World Health Organization

SEVENTY-SIXTH WORLD HEALTH ASSEMBLY **WHA76.3**
Agenda item 13.1 **30 May 2023**

Increasing access to medical oxygen

The Seventy-sixth World Health Assembly,

Having considered the consolidated report by the Director-General;[1]

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 Medicines[2] 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 during anaesthesia that is essential for surgery and trauma;

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

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 of the Global Action Plan for the Prevention and Control of NCDs 2013–2020,[4] the End TB Strategy,[5] the WHO Package of Essential Noncommunicable (PEN) Disease Interventions for Primary Health Care[6] and WHO Guidelines for Safe Surgery 2009;[7]

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[1] Document A76/7 Rev.1.

[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).

[4] 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).

[5] 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).

[6] 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, accessed 31 August 2022).

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

Underscoring that medical oxygen access is particularly critical for pregnant women during and after delivery, newborns with respiratory distress and children with pneumonia, and therefore necessary for the achievement of the goals and targets of the Global Strategy for Women's, Children's and Adolescent's Health,[1] the Every Newborn Action Plan[2] and The integrated Global Action Plan for Pneumonia and Diarrhoea;[3]

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, which can result in retinopathy of prematurity (one of the leading causes of child blindness) and chronic lung disease;

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;

Recalling the publication of WHO medical oxygen treatment guidelines, good practices, technical specifications, forecasting tools, training videos, consultations, safety guidelines[4] 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,[5] which collectively aim to improve access to medical oxygen through the appropriate selection, procurement, instalment, operation and maintenance of medical oxygen systems and related infrastructure by Member States;

Acknowledging the inclusion of pulse oximeters and other medical oxygen-related devices as priority medical devices listed in Core Medical Equipment,[6] the Interagency List of Medical Devices for Essential Interventions for Reproductive, Maternal, Newborn and Child Health,[7] the WHO list of priority medical devices for cancer management,[8] the Priority medical devices list for the COVID-19

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[1] 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).

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

[3] 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), accessed 31 August 2022).

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

[5] 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).

[6] 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).

[7] 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).

[8] 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).

response and associated technical specifications,[1] the WHO–UNICEF Technical specifications and guidance for oxygen therapy devices and the WHO list of priority medical devices for management of cardiovascular diseases and diabetes,[2] and that medical oxygen devices are also regularly highlighted in the WHO compendium of innovative health technologies for low-resource settings;[3]

Acknowledging the role of the Access to COVID-19 Tools Accelerator Oxygen Emergency Taskforce[4] in helping developing countries to 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;

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

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

1. URGES Member States,[5] 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 hypoxaemia and during anaesthesia, for relevant communicable and noncommunicable diseases, medical conditions and injuries for all relevant patients, including mothers, newborns, 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-related Sustainable Development Goals and universal health coverage;

[1] 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).

[2] 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).

[3] 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).

[4] Chaired by Unitaid, the Access to COVID-19 Tools – Accelerator 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, the Program for Appropriate Technology in Health, the Access to Medicine Foundation, Save the Children and the 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).

[5] And, where applicable, regional economic integration organizations.

(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 that relate 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 the availability of qualified staff;

(5) to update their national pharmacopoeias 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 oxygen blenders, pulse oximeters and equipment that meet global standards for technical specifications;

(7) to consider conducting regular assessments to provide for the 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 adequate numbers of qualified staff, including engineers and other staff as 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;

(11) to monitor access to safe, affordable, quality assured medical oxygen and related services throughout their health systems, 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 including both 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 to reduce the risk of bottled medical oxygen shortages;

(15) to consider increasing domestic financing as well as international support for medical oxygen and to 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 practices by strengthening quality control in the production chain, filling and distribution of medical oxygen;

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

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

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

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 by providing technical support especially designed to meet the needs of health systems in developing countries;

(3) to promote the 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 install, operate and maintain medical oxygen systems safely;

(5) to include medical oxygen supply in WHO-related pandemic, preparedness and response efforts;

(6) to review medical oxygen innovations and to 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, as needed, a research agenda regarding the use of medical oxygen;

(8) to collect and analyse data and to share best practices in closing gaps to medical oxygen access in health systems;

(9) to consult with relevant non-State actors regularly 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;

(11) to report on progress in the implementation of this resolution to the Health Assembly in 2026, 2028 and 2030.

Ninth plenary meeting, 30 May 2023
A76/VR/9

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