

Member States information session on **increasing access to medical oxygen**

17 June 2025

13:30 – 14:30 CEST



Agenda



Item	Time	Speaker
Opening session	5 min	ADG Yukiko NAKATANI
Background and objectives • Historical oxygen scale-up efforts • WHA 76.3 resolution: Increasing access to medical oxygen	3 min	Adriana VELAZQUEZ BERUMEN
Updates from the secretariat on WHA 76.3 • Progress on Secretariat requests • Introduction to ATMO₂S (Access to Medical Oxygen Scorecard)	20 min	Janet DIAZ Agnes KIJO Herbert SCHMIDT Jamie RYLANCE
Next steps and timeline	2 min	Adriana VELAZQUEZ BERUMEN
Q&A	20 min	Deirdre DIMANCESCO
Closing	5 min	ADG TBD

Background & objectives

Adriana Velazquez Berumen



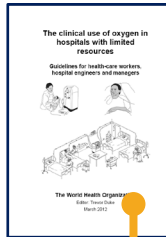
Oxygen scale-up before WHA 76.3



1980

Oxygen included in **European Pharmacopoeia** (2nd ed.).

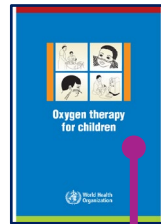
2012



WHO: “**The Clinical Use of O₂ in Hospitals with Limited Resources**”.

2016

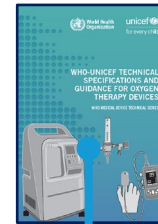
•WHO: “**O₂ Therapy for Children**”.



•Ethiopia: first MS to publish “**National O₂ Scale-up Roadmap**”.

2019

•WHO-UNICEF: “**Tech. Specs & Guidance for O₂ Therapy Devices**”.



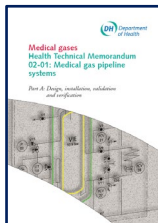
2020 – 2023

•Publication of various [interim] tech. guidance documents.



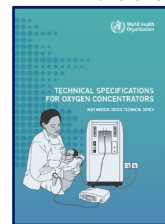
2006

NHS/DoH’s “**HTM 02-01: Medical Gases**”



2015

WHO: •**Intn’l Pharmacopoeia: inclusion of O₂**.



•“**Tech. guidance & Specs. for O₂ Concentrators**”.

2017

•WHO **Model List of Essential Medicines:** adds O₂.
•Nigeria: **National O₂ Policy and Scale-up Strategy**
•Every Breath Counts coalition launches.

2020

Declaration of COVID-19 pandemic.

May 2023

WHA 76.3 resolution
Increasing access to medical oxygen



WHA resolution 76.3

Increasing access to medical oxygen



SEVENTY-SIXTH WORLD HEALTH ASSEMBLY
Agenda item 13.1

WHA76.3
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 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 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 3.2) and premature mortality from chronic co-oxigen has a role in the acute treatment of some AIDS-, tuberc (target 3.3) and road traffic injuries (target 3.6), and accelerating coverage (target 3.8);

Noting that the wide application of medical oxygen is essential across many communicable and noncommunicable diseases; in course, to which older persons in particular are vulnerable, in disease (COVID-19), pneumonia, tuberculosis and chronic situations requiring surgery, emergency and critical care, and that of the goals and targets of the Global Action Plan for the Prevention of the End TB Strategy;⁴ the WHO Package of Essential Noncommunicable for Primary Health Care⁵ and WHO Guidelines for Safe Surgery



Outlines priorities for **accelerating progress in universal access** to medical oxygen.

- Urges Member States to take **20 priority actions**, considering their national contexts.
- Requests **WHO to take 11 priority actions**.

It was agreed on the 9th plenary meeting, 30 May 2023. Reporting is required in 2026, 2028 and 2030.

WHA Resolution 76.3: Increasing access to medical oxygen

Objectives of this information session



1. Report on progress of the implementation of **resolution WHA76.3** by the Secretariat.
2. Introduce the **Access to Medical Oxygen Scorecard** (ATMO₂S), a voluntary self-assessment scorecard.
3. Share the **timeline towards reporting at WHA79**.

Updates from the secretariat on WHA 76.3

Dr Janet Diaz &
Contributors to the Access to Oxygen Initiative.



