
23 May 2026(Draft) A79/41

Fourth report of Committee A

(Draft)

Committee A held its ninth and tenth meetings on 22 May 2026 chaired by Dr Timur Sultangaziyev (Kazakhstan), Mr Fernando Israel Espinosa Olivera (Mexico) and Mr Ibrahim Nishan Ahmed (Maldives).

It was decided to recommend to the Seventy-ninth World Health Assembly the adoption of the attached four resolutions and two decisions relating to the following agenda items:

Provide health

12. Review of and update on matters considered by the Executive Board

12.4 Universal health coverage

One resolution entitled:

- Precision medicine: a path towards targeted, personalized and equitable care

One resolution entitled:

- Strengthening equitable access to diagnostic imaging through teleradiology

One resolution entitled:

- Reducing the burden of stroke: strengthening prevention, acute care, rehabilitation and health system readiness

One resolution entitled:

- Advancing smart, efficient pharmacovigilance as an essential tool for robust, sustainable, resilient and responsive health systems, for everyone, everywhere
- Draft global strategy for integrated emergency, critical and operative care, 2026–2035

One decision

- Increasing availability, ethical access and oversight of transplantation of human cells, tissues and organs

One decision

Agenda item 12.4**Precision medicine: a path towards targeted, personalized and equitable care**

The Seventy-ninth World Health Assembly,

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

Acknowledging the rapid evolution of biomedical and digital health sciences, including genomics, proteomics, pharmacogenomics, bioinformatics, real-world data analytics, molecular diagnostics, and advanced therapies such as cell and gene therapies, and recognizing the cross-cutting and enabling role of artificial intelligence in supporting these domains, which collectively underpin precision medicine and have the potential to transform prevention, diagnosis and treatment across the life course;

Recognizing that the term “precision medicine” refers to the use of clinical, molecular, genomic, and other health-related data to inform prevention, diagnosis and treatment decisions, taking into account individual variability in clinical characteristics, molecular and genomic profiles with appropriate safeguards, including the use of health technology assessment, to promote ethical, equitable and cost-effective implementation and improved health outcomes;

Recognizing also that precision medicine represents a paradigm shift towards predictive, preventive and participatory health systems, enabling targeted, effective and efficient interventions that enhance the efficiency and sustainability of universal health coverage by ensuring that the right intervention reaches the right patient at the right time;

Recognizing further that precision medicine, through genomic sequencing, high-throughput diagnostics and molecular targeting, and through the development and delivery of advanced therapies such as cell and gene therapies, has shown measurable clinical benefit, and in several cases demonstrated cost-effectiveness, including by improving survival through targeted cancer therapies, shortening the diagnostic odyssey for rare diseases, and reducing adverse drug reactions through pharmacogenomics;

Recognizing the contribution of precision medicine to the prevention and management of noncommunicable diseases, infectious diseases, maternal, child, and mental healthcare, and its potential to improve health outcomes and greater health system efficiency;^{2,3,4}

¹ Document A79/5.

² Liang S, Kennedy E, Gale N, Watson P, Ramanathan M, Shinde A, et al. Implementation of precision medicine in treating non-communicable diseases: a systematic review. *Journal of Translational Medicine*: 23, 1174 (2025). doi: 10.1186/s12967-025-07201-y.

³ Strianese O, Rizzo F, Ciccarelli M, Galasso G, D’Agostino Y, Salvati A, et al. Precision and personalized medicine: how genomic approach improves the management of cardiovascular and neurodegenerative disease. *Genes*. 2020 July;11(7):747. doi: 10.3390/genes11070747.

⁴ [Precision health: emerging innovations for children and adolescents](#). Insight Report No.3. New York: UNICEF; 2024 (accessed 31 January 2026).

Noting that global investment in precision medicine is projected to grow substantially by 2030, reflecting its growing impact on clinical innovation, biotechnology and public health, and the need to foster such investment to yield equitable and sustainable benefits across all regions;^{5,6}

Recalling, as appropriate, the 2023 United Nations high-level meeting on universal health coverage and the 2030 Agenda for Sustainable Development, including commitments to promote equitable distribution of and increased access to quality, safe, effective, affordable and essential medicines, vaccines, diagnostics and health technologies, as enablers of affordable, quality healthcare services and their timely delivery for all throughout the life course;

Recognizing the role of precision medicine in advancing universal health coverage and the WHO Fourteenth General Programme of Work, 2025–2028, particularly in strengthening primary healthcare, ensuring equity and addressing health inequalities;

