*)
  - Creating surge capacity for acute and intensive care (*56*)

I. Rationalizing health workforce distribution

As the pandemic affects national and subnational health systems to varying degrees that may evolve over time, temporary redeployment of staff may be needed (1).

In settings facing or anticipating temporary staff shortages linked to a caseload peak, policy-makers and managers should:

I.1 Temporarily redeploy, on a voluntary basis and minimizing disruption of essential health services (*1*), staff from non-affected or low-intensity areas, as well as from within health facilities and from other clinical areas, towards the COVID-19 response. This may include deployment of national emergency medical teams (*57*). Where national capacity is exceeded, regional and international mechanisms (*58*), including international emergency medical teams, may be requested.

I.2 When movement restriction measures are in place, ensure that health workers can travel to hospitals and health facilities and other service delivery points.

I.3 Redeploy experienced staff from low- to high-burden settings. International recruitment of individual health workers can play an important role in the COVID-19 response but should do so in compliance with ethical principles to manage international health worker mobility (*59*).

I.4 Harness web-based and telemedicine platforms to provide direct clinical advice and services to patients and clinical decision support to community-based service providers (*60*).

J. Supportive work environment and manageable workload

An enabling work environment should monitor and reinforce appropriate health worker behaviour and optimize workflow organization and burden.

Employers and managers should:

J.1 Strengthen existing or institute regular supportive supervision mechanisms to enforce adherence to relevant management and IPC protocols.

J.2 Support health workers who become infected and are isolating, including through communication, care and psychological support mechanisms, and compensated sick leave and insurance.

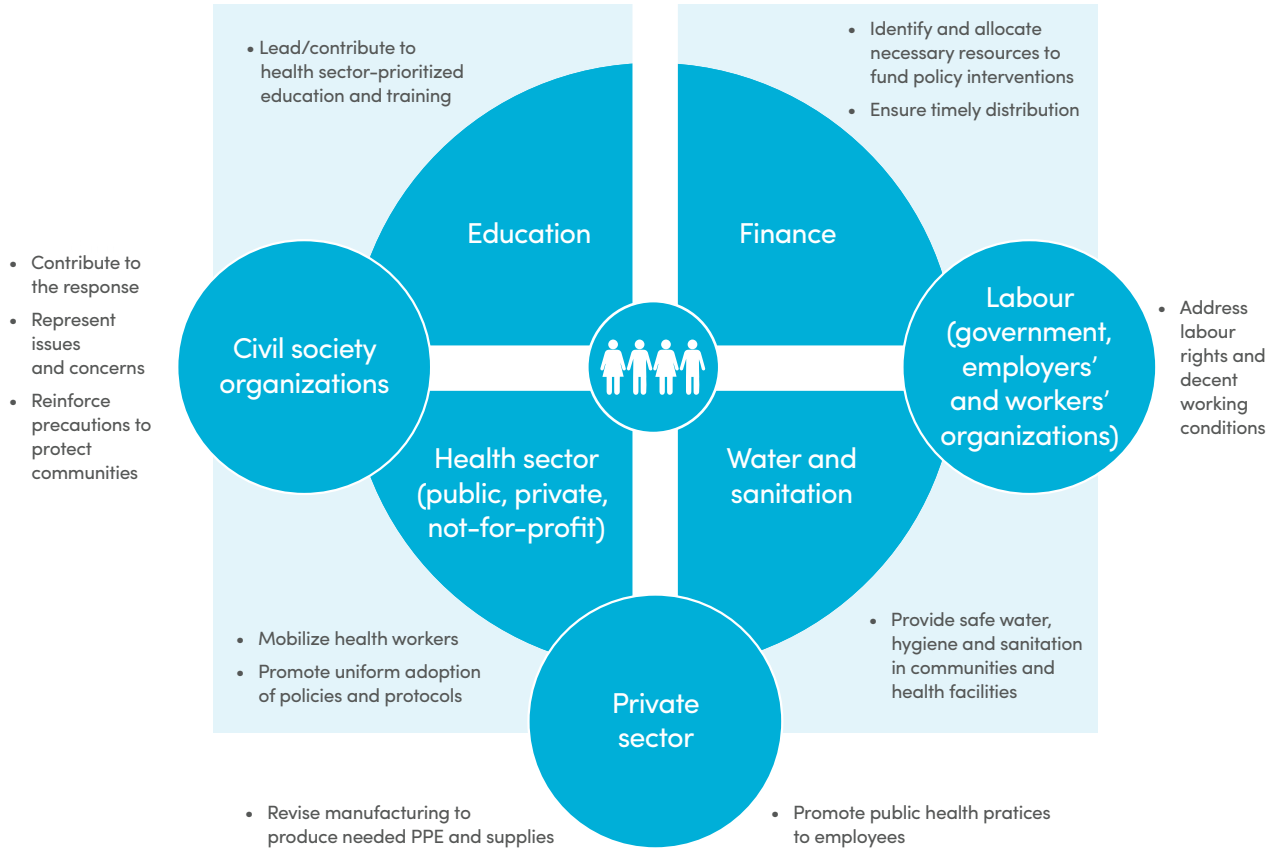
J.3 Plan workload to ensure appropriate working hours (guided by national law and collective agreements, if available) and enforced rest periods and breaks to prevent burnout and error (*32*). Provide in-facility rest areas that are cleaned regularly, with space for physical distancing between staff