WHO's 11 priority actions



WHA76.3 Requests to DG	status
1. Advocacy: to continue to highlight the importance of medical oxygen	Ongoing
2. Tools and resources: guidelines, specifications, tools, training and other resources	Achieved & to continue
3. Regulations: convergence & harmonization for safe, effective, quality assured oxygen	In development
4. Financing: support in finding adequate, predictable, sustainable financing	Ongoing
5. Pandemic preparedness and response: inclusion of medical oxygen	Achieved & to continue
6. Innovation: review and promote innovation to increase access to medical oxygen	Achieved & to continue
7. Research: establish and or include of medical oxygen in research agenda	In development
8. Data: collect and analyse data and share best practices	Ongoing
9. Non-state actor consultation: regular consultation, enable Member State partnerships	Ongoing
10. Stakeholder engagement: promote mutual support and assistance	Ongoing
11. Reporting: communicate progress of this resolution in 2026, 2028 and 2030	Ongoing

Advocacy



(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;



- WHO continues to promote medical oxygen as an essential medicine and the criticality of scale up for pandemic preparedness at high profile global health events e.g. WHA, WHS.

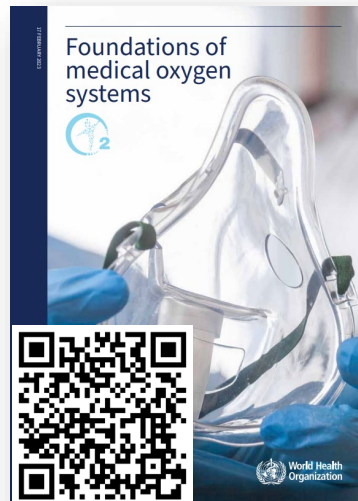
- WHO has hosted global oxygen events:
 - National medical oxygen scale-up framework – Road to oxygen access
 - Virtual series for developing national medical oxygen scale-up plans
- WHO co-hosts the Global Oxygen Alliance (GO₂AL).



Tools and resources (1 of 2)

(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;

New products:



Under development:

Self-assessment checklist for oxygen generation systems installed in health facilities (est. publication Q3)

PART I: General information for oxygen generation systems installed in health facilities									
PART I: General information for oxygen generation systems installed in health facilities									
1	Facility								
2	Country	Province	City/town	District		Street	Section	Allotment	Building and floor level
3	Postal code								
4	Quality management responsible								
Equipment: Oxygen generation system components, high-pressure cylinders and MGPS									
5	Equipment	Manufacturer (name & country)	Brand/make	Model	Serial number	Rated output capacity (indicate units)	Vendor (responsible for sale and/or installation) (name & country)	Contractor (responsible for installation and/or maintenance) (name & country)	Donor (if applicable)
6	Air compressor								
7	Air dryer								
8	Oxygen generator (PSA, VSA, VPSA)								
Equipment: cylinder filling station and high-pressure cylinders									
9	Booster compressor								
10	High-pressure cylinders								
Equipment: MGPS									
11	Manifold								
12	MGPS - full coverage (i.e. all medical wards)								
13	MGPS - partial coverage. If so, indicate medical wards that are piped:								
Scope of manufacturing, storage and distribution activities									
14	On-site distribution (only this health facility)								
15	Off-site distribution (other facilities)								
16	List any outsourced operational activities								
17	Name of supplier(s) for all outsourced operational activities								
18	Site master file (SMF)								

Tools and resources (2 of 2)



(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;

OpenWHO oxygen-related courses:



Oxygen ecosystem & oxygen systems

Clinical management of C-19 respiratory equipment



Opportunity for easy-access learning: OpenWHO is free, self-paced, and requires no registration.

International Pharmacopoeia:

Updated monograph with

- Oxygen 93%
- Oxygen 98%
- Oxygen 99.5%



Will be published in the upcoming 13th edition of Ph.Int.

Regulations (1 of 2)



(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;

Existing:

WHO has extensive GMP guidelines, with **GMP for medicinal gases** directly applicable to medical oxygen (see [TRS 1044 - Annex 5](#)).

Annex 5

WHO good manufacturing practices for medicinal gases

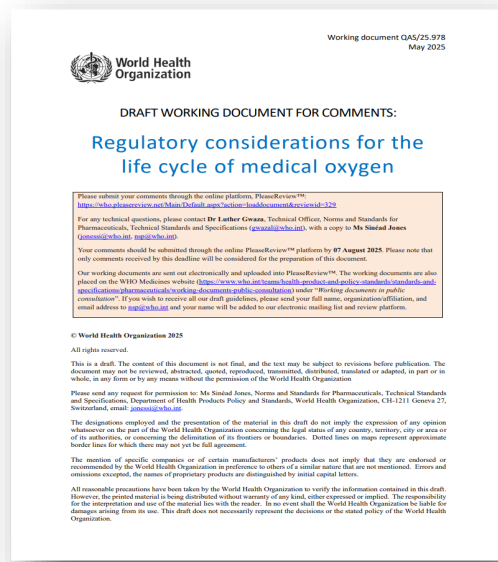
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Regulations (2 of 2): Regulatory Considerations in the Life Cycle of Medical Oxygen