Recognizing also that many populations, particularly women, children and older adults, remain underrepresented in the data and research that underpin precision medicine, and emphasizing the need to ensure diversity and inclusivity in the research and application of precision medicine, including meaningful representation of developing countries and historically underrepresented regions, so that emerging approaches equitably benefit all populations;

Reaffirming the importance of deliberate and well-coordinated global and national efforts to ensure that advances in precision medicine contribute to reducing inequities and health disparities within and between countries, narrowing the digital divide and promoting equitable access to affordable and timely care;

Noting that current global capacities remain uneven, with developing countries facing limited laboratory infrastructure, underrepresentation in genomic and clinical datasets, shortage of skilled professionals, and inadequate governance mechanisms for ethical data use and sharing;^{7,8,9,10}

Conscious of the ethical, legal, social and economic implications of precision medicine, including patient privacy, informed consent, governance and stewardship of genetic and health data, respecting national laws, data protection and data sovereignty, algorithmic bias, and equitable access to innovation;

Recalling resolution WHA57.13 (2004) on genomics and world health, which urged Member States to strengthen capacity in genomics to improve health outcomes and to ensure that advances in this field are used ethically, equitably and for the benefit of all populations;

⁵ [Global precision medicine market size and outlook, 2023–2030](#). Grand View Horizon Databooks (accessed 31 January 2026).

⁶ [Precision medicine market size, share and trends analysis report, 2025–2033](#). Straights Research (accessed 31 January 2026).

⁷ Girisha K and Moosa S. Genomic testing in low- and middle-income countries (LMIC). *European Journal of Human Genetics*, 2024: 32;119394. doi: 10.1038/s41431-024-01622-x.

⁸ Corpas M, Pius M, Poburennaya M, Guio H, Dwek M, Nagaraj S, et al. Bridging genomics' greatest challenge: The diversity gap. *Cell Genomics*: 2025;5(1):100724. doi: 10.1016/j.xgen.2024.100724.

⁹ [Health researcher \(in full-time equivalent\) per million inhabitants, by WHO region \(first set of charts\)](#). World Health Organization, August 2025 (accessed 31 January 2026).

¹⁰ [Guidance for human genome data collection, access, use and sharing](#). Geneva: World Health Organization; 2024 (accessed 31 January 2026).

Recognizing also that the evolution of genomics and related biotechnologies, and the significant drop in costs in genome sequencing since the adoption of that resolution, has led to the emergence of precision medicine, offering new opportunities to translate scientific discovery into equitable, needs-based and data-driven healthcare, at both the individual and population levels;^{11,12,13}

Recalling resolution WHA78.11 (2025) on rare diseases: a global health priority for equity and inclusion, which recognizes the importance of early diagnosis, equitable access to treatment and the inclusion of persons living with rare diseases;

Recalling also WHO's global strategy on digital health 2020–2027 and related initiatives on data governance, artificial intelligence and innovation, and recognizing their relevance in supporting the safe, ethical and equitable integration of precision medicine into health systems;

Recalling also the 2022 report of the WHO Science Council on accelerating access to genomics for global health, which calls for, inter alia, equitable integration of precision technologies to reduce health disparities, and the WHO's normative and technical guidance on human genome editing, digital health ethics and data governance, which offers a foundational policy framework for the responsible implementation of precision medicine;

Emphasizing the urgent need to strengthen national and regional capacities in genomics, pharmacogenomics, digital infrastructure, bioinformatics, clinical research, regulatory sciences and data governance, especially in developing countries, while ensuring transparency, data privacy and security, and to promote safe and secure access to that data, data health literacy and public engagement to build trust;

Emphasizing that effective and equitable implementation of precision medicine requires robust governance, skilled human resources, interoperable and secure data systems, sustainable financing and meaningful social participation, ensuring that no one is left behind;

Noting with appreciation the initiatives of Member States and regional bodies that enhance collaboration, research and equitable access to precision medicine and data-driven public health solutions,

1. URGES Member States,¹⁴ in accordance with national contexts and priorities:

- (1) to develop, implement and strengthen national policies and strategies that promote precision medicine, aligned with universal health coverage goals and ethical standards, ensuring affordability, accessibility, equity and sustainability;
- (2) to recognize precision medicine as an important enabler of universal health coverage, where appropriate and cost-effective, and to integrate it into health system strengthening efforts, encompassing prevention, early detection, diagnosis, treatment and monitoring,

¹¹ [Measuring genome sequencing costs and its health impact](#). Geneva: World Intellectual Property Organization; 19 March 2025 (accessed 31 January 2026).

