

Increasing access to medical oxygen

Draft decision proposed by Australia, Bangladesh, Central African Republic, European Union and its 27 Member States, Kenya, Türkiye and Uganda

The Executive Board, having considered the report on reorienting health systems to primary health care as a resilient foundation for universal health coverage,¹

Decided to recommend to the Seventy-sixth World Health Assembly the adoption of the following resolution:

The Seventy-sixth World Health Assembly,

(PP1) Recognizing the inclusion of medical oxygen as a life-saving essential medicine with no substitute on the 22nd World Health Organization Model List of Essential Medicines² and the 8th World Health Organization Model List of Essential Medicines for Children,³ where it is an indication for the management of hypoxaemia, including for vulnerable groups, and anesthesia that is essential for surgery and trauma;

(PP2) Reaffirming the critical role of medical oxygen in the achievement of the Sustainable Development Goals (SDGs) for health, including reducing maternal mortality (SDG target 3.1), newborn and child mortality (SDG target 3.2) and premature mortality from chronic conditions (SDG target 3.4), and that medical oxygen has a role in the acute treatment of some AIDS-, tuberculosis- and malaria-related conditions (SDG target 3.3) and road traffic injuries (SDG target 3.6), and accelerating progress towards universal health coverage (SDG target 3.8);

(PP3) Noting that the wide application of medical oxygen is essential for the treatment of hypoxaemia across many communicable and noncommunicable diseases and medical conditions, across the life course, to which older persons in particular are vulnerable, including but not limited to coronavirus disease (COVID-19), pneumonia, tuberculosis and chronic obstructive pulmonary disease, and situations requiring surgery, emergency and critical care, and therefore necessary for the achievement of the goals and targets in the Global action plan for the prevention and control

¹ Document EB152/5.

² World Health Organization Model List of Essential Medicines – 22nd List, 2021. Geneva: World Health Organization; 2021. (<https://www.who.int/publications/i/item/WHO-MHP-HPS-EML-2021.02>, accessed 31 August 2022).

³ World Health Organization Model List of Essential Medicines for Children – 8th List, 2021. Geneva: World Health Organization; 2021. (<https://www.who.int/publications/i/item/WHO-MHP-HPS-EML-2021.03>, accessed 31 August 2022).

of NCDs 2013–2020,¹ the End TB Strategy,² the WHO package of essential noncommunicable (PEN) disease interventions for primary health care³ and WHO Guidelines for Safe Surgery 2009;⁴

(PP4) Underscoring that medical oxygen access is particularly critical for pregnant women during and after delivery, newborns in respiratory distress and children with pneumonia, and therefore necessary for the achievement of the goals and targets in the Global Strategy for Women’s, Children’s and Adolescent’s health,⁵ the Every Newborn Action Plan⁶ and The integrated Global Action Plan for Pneumonia and Diarrhoea;⁷

(PP5) Concerned that complications due to preterm birth are the leading cause of global neonatal mortality and recalling that WHO recommends support for respiratory distress syndrome and the importance of safe medical oxygen use to prevent injury from toxic levels of oxygen in the blood resulting in retinopathy of prematurity (one of the leading causes of child blindness) and chronic lung disease;

(PP6) Concerned that in developing countries not all health facilities have uninterrupted access to medical oxygen, and that lack of access is contributing to preventable deaths – a problem that has been exacerbated by the COVID-19 pandemic when the need for medical oxygen has exceeded the capacities of many health systems;

(PP7) Recalling the publication of WHO medical oxygen treatment guidelines, good practices, technical specifications, forecasting tools, training videos, consultations, safety guidelines⁸ and the 2022 revisions to the monograph on Medicinal Oxygen that was adopted at the 56th meeting of the WHO Expert Committee on Specifications for Pharmaceutical Preparations for publication in the 11th Edition of The International Pharmacopoeia,⁹ which collectively aim to improve access to medical oxygen through the appropriate selection,

¹ Global action plan for the prevention and control of NCDs 2013–2020. Geneva: World Health Organization; 2013. (<https://www.who.int/publications/i/item/9789241506236>, accessed 31 August 2022).