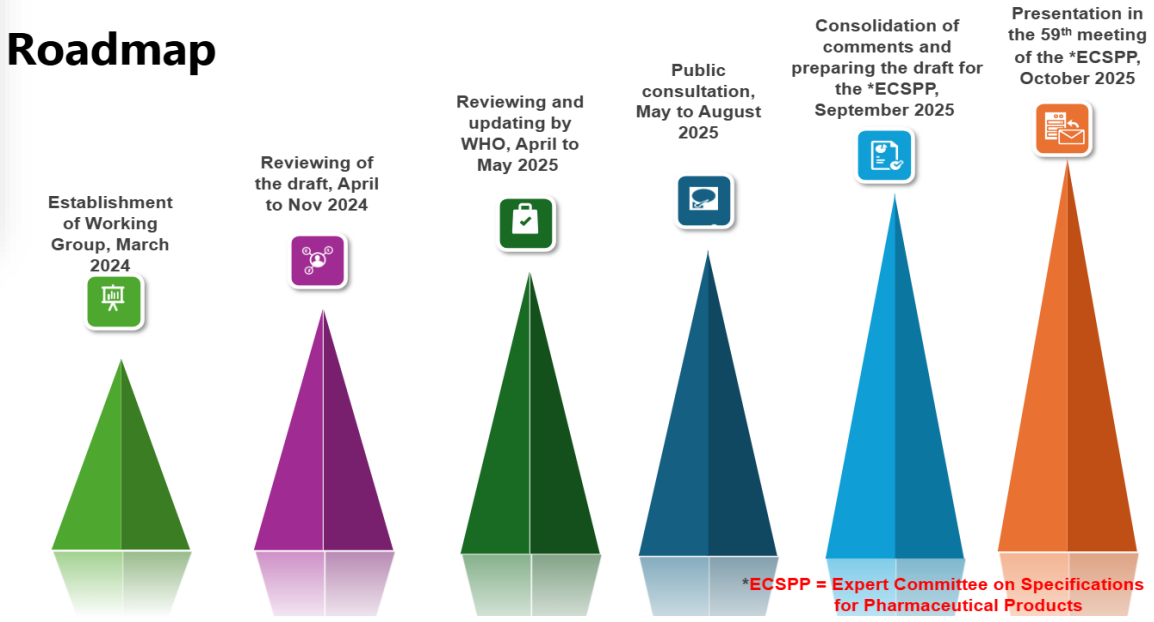


Opportunity for Member States to provide input on this forthcoming document.

Purpose: provides recommendations for NRAs on the regulation of medical oxygen throughout its life cycle. It also serves to help manufacturers, importers, and distributors understand the regulatory requirements needed to ensure that medical oxygen meets established quality and safety standards, ensuring its effective delivery to patients.

Scope: covers the entire life cycle of medical oxygen, from premarket to post-market activities

Roadmap



Final document

Regulatory considerations for the life cycle of medical oxygen

For any further information or request, please send an email to the Norms and Standards for Pharmaceuticals (NSP) Team at WHO, at email nsq@who.int.

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Sustainable financing



(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;

Costing and financing was covered in two parts across the WHO virtual workshop series for developing national medical oxygen scale-up plans.

Part 1: Costing national medical oxygen scale-up



Part 2: Sustainable financing



Topics included:

- Using S.M.A.R.T. metrics.
- Taking a 'whole of system' approach.
- Leveraging, adapting and applying existing tools.
- Optimizing capital investment projects.
- Considerations to sustain systems.
- Looking for potential existing sources of funding.

Pandemic preparedness & response



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



On 20 May 2025, the pandemic agreement was adopted.

WHO encourages Member States to incorporate oxygen all efforts related to pandemic prevention, preparedness and response per Chapter II articles.

Tools and resources to leverage for PPPR include: NAPHS, JEE, SPAR and HEPR.

Innovation (1 of 2)



(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;



Access to appropriate, affordable, effective, and safe health technologies is paramount, especially in low-resource settings.