Interventions targeting systemwide health workforce enablers

K. Governance and intersectoral collaboration

The COVID-19 response may require streamlining decision-making processes, exploring new partnerships to promote public policies, and strengthening intersectoral collaboration (**Figure 2**) to mobilize the required response.

Figure 2. Mobilizing an intersectoral response to COVID-19 health workforce requirements



Policy-makers should:

K.1 Promote uniform adoption of policy decisions and protocols by reinforcing or establishing intersectoral coordination mechanisms across different sectors (health, education, finance, public services, labour, defence, foreign affairs, social security, military, media, telecommunications), levels of government (national, subnational, local) and types of employers (public, private, not-for-profit).

K.2 Contribute to or lead COVID-19 education and training activities identified as priority by the health sector (*coordination with* education sector).

K.3 Identify and allocate resources to fund the required COVID-19 interventions and develop appropriate mechanisms for their timely distribution and utilization (*coordination with* finance sector).

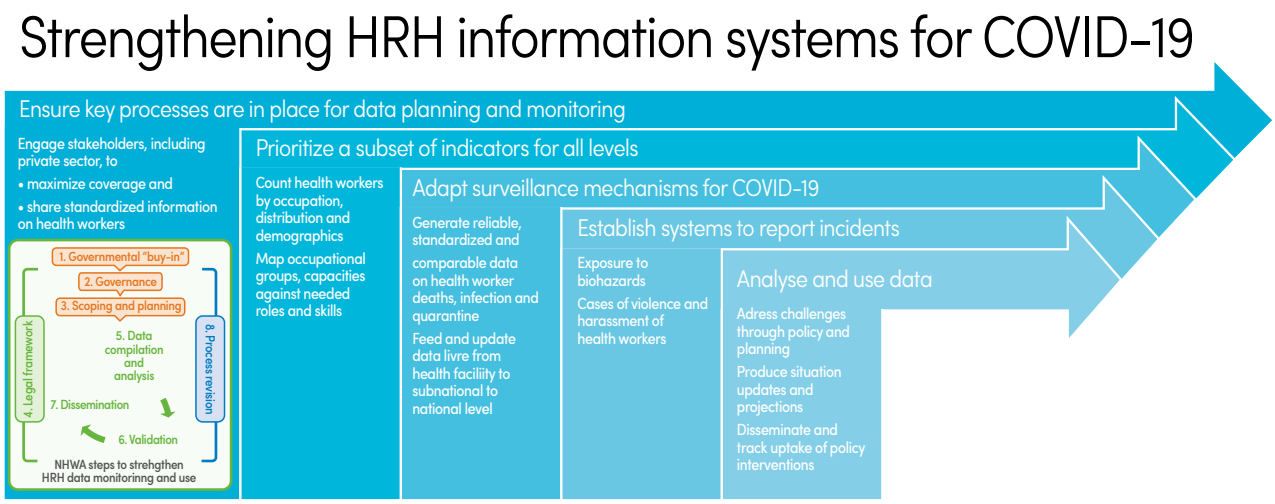
K.4 Ensure the provision of safe water, sanitation and hygiene for IPC at the community and primary care levels (*coordination with* water and sanitation sector) (*52*).