² The End TB Strategy. Geneva: World Health Organization; 2015. (<https://www.who.int/publications/i/item/WHO-HTM-TB-2015.19>, accessed 31 August 2022).

³ WHO package of essential noncommunicable (PEN) disease interventions for primary health care. Geneva: World Health Organization; 2020. ([https://www.who.int/publications/i/item/who-package-of-essential-noncommunicable-\(pen\)-disease-interventions-for-primary-health-care](https://www.who.int/publications/i/item/who-package-of-essential-noncommunicable-(pen)-disease-interventions-for-primary-health-care), accessed 31 August 2022).

⁴ WHO Guidelines for Safe Surgery 2009. Geneva: World Health Organization; 2009. (<https://www.who.int/publications/i/item/9789241598552>, accessed 31 August 2022).

⁵ Global Strategy for Women’s, Children’s and Adolescents’ Health. Geneva: World Health Organization; 2015. (https://platform.who.int/docs/default-source/mca-documents/rmncah/global-strategy/ewec-globalstrategyreport-200915.pdf?Status=Master&sfvrsn=b42b6d22_4, accessed 31 August 2022).

⁶ The Every Newborn Action Plan. Geneva: World Health Organization; 2014. (<https://www.who.int/initiatives/every-newborn-action-plan>, accessed 31 August 2022).

⁷ The integrated Global Action Plan for Pneumonia and Diarrhoea. Geneva: World Health Organization; 2013. ([https://www.who.int/publications/i/item/the-integrated-global-action-plan-for-prevention-and-control-of-pneumonia-and-diarrhoea-\(gappd\)](https://www.who.int/publications/i/item/the-integrated-global-action-plan-for-prevention-and-control-of-pneumonia-and-diarrhoea-(gappd)), accessed 31 August 2022).

⁸ Oxygen [website]. Geneva: World Health Organization; (n.d.). (https://www.who.int/health-topics/oxygen#tab=tab_1, accessed 31 August 2022).

⁹ Medicinal Oxygen. Geneva: World Health Organization; 2022. (https://cdn.who.int/media/docs/default-source/essential-medicines/norms-and-standards/qas20-867-medicinal-oxygen.pdf?sfvrsn=ab60e2fe_5, accessed 31 August 2022).

procurement, instalment, and operation and maintenance of medical oxygen systems and related infrastructure by Member States;

(PP8) Acknowledging the inclusion of pulse oximeters and other medical oxygen-related devices as priority medical devices listed in Core Medical Equipment,¹ the Interagency list of medical devices for essential interventions for reproductive, maternal, newborn and child health,² the WHO list of priority medical devices for cancer management,³ the Priority medical devices list for the COVID-19 response and associated technical specifications,⁴ WHO-UNICEF Technical specifications and guidance for oxygen therapy devices⁵ and the List of Priority Medical Devices for management of cardiovascular diseases and diabetes,⁶ and that medical oxygen devices are also regularly highlighted in the WHO compendium of innovative health technologies for low-resource settings;⁷

(PP9) Acknowledging the role of the ACT-A Oxygen Emergency Taskforce⁸ in helping developing countries finance urgently needed medical oxygen supplies to meet the surging demand during the COVID-19 pandemic and recognizing that large gaps in access to medical oxygen remain globally unaddressed, especially in developing countries;

(PP10) Highlighting the opportunity to consider medical oxygen in pandemic preparedness and response efforts, including through domestic and international funding; and

(PP11) Recognizing resolution WHA72.8 (2019) on improving the transparency of markets for medicines, vaccines, and other health products, in order to enhance availability and affordability of medical oxygen, particularly in developing countries,

¹ Core Medical Equipment. Geneva: World Health Organization; 2011. (<https://www.who.int/publications/i/item/WHO-HSS-EHT-DIM-11.03>, accessed 31 August 2022).

² Interagency list of medical devices for essential interventions for reproductive, maternal, newborn and child health. Geneva: World Health Organization; 2016. (<https://www.who.int/publications-detail-redirect/9789241565028>, accessed 31 August 2022).

³ WHO list of priority medical devices for cancer management. Geneva: World Health Organization; 2017. (<https://www.who.int/publications/i/item/9789241565462>, accessed 31 August 2022).

⁴ Priority medical devices list for the COVID-19 response and associated technical specifications. Geneva: World Health Organization; 2020. (<https://www.who.int/publications/i/item/WHO-2019-nCoV-MedDev-TS-O2T.V2>, accessed 31 August 2022).

⁵ WHO-UNICEF Technical specifications and guidance for oxygen therapy devices. Geneva: World Health Organization; 2019. (<https://www.who.int/publications/i/item/9789241516914>, accessed 26 January 2023).

⁶ WHO launches List of Priority Medical Devices for management of cardiovascular diseases and diabetes. Geneva: World Health Organization; 2021. (<https://www.who.int/news/item/30-06-2021-who-launches-list-of-priority-medical-devices-for-management-of-cardiovascular-diseases-and-diabetes>, accessed 31 August 2022).

⁷ WHO compendium of innovative health technologies for low-resource settings. Geneva: World Health Organization; 2022. (<https://www.who.int/publications/i/item/9789240049505>, accessed 31 August 2022).

⁸ Chaired by Unitaid, the ACT-A Oxygen Emergency Taskforce includes WHO (and the broader biomedical consortium WHO coordinates), Unicef, The Global Fund, the World Bank, UNOPS, USAID, the Bill & Melinda Gates Foundation, the Clinton Health Access Initiative, Program for Appropriate Technology in Health, Access to Medicine Foundation, Save the Children, Every Breath Counts (coalition). COVID-19 oxygen emergency impacting more than half a million people in low- and middle-income countries every day, as demand surges. Geneva: World Health Organization; 2021. (<https://www.who.int/news/item/25-02-2021-covid-19-oxygen-emergency-impacting-more-than-half-a-million-people-in-low--and-middle-income-countries-every-day-as-demand-surges>, accessed 31 August 2022).

(OP)1. URGES Member States,¹ taking into account their national contexts:

- (1) to include medical oxygen and associated medical devices on national lists of essential medicines and medical devices for adults and children, including to address treat hypoxaemia and anesthesia, for relevant communicable and noncommunicable conditions and injuries for all relevant patients, including for maternal, newborn, infants and children;
- (2) to develop, as appropriate, costed national plans to increase access to quality assured, affordable medical oxygen systems and personnel to meet the identified needs of all patients in the context of national achievement of the health SDG targets and universal health coverage;
- (3) to develop national, regional and local health regulations, policies and plans that are informed by but not limited to WHO guidelines and technical specifications relating to medical oxygen and associated medical devices;
- (4) to assess the scale of medical oxygen access gaps in their health systems, including at subnational- and local-level health facilities, in order to provide patients with the required amounts of medical oxygen and related diagnostic tools (including pulse oximeters and patient monitors), and medical devices that deliver oxygen therapy (including invasive and non-invasive ventilators, and continuous positive airway pressure), and availability of qualified staff;
- (5) to update their national pharmacopoeia as appropriate, informed by provisions on medical oxygen in The International Pharmacopoeia;
- (6) to prevent toxic levels of medical oxygen and the provision of safe medical oxygen among preterm newborns, by using blenders, pulse oximeters and equipment that meet global standards for technical specifications;
- (7) to consider conducting regular assessments to provide for rational use of oxygen, in order to prevent under-utilization, overuse and/or inappropriate use of medical oxygen;
- (8) to consider including, as appropriate, access to medical oxygen, related diagnostics and therapies, and all medical oxygen systems and personnel in national strategies for pandemic preparedness and response and other health emergencies, including for infectious disease outbreaks;
- (9) to provide for adequate numbers of clinical staff to be appropriately trained to provide clinical assessments for hypoxaemia and to administer medical oxygen therapy, including as part of comprehensive emergency, critical and operative care services across all clinical settings;
- (10) to provide for availability of qualified staff including engineers and other staff required to establish demand, select, set up, operate and maintain the equipment and all the infrastructure related to medical oxygen production, storage and uninterrupted distribution to patients;

¹ And, where applicable, regional economic integration organizations.

(11) to monitor access to safe, affordable, quality assured medical oxygen and related services throughout the health system, as part of national efforts to achieve universal health coverage;

(12) to raise public awareness, as appropriate, about the life-saving role of medical oxygen as a treatment for many conditions, including the critical role of pulse oximetry as a routine screening tool, to increase public understanding of hypoxaemia and its consequences, and to build confidence in health system capacities to meet medical oxygen needs;

(13) to set up, as appropriate, national and subnational medical oxygen systems in order to secure the uninterrupted provision of medical oxygen to health care facilities at all levels comprising rural and urban set-ups;

(14) to consider the stepwise integration of medical oxygen and other medical gas systems into the construction of health care infrastructure to improve accessibility and reduce the risk of bottled medical oxygen shortages;

(15) to consider increasing domestic financing as well as international support for medical oxygen and provide transparent procurement and tendering processes, as appropriate, to ensure resilient supply chains for sustainable local manufacturing and procurement of medical oxygen and related diagnostic tools and therapies;

(16) to invest, as appropriate, in medical oxygen innovations with the potential to increase access to quality assured, affordable and reliable supplies of medical oxygen and related diagnostic tools and therapies, including those suitable for low-resource settings;

(17) to promote good manufacturing practice through strengthening of quality control in the production chain, filling and distribution of medical oxygen;

(18) to promote research, including translational research, to improve access, quality and safety of medical oxygen in health care settings;

(19) to promote mutual support, assistance and cooperation to increase access to medical oxygen; and

(20) to integrate medical oxygen data into routine health information systems;

(OP)2. REQUESTS the Director-General:

(1) to continue to highlight medical oxygen as an essential medicine and to highlight the related priority medical devices and infrastructure that must be available to all patients who need them as part of quality health systems contributing to universal health coverage;

(2) to support Member States to improve access to medical oxygen by developing guidelines, technical specifications, forecasting tools, training materials and other resources, and provide technical support especially designed to meet the needs of health systems in developing countries;

- (3) to promote convergence and harmonization of regulations governing the provision of medical oxygen and access to safe, effective and quality assured medical oxygen sources and devices that meet standards set by WHO and competent authorities;
- (4) to support Member States' efforts to provide adequate, predictable and sustainable financing for affordable medical oxygen and for the trained workforce required to safely install, operate and maintain the medical oxygen systems;
- (5) to include medical oxygen supply in WHO-related pandemic, preparedness and response efforts;
- (6) to review medical oxygen innovations and promote sharing of the innovations among Member States on voluntary and mutually agreed terms to increase access to quality, affordable and reliable supplies of medical oxygen and related diagnostic tools and therapies in low-resource settings;
- (7) to establish a research agenda as needed regarding the use of medical oxygen;
- (8) to collect and analyse data and share best practices in closing gaps to medical oxygen access in health systems;
- (9) to regularly consult with relevant non-State actors on all aspects of access to medical oxygen and to enable partnerships between non-State actors and Member States in the design and delivery of medical oxygen solutions;
- (10) to promote mutual support, assistance and cooperation among all stakeholders to increase access to medical oxygen; and
- (11) to report on progress in the implementation of this resolution to the Health Assembly in 2026, 2028 and 2030.

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