¹² Ehman M, Sharma K, Weymann D, Maroilley T, Mohajeri A, Lehman A, et al. The cost and cost trajectory of genome sequencing and bioinformatics analysis for Indigenous children with suspected rare diseases. *Genetics in Medicine*. 2025;27(11):101568. doi:10.1016/j.gim.2025.101568.

¹³ [The cost of sequencing a human genome](#). National Human Genome Research Institute; 2021 (accessed 31 January 2026).

¹⁴ And, where applicable, regional economic integration organizations.

paying particular attention to primary healthcare, as well as cancer control, rare diseases, noncommunicable diseases, infectious diseases, maternal and child health, and mental health and other nationally identified priority health areas;

(3) to strengthen national and regional capacities by investing in laboratory and diagnostic infrastructure, genomic databases, digital health platforms and relevant technologies, including artificial intelligence and biomedical engineering, to support the implementation and integration of precision medicine with the respect of national data sovereignty;

(4) to promote the inclusion of all populations in research, data systems and evaluation frameworks that support precision medicine, paying particular attention to women, children and older adults, and to address underrepresentation within the data, consistent with ethical standards, including appropriate informed consent, ensuring that approaches and interventions are rigorously assessed for safety and effectiveness across all populations and equitably benefit them;

(5) to establish, strengthen or maintain legal, ethical and regulatory frameworks that ensure effective data governance, privacy, transparency, interoperability, security and quality assurance, and that ensure the responsible, equitable and sustainable integration of precision medicine into national health systems, as well as enhance equitable access to innovations;

(6) to foster capacity-building through comprehensive education and training programmes in genomics, data science, bioinformatics and clinical interpretation, targeting the health workforce, researchers and policy-makers, to ensure and to foster the safe, effective and equitable application of precision medicine;

(7) to encourage and promote equitable access to precision medicine services and technologies by investing in sustainable financing models and implementing pooled procurement, thereby supporting affordability and inclusivity;

(8) to foster research collaboration and innovation in precision medicine that reflect the diversity of global populations and sex-disaggregated data and that address national and regional health priorities, including neglected and rare diseases;

(9) to strengthen existing or establish new national centres and institutions for genomics research, as needed, with a view to enhancing national capacity and accelerating the ethical application of genomic advances in relation to national health problems;

(10) to empower individuals, families and communities through health literacy, awareness and participatory engagement, recognizing their essential role in the co-creation and implementation of precision medicine policies and programmes and fostering inclusivity, transparency and public trust, in a way that no one is left behind;

(11) to establish or maintain evidence-based mechanisms for the assessment and prioritization of precision medicine technologies to evaluate their clinical effectiveness, cost-effectiveness, safety and quality;

(12) to strengthen collaboration among governments, academic and research institutions, civil society, the private sector and other relevant stakeholders to promote the exchange of precision medicine technologies, knowledge-sharing, resource mobilization and

capacity-building, respecting international rules and national rules in line therewith, to advance equitable, inclusive and sustainable innovation in precision medicine;

(13) to promote harmonization of data standards and interoperability frameworks, aligned with WHO's global strategy on digital health 2020–2027 and international governance, ethics and regulatory guidelines on artificial intelligence, and drawing on existing initiatives;

2. REQUESTS the Director-General:

(1) to review and map existing WHO guidance and recommendations relevant to precision medicine, and if necessary, consider the development of a global strategy on precision medicine in consultation with Member States and relevant stakeholders, in line with the Framework of Engagement with Non-State Actors, as applicable, and in line with the Fourteenth General Programme of Work, 2025–2028 and prioritization process, to set out guiding principles, ethical and technical standards, and a road map for equitable, sustainable and context-appropriate implementation of precision medicine within universal health coverage frameworks;

(2) to provide technical and normative support to Member States, particularly developing countries, upon request, in developing policies, governance mechanisms, regulatory frameworks and capacity-building initiatives that enable the safe, effective and equitable application of precision medicine, drawing on existing WHO guidance, tools and expertise, including through further strengthening and coordinating existing WHO institutional capacity in genomics, data science, bioinformatics and digital health;