K.5 Use existing or establish new mechanisms for social dialogue between government, employers' organizations, and workers' organizations and their respective representatives to address labour rights and decent working conditions in a timely manner, including preventing and quickly defusing possible tensions that may lead to industrial action by health workers.

L. Strengthening human resources for health information systems, including tracking health workforce infections

The COVID-19 response requires that existing national and subnational human resources for health information systems track specific health workforce indicators to inform policies and make rapid, evidence-based decisions (**Figure 3**).

Figure 3. Strengthening human resources for health information systems for COVID-19



Source: Adapted from *National health workforce accounts implementation guide* (*64*).

Health workforce policy-makers and managers should:

L.1 Ensure data availability for health workforce planning and monitoring for the COVID-19 response (*61*).

L.2 Prioritize a specific health workforce monitoring indicator subset, at least counting health workers by occupation, distribution (geographical and by type of facility) and demographics, mapping occupational groups and capacities against roles and skills required, including facility-level data and aggregate data at subnational or national level.

L.3 Adapt existing surveillance mechanisms for human resources for health information systems and establish, if not available, a specialized registry to generate reliable, standardized and comparable data on COVID-19 health worker infections (*11*), quarantine and deaths (including cause of death according to emergency use International Classification of Diseases (ICD) codes, as outlined in the International guidance for certification and coding of COVID-19 as cause of death) (*40*, *62*), with live COVID-19 database feeds and updates from health facilities or subnational reporting mechanisms (*63*).

L.4 Establish systems to monitor and report incidental exposures to blood, body fluids and respiratory secretions and any acts of violence against health workers (*9*).

L.5 Use and analyse the data to address the challenges through policy-making and planning, producing periodic situation updates and projections. Disseminate findings to appropriate audiences and track the timely adoption and implementation of the policy options.

Resources

- International guidelines for certification and classification (coding) of COVID-19 as cause of death (*62*)

M. Needs assessment and planning

Building on the emergency response human resources for health interventions required to respond to the pandemic, strategic medium- to long-term needs assessment and planning create a better foundation for sustainable resource deployment and addressing possible subsequent waves of the pandemic, as well as mass COVID-19 vaccination campaigns once an efficacious and safe vaccine becomes available.

Policy-makers should:

M.1 Identify key skills and workforce required to address COVID-19 preventive, promotive, care and rehabilitative services. Where available and relevant, draw from and build on existing health workforce national and subnational strategies and response plans, including through implementing recommended actions designed to achieve International Health Regulations benchmarks (*65*).

M.2 Establish or refresh contingency plans, including updating surge rosters and putting in place detailed redeployment and redistribution arrangements.

M.3 Convene discussions with partner organizations and across levels of government about staffing needs and issues related to the COVID-19 response, integrating health workforce dialogue in existing mechanisms and processes, and linking to other relevant service delivery planning efforts.

M.4 Include diverse employer and health worker participants (*66*) in planning, social dialogue and leadership decision-making to harness critically needed expertise and ensure acceptability, feasibility and full ownership of policies adopted (*67*).

M.5 Beyond addressing immediate needs, embed relevant workforce interventions in longer-term strategy, planning and budget appropriation processes to contribute to sustainability, preparedness and resilience efforts.

N. Licensing and regulation

While most of the relevant policy options for the health workforce COVID-19 response may be put in place within existing normative and regulatory environments, in settings facing numerical or skills shortages new regulation or legislation may be needed to establish or strengthen the capacity of medical, nursing, allied health sciences and quality management regulatory bodies to enact response measures.

Regulators should:

N.1 Conduct a fast-track regulatory review to ensure that appropriate policies and associated regulatory capacities are in place for health workers to deliver COVID-19 interventions (**Box 5**).

N.2 Streamline regulatory measures to allow health professionals licensed in other jurisdictions but whose credentials are not recognized to be given a temporary licence to contribute to the response and ensure that measures are in place to protect these health workers.

N.3 Where appropriate, establish pathways for accelerated licensing or credentialing of medical, nursing, pharmacy and rehabilitation graduates. This approach should be designed to avoid future challenges in recognition of their qualifications.

N.4 To reduce pressure on the health system and minimize infection risks for both health workers and patients, enable pharmacist waivers for early and multi-month refills, permit therapeutic substitution (*68*), and allow community pharmacists to provide vaccinations and medicines that are normally supplied to outpatients by hospital pharmacies (*69*).

N.5 Review regulatory requirements for practice indemnity of health workers involved in the COVID-19 response. Establish or enact protocols and legislation on health worker violence and discrimination protection, infection, return to work, disability, death and the recognition of COVID-19 infection as a professional exposure disease in certain occupational groups (*70*, *71*).

BOX 5. APPROACHES TO STREAMLINE REGULATIONS FOR THE COVID-19 RESPONSE

Regulatory reforms to support the COVID-19 response may include allowing health workers to:

- perform tasks for which they were not licensed, despite having the training and competencies to perform them;
- waive administrative process requirements or fast-track post-graduation compulsory internship requirements;
- be redeployed across different employers, sectors (public or private), geographical regions or separate jurisdictions within the same country;
- be recruited at the subnational level if relevant;
- benefit from liability coverage for tasks that they are requested to perform.

Within these reforms, public safety must be ensured, including by not requesting health workers to perform tasks outside their competencies.

Conducive environment

O. Gender and equity

Women, composing 70% of the global health workforce (*72*), are highly represented in service delivery for critically ill COVID-19 patients, as well as home-based care for mild COVID-19 cases. Lockdowns and measures that restrict travel and access to basic living essentials result in increases in domestic work, already disproportionately carried by women (*73*). Female health and social workers therefore face a double burden of increased care responsibilities both within and outside the home. In many contexts, health workers from ethnic minority populations have special needs that must be addressed.

Policy-makers and managers should:

O.1 Provide support for domestic tasks to support female health and social care workers to focus on health service delivery and help minimize the risk of deterioration in quality of care, burnout and absenteeism.

O.2 Address gender-specific workplace needs. For menstruating health workers, feminine hygiene products should be provided, together with workload and shift flexibility to allow reconciling appropriate PPE use with menstrual hygiene needs.

O.3 Ensure that health systems provide individual support and personal protection to the mostly female caregivers of COVID-19 patients at the community level. Recognition of the need for this role and the accompanying policy measures (including system support, protection and remuneration) should be gender neutral.

O.4 Designate a gender and equity focus person in human resources for health decision-making and policy-making bodies to formalize gender dimensions in the response.

O.5 Take account of the fact that ethnic minorities and workers with disabling conditions may be more susceptible to contracting and have more severe cases of COVID-19 (*74*). As relevant to context, they might be assigned to non-COVID-19 roles.

P. Socioeconomic factors

Socioeconomic factors affect the capacity of countries to implement the proposed health sector interventions. Funding options and constraints vary across countries.

Policy-makers should:

P.1 Develop costed estimates of requirements of the interventions to be implemented and assess the relative importance and feasibility of additional funding sources (for example, reallocation within the current budget, special additional budget, the private sector, donors or loans), as well as mechanisms to optimize absorption.

P.2 In resource-constrained settings, review and prioritize funding to free necessary resources for COVID-19 human resources for health surge deployment, while preserving funding for other essential activities.

P.3 Prioritize measures and criteria to ensure efficient utilization and financial sustainability, while maximizing the attainment of the objectives of the selected interventions.

P.4 Identify opportunities to address pre-existing socioeconomic challenges; for instance, health worker unemployment paradoxically co-exists in some low-income countries with substantial unmet health workforce needs. The human resources for health COVID-19 response can be an opportunity to absorb qualified, yet unemployed, health workers into the health labour market to cope with rising demand, while setting a basis for greater long-term human resources for health capacity and resilience.

Implementation considerations

Health workforce scale-up and allocation requires strategic approaches that encompass addressing quantity and availability of health workers; distribution; competencies and skills specific to COVID-19 through appropriate training and supervision; organization of care delivery pathways; safe and decent working conditions, including occupational health and safety; rapid policy and regulatory review; and support mechanisms, including financial resources. The policy responses require concerted actions across a variety of stakeholders, at the national, subnational and local levels (*75*).

The COVID-19 implications for health workforce readiness and availability vary for each health system, depending on the phase and severity of the pandemic, as well as the service delivery model and patient care pathways adopted (*76*). Strategies to protect and support health workers should recognize the potential for fluctuating local incidence and tailor the management response accordingly (*77*).

- Countries with no or sporadic transmission scenarios should focus on preparedness, planning, procuring, hiring, allocating resources, establishing protocols and procedures, authorizing occupational groups to perform new tasks and training health workers.
- Countries experiencing cluster or community transmission should focus on surge capacity for mitigation measures, including reallocating personnel to address COVID-19 needs in high-transmission areas, and on ensuring clinicians follow relevant clinical and management guidelines, contributing to efforts to contain further spread. Lengthy health sector decision-making and actions should be replaced by a more agile approach, expedited processes and openness to explore public–private partnerships that can further public policy objectives.
- In all settings, countries should consider appropriate monitoring mechanisms for newly adopted policies to prevent unexpected and undesired drifts, such as abuse of flexibility and watering down regulatory safeguards.
- The management response should avoid building parallel mechanisms or inadvertently undermining existing approaches to health workforce management. In settings characterized by fragile governance structures, strengthening health workforce leadership and management capacity may be required to coordinate and implement the necessary response policies.
- Interventions should aim to break down public–private sector barriers and enhance planning and operational response collaboration.

The relative importance of the various policy options presented in this document will vary by country context and epidemiological phase; however, some actions will be of high relevance and have a higher logical priority than others in most settings, including:

- preserving the existing health workforce, especially in relation to preventing infection and quarantine through appropriate IPC measures, and avoiding industrial action by providing decent working conditions;
- obtaining reliable and up-to-date data on health workforce stock, distribution and competencies to allow identification of unmet needs and inform development of appropriate policy responses.

The recommended measures proposed will require varying time frames. Certain policy options, such as delivering in-service training and redistributing staff from lower-intensity areas, can be implemented rapidly. Training new staff is, conversely, a long-term measure. Investing in health worker jobs, however, will result in both immediate and long-lasting social, labour, economic and health outcome returns on investment.

In the aggregate, the resource requirements to implement and sustain the required interventions and policy options may be considerable, factoring in hiring additional health workers and providing overtime, hazard or living allowances, training and PPE. Failure to invest, however, will result in an inability to meet population health needs to contain the pandemic and sustain the delivery of essential health services.

Policy-makers and planners should quantify the financial implications (61) of human resources for health requirements to respond to COVID-19 and allocate resources through reprioritization of domestic resources and increased investment in the health sector. In certain low-income and chronic complex emergency settings, there may be a role for international solidarity mechanisms and financial assistance channels. Several global health initiatives have opened dedicated funding to enable countries to respond to the COVID-19 pandemic, offering an opportunity to co-fund needed additional investments.

Resources

- **WHO COVID-19 essential supplies forecasting tool** (*78*), including a costing tool allowing quantification of the financial implications of health workforce requirements for the COVID-19 response
- Global Fund to Fight AIDS, Tuberculosis and Malaria **COVID-19 support mechanisms** (*79*)
- **Gavi, the Vaccine Alliance COVID-19 support mechanisms** (*80*)
- World Bank **COVID-19 preparedness and response projects** (*81*)

Resources to scale up appropriate support for the health workforce for COVID-19 should be understood as short- and long-term investments in building capacity to respond to short-term health threats and to lay the foundations to strengthen epidemic preparedness and long-term global health security. The COVID-19 pandemic highlights the need for sustainable investment in the health workforce, and for decent working conditions as a foundation for recruiting, deploying, retaining and protecting sufficient quantities of well trained, supported and motivated health workers.

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