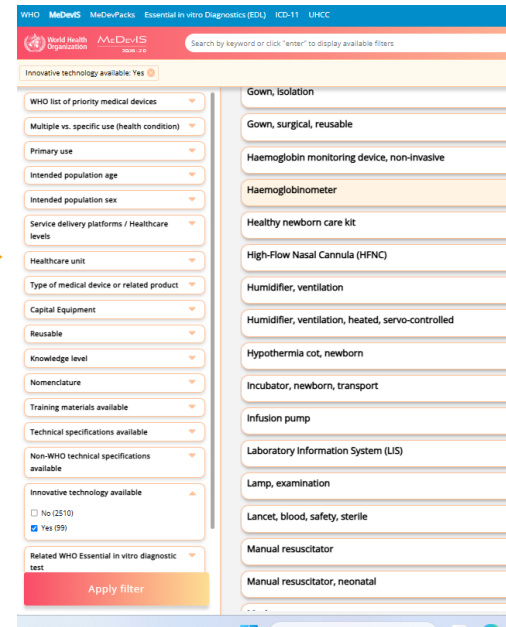
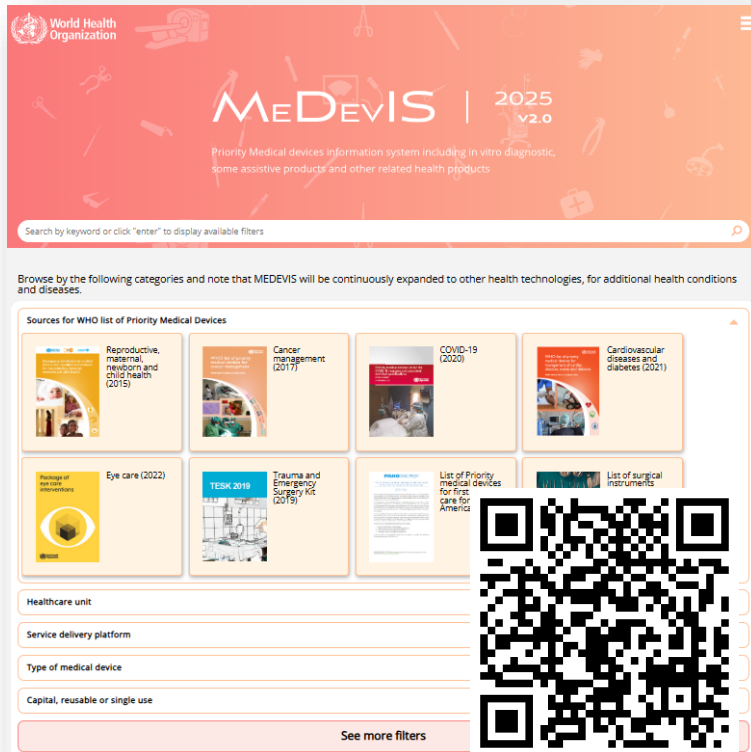
In 2024, WHO published the 7th edition of the **WHO compendium of innovative health technologies for low-resource settings**.

- Most editions include products related to oxygen.
- Includes both commercially available solutions and prototypes.
- Serves as a catalyst for increased interaction among stakeholders: MOH, procurement officers, donors, developers, biomedical engineers, clinicians and users.
- Aims to drive use of innovative health technology and expand global access, particularly for low-resource settings for populations in need.

Opportunity: Member States should encourage innovation at a national-level.

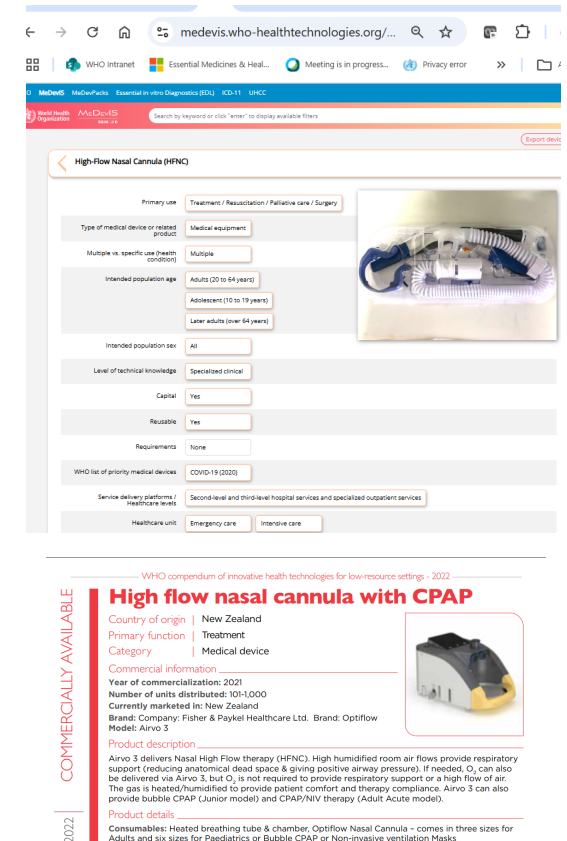
Innovation (2 of 2): MeDevIS

MeDevIS digital platform – WHO's priority medical devices information system, includes innovative technologies for oxygen .



Search for devices by healthcare unit, delivery platform, or type. MeDevIS maps out device-specific information including all WHO-related resources.

Medical oxygen ecosystem devices included in MeDevIS.



Research

(7) to establish, as needed, a research agenda regarding the use of medical oxygen;

WHO is establishing a respiratory support collaborative

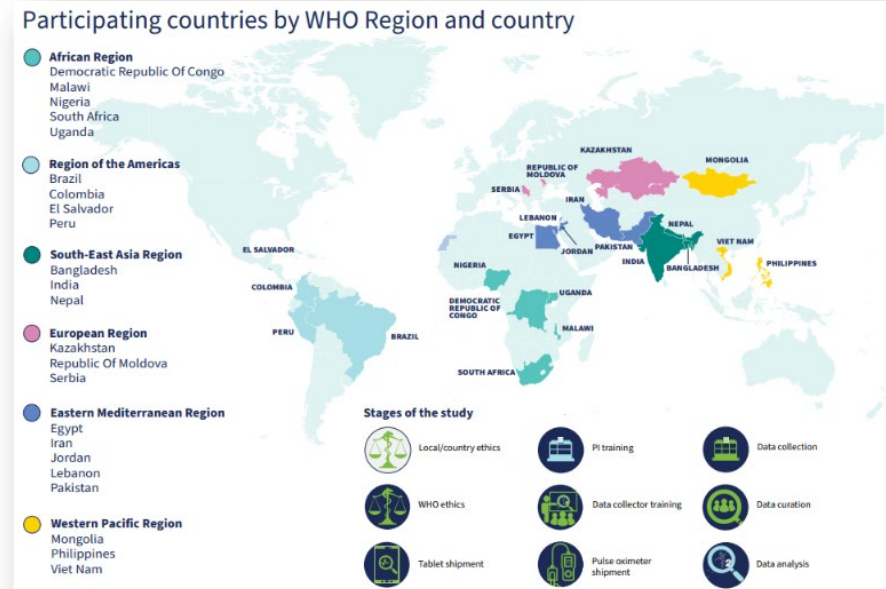


The screenshot shows the WHO Newsroom article page. At the top, there are navigation tabs for 'Global' and 'Regions'. Below the WHO logo, there are more navigation tabs: 'Home', 'Health Topics', 'Countries', 'Newsroom' (which is active), and 'Emergencies'. The breadcrumb trail reads: 'Home / Newsroom / Article / Call for expression of interest: Global O2ptimization of respiratory support collaboration'. The main heading is 'Call for expression of interest: Global O2ptimization of respiratory support collaboration'. Below the heading, it says '28 June 2024 | Expression of interest'. The text begins with 'Oxygen is a basic human need. Supplemental oxygen is the mainstay of COVID-19 and of other severe acute respiratory tract infections (SARI). In countries, SARIs are a major cause of mortality and morbidity. The experience revealed two uncomfortable truths:'. A QR code is visible on the right side of the article preview.

Opportunity for Member States collaboration.

Completed (to be published)

WHO O₂CoV₂: Oxygen requirements and approaches to respiratory support in patients with COVID-19 in low- and middle-income countries – a WHO observational study



Data

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

Quality data is needed for research and the basis for evidence-informed policy and health care. **The Lancet Global Health Commission** on medical oxygen security hosts the most comprehensive and current oxygen data and statistics.



While much data has been collected by Member States, partners and academics, gaps remain.

WHO data-related products / activities:

- Developing KPIs for the medical oxygen ecosystem
- WHO co-leads GO₂AL's recently launched M&E Working Group



Non-state actor consultation



(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;

- In development of oxygen-related products, WHO invites non-State actors to join as observers where thematically relevant. Examples include:
 - Technical specifications.
 - Self-inspection checklist (forthcoming product).
- Through GO₂AL, WHO works to enable partnerships between non-State actors and Member States.

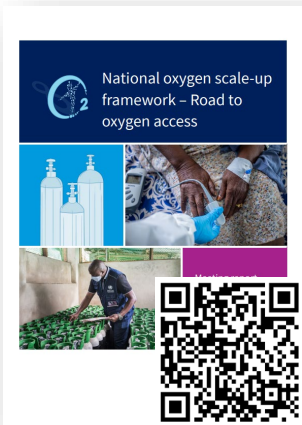


Stakeholder engagement

(10) to promote mutual support, assistance and cooperation among all stakeholders to increase access to medical oxygen;

WHO has hosted significant global oxygen events:

- National medical oxygen scale-up framework – Road to oxygen access, 14-16 May 2024, Dakar, Senegal.
- Virtual workshop series for developing national medical oxygen scale-up plans (See event page for recordings).



WHO is actively engaged:

- Monthly world oxygen collective meetings (formerly EBC) hosted by the COPD foundation.

Member States are welcome to join in the monthly world oxygen collective meetings.
Great opportunity to connect, learn and share.

Reporting



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

- WHO will continue to track progress on actions and activities related to the Secretariat actions.
- WHO proposes to host the Access to medical oxygen scorecard (ATMO₂S) to support reporting on Member State progress on WHA resolution 76.3 in 2026, 2028, and 2030

Opportunity for Member States to provide input
on relevance, utility and accessibility of ATMO₂S.

WHO oxygen websites



Health topic

The screenshot shows the WHO Oxygen health topic page. At the top is the WHO logo and a 'Donate' button. Below is a navigation bar with links: Home, Health Topics, Countries, Newsroom, Emergencies, Data, and About WHO. The main heading is 'Oxygen'. Below the heading are three tabs: Overview, Impact, and WHO Response. The Overview tab is selected. The main content area contains a large image of a person receiving oxygen therapy. Below the image is a QR code. To the right of the QR code is a list of links: Fact sheet, Questions, Databases, Initiatives, Resolution, Training, and Technical v.

World Health Organization

Home / Health topics / Oxygen

Oxygen

Overview Impact WHO Response

Oxygen is a life-saving essential medicine with no substitution. Healthcare professionals use oxygen to treat respiratory illnesses like COVID-19 and pneumonia. Oxygen is also essential for surgery and trauma. Vulnerable groups like older people, pregnant women, young infants and newborns need oxygen therapy regularly.

Despite being an essential medicine, oxygen is a complex product. Medicinal oxygen is produced in an industrial process applying good manufacturing practices (GMP) or is generated on-site using oxygen concentrators, which are in many legislations regulated as medical devices. Oxygen also requires a whole system to safely reach patients.

Due to their complexity, access to medical oxygen meets many challenges on availability, quality, affordability, management, supply, human resources capacity and safety. In face of these challenges, WHO continuously develops resources and tools to overcome them.

Fact sheet
Questions
Databases
Initiatives
Resolution
Training
Technical v

Initiative

The screenshot shows the WHO Access to Oxygen Initiative page. At the top is the WHO logo and a 'Donate' button. Below is a navigation bar with links: Home, Health Topics, Countries, Newsroom, Emergencies, Data, and About WHO. The main heading is 'Access to Oxygen Initiative'. Below the heading is a large image of a person receiving oxygen therapy. To the right of the image is a QR code.

World Health Organization

Home / Initiatives / Oxygen Access Scale Up

Access to Oxygen Initiative

External links: GO₂AL & Lancet



Ensuring affordable and equitable access to medical oxygen for those in need

[FIND OUT MORE](#)



The Global Oxygen Alliance (GO₂AL) is a multistakeholder collaborative consisting of 20 organizations and delegations that volunteered to join the Alliance to work towards a collective vision to increase oxygen access in LMICs. It is co-chaired by Unitaïd and The Global Fund and vice-chaired by PAHO/WHO and the Africa Centres for Disease Control and Prevention and managed by Unitaïd, WHO and UNICEF (the Coordination Group). It is not a legal entity or funding mechanism.



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COMMISSIONS | GLOBAL HEALTH

Reducing global inequities in medical oxygen access: the *Lancet Global Health* Commission on medical oxygen security

Published: February 17, 2025

Executive summary

Oxygen therapy is lifesaving for people with acute illness, life-sustaining for people undergoing anaesthesia and surgical care, and life-enhancing for people with chronic respiratory failure. The COVID-19 pandemic shone a spotlight on the long-standing inequities in access to medical oxygen globally. This Commission situates medical oxygen as a multifaceted system, a vital service, and an essential medicine, and presents new estimates of global medical oxygen need, the coverage gap, and the cost of closing it. Going further, it sets out strategies for building resilient medical oxygen production, storage, distribution, and delivery systems, and introduces a new national policy scorecard and oxygen coverage indicators. Centring oxygen investments around national plans and health-systems strengthening will ensure that oxygen is integrated into all health services, benefiting all patients, everywhere.



Copyright: The Global Fund/Talant

Commission

[Open Access](#)

[Reducing global inequities in medical oxygen access: the *Lancet Global Health* Commission on medical oxygen security](#)

Hamish R Graham, Carina King, Ahmed Ehsanur Rahman, Freddy Eric Kitutu, Leith Greenslade, Masooma Aqeel, et al.

The Lancet Global Health, Vol. 13, No. 3, e528-e584

Comments

[Open Access](#)

[Realising the benefits of oxygen through essential emergency and critical care](#)

Tim Baker, Karima Khalid, Alhassan Dattai Mohammed, Alexa Wharton-Smith, Ganbold Lundeg, Rob Mitchell, et al.

The Lancet Global Health, Vol. 13, No. 3, e387-e388

[Open Access](#)

[The crucial role of industry in increasing access to medical oxygen](#)

Jayasree K Iyer, Emma Cahuzac, Zachary Katz, Kaodili Udeh, Noha El-Ghobashy, David Lowrance, et al.

The Lancet Global Health, Vol. 13, No. 3, e389-e391

[Open Access](#)

[Medical oxygen: a necessity or a luxury in humanitarian settings?](#)

Aurélien Godard, Revati Phalkey, Susan Shepherd, Sara Rossi, Mesfin Teklu Tessema, James S Lee

The Lancet Global Health, Vol. 13, No. 3, e392-e393

[Open Access](#)

[Global access to medical oxygen: embedding nursing involvement](#)

Di Brown, Dines Birhane, Michael Lauer, Ousse Lubo, Patrick Kimutai Too, Keshini Naidu, et al.

The Lancet Global Health, Vol. 13, No. 3, e394-e395

[Open Access](#)

[Investing in local capacity and grassroots innovation to bridge gaps in medical oxygen access and security](#)

Millicent Aloo, Gerald Paul Douglas, Tadesse Waktoza Gemesa, Phoebe Nelima Khagame, June Kazira Madete, Varun Manhas, et al.

The Lancet Global Health, Vol. 13, No. 3, e399-e400

Podcast

In conversation with... Carina King and Ahmed Ehsanur Rahman

Carina King and Ahmed Ehsanur Rahman outline the purpose and main findings of the new *Lancet Global Health* Commission on medical oxygen security and their hopes for its impact.

0:00 / 0:00

Case studies

[Bangladesh Country Case Study](#)
[India Country Case Study](#)



ATMO₂S:

Access to medical oxygen scorecard

Dr Jamie Rylance



Access to medical oxygen scorecard

“ATMO₂S”



- **What** is the scorecard?
 - A scorecard to track progress on achieving objectives of WHA resolution 76.3 Increasing access to medical oxygen.
 - 21 questions with scaled answers mapped to WHA 76.3.
- **How** was it developed?
 - Adapted from the first version published by the Lancet Global Health Commission on medical oxygen security.
 - Refined by engaging global oxygen experts, following WHO policies on conflict of interest and transparency.
- **Who** can use the scorecard?
 - Member States can use it as a self-assessment scorecard to track progress on WHA resolution 76.3 and for voluntary reporting.

ATMO₂S mock-up

- Online, self-contained scorecard.
- Drop-down answers for each of the 21 questions.
- Option to input additional details on ‘strengths’, ‘accomplishments’, ‘challenges’ and ‘next steps’ to help identify or track priority areas.
- Data not publicly available by Member State but to be used in aggregate (region, global).



World Health
Organization

5%

ATMO2S scorecard

National essential medicine lists [1.1]

Item

"We include medical oxygen in national essential medicine lists (or an equivalent e.g., pharmacopoeia)."

Details

The national level essential medicines list, or where this is not available, a national pharmacopoeia or formulary.

Potential sources of evidence

- Relevant pharmacopoeia (if national, preferably to be updated by provisions in the International Pharmacopoeia)
- Essential medicine lists, if applicable
- Priority list of medical devices includes those needed for oxygen therapy and respiratory support, if available

* 1.1. Self assessment of national essential medicine lists

Choose one of the following answers

Please choose...

* Do you wish to document details about this question

Choose one of the following answers

☒ Yes

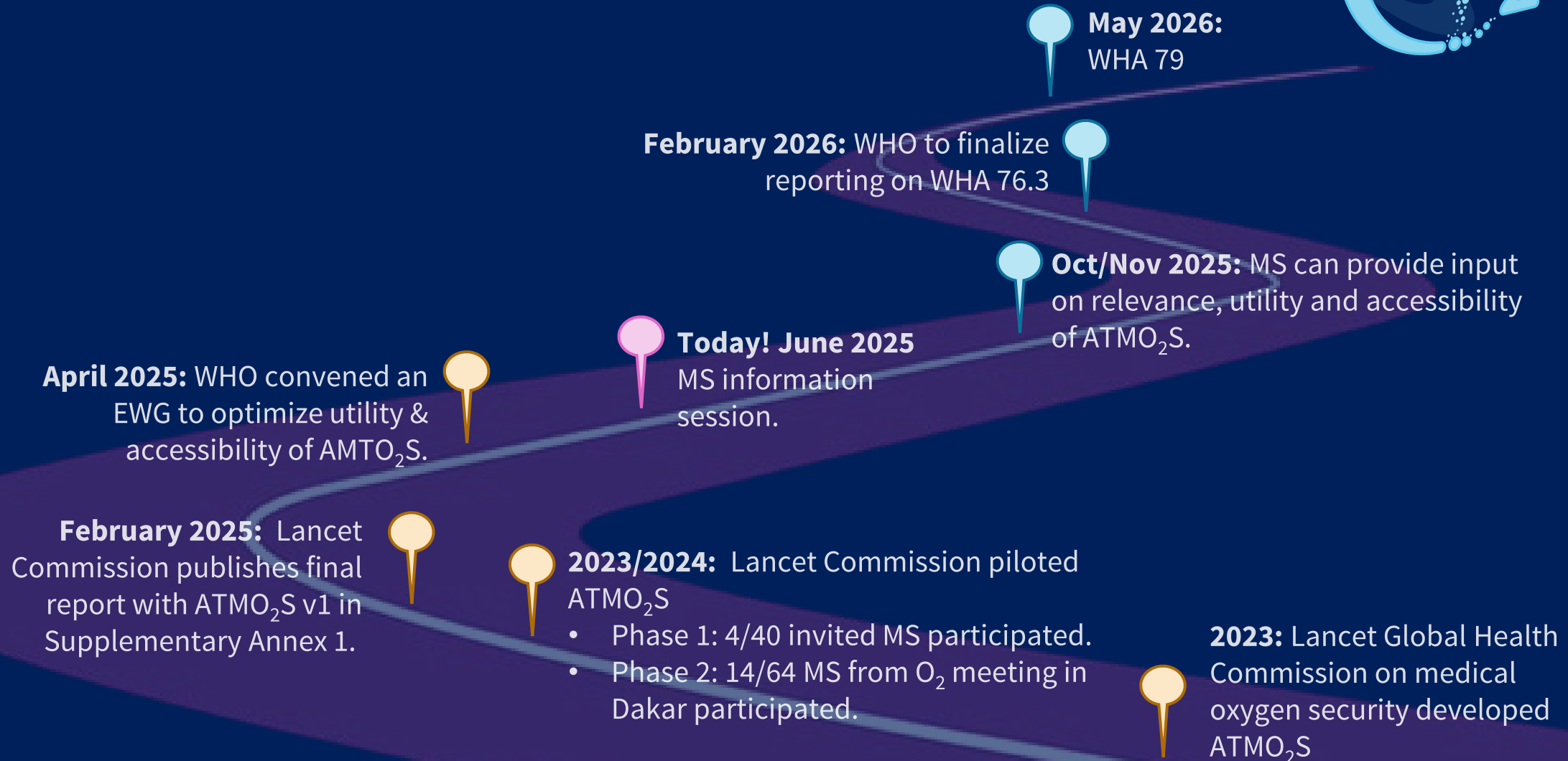
☐ No

Current strengths

Write here if you wish to document strengths

Current accomplishments

ATMO₂S development & road ahead



Next steps

Adriana Velazquez Berumen



Next steps



Q2 2025

- Today.
- 1st Member States information session on medical oxygen resolution.

Q3/4 2025

- WHO to host 2nd Member States information session.
- MS welcome to provide feedback on ATMO₂S.

Q1 2026

- WHO to finalize reporting on WHA resolution 76.3 for WHA 79.

Q2 2026

- WHO Secretariat delivers a progress reports to WHA79 on the implementation of the oxygen resolution.

WHO Secretariat will report again in WHA 81 (2028) and WHA 83 (2030)

Questions?





Thank you



2