(3) to develop, upon the request of Member States, and in consultation with Member States and relevant stakeholders, in line with the Framework of Engagement with Non-State Actors, as applicable, a country maturity model consisting of a structured framework with progressive stages and measurable indicators, for the differentiated integration of precision medicine interventions, enabling Member States and institutions to assess current capacity, identify priorities, track progress and guide phased implementation, in line with national contexts and health system readiness;

(4) to facilitate regional and global platforms for knowledge exchange, best practices and innovation in precision medicine, taking into consideration data privacy and security at the aggregated level, as well as countries' contexts, including, but not limited to, the development of population-diverse national genomic reference databases, ensuring equitable representation, transparency and benefit-sharing;

(5) to facilitate, as appropriate, the establishment of new or the strengthening of existing regional networks and capacity-building hubs in genomics and related fields, paying particular attention to the health needs of developing countries, building on and supporting existing regional initiatives;

(6) to strengthen global, regional and national collaboration with relevant partners and stakeholders, academic and research institutions, and civil society, in line with the Framework of Engagement with Non-State Actors, as applicable, to mobilize resources, foster research and innovation and promote equitable access to digital tools and technologies appropriate to precision medicine, respecting international rules;

(7) to report on the implementation of this resolution to the Eightieth and Eighty-second World Health Assemblies in 2027 and 2029, respectively, on the progress achieved;

(8) to submit, pursuant to paragraph 2(1), the global strategy on precision medicine for consideration by the Executive Board at its 164th session, with a view to its submission for adoption to the Eighty-second World Health Assembly in 2029.

Agenda item 12.4**Strengthening equitable access to diagnostic imaging through teleradiology**

The Seventy-ninth World Health Assembly,

Having considered the consolidated report by the Director-General;¹⁵

Recalling resolution WHA71.7 (2018) on digital health, resolution WHA76.5 (2023) on strengthening diagnostics capacity, and the WHO global strategy on digital health 2020–2025,¹⁶ which collectively emphasize the critical role of digital technologies and diagnostics in achieving universal health coverage and the health-related Sustainable Development Goals;

Recognizing that diagnostic imaging, including radiology, is an essential component of healthcare, vital for the timely detection, diagnosis, management, treatment planning, and monitoring of communicable diseases, noncommunicable diseases, trauma, and maternal and child health conditions and other medical conditions, particularly in developing countries, including but not limited to small island developing States and remote and underserved areas;

Acknowledging that access to radiology services remains limited in and within many countries particularly developing countries and remote or rural areas, and noting with concern the shortage of trained and certified radiologists and other imaging professionals, which contributes to delayed or missed diagnoses and poorer health outcomes and preventable deaths;

Further noting that the absence of trained personnel to interpret images, or weak referral systems, lead to suboptimal utilization of equipment and may limit the effective use of existing imaging capacity;

Recognizing that teleradiology, the use of telecommunications technology to transmit and interpret medical images remotely, can offer a scalable, cost-effective and practical solution to help to bridge the human resource gap and extend the reach of expert diagnostic services to underserved populations;^{17,18}

Acknowledging that teleradiology, the secure and privacy preserving digital transmission, and remote interpretation of diagnostic images, can expand access to imaging, optimize use of limited expertise and improve quality of care, provided that the laws, regulations, standards and ethical rules governing this medical practice are respected;

Noting that, when appropriately implemented, teleradiology can contribute to the achievement of universal health coverage by increasing efficiency, supporting continuous education and strengthening preparedness and response capacities;

¹⁵ Document A79/5.

¹⁶ [Global strategy on digital health 2020–2025](#). Geneva: World Health Organization; 2021 (accessed 2 February 2026).

¹⁷ Jing AB, Garg N, Zhang J, Brown JJ. AI solutions to the radiology workforce shortage. *Npj Health Systems*. 2025;2(1): 20. doi: 10.1038/s44401-025-00023-6.

¹⁸ Nigatu AM, Yilma TM, Gezie LD, Gebreworld Y, Gullslett MK, Mengiste SA, et al. Barriers and facilitators experienced during the implementation of web-based teleradiology system in public hospitals of the northwest Ethiopia: An interpretive description study. *International Journal of Telemedicine Applications*. 2024:5578056. doi: 10.1155/2024/5578056.

Recognizing that, for the integration of artificial intelligence and digital health platforms, including teleradiology, into radiology services, it is necessary to ensure that these tools are developed, validated, safely deployed and governed ethically for performance, and implemented under clinical oversight, while ensuring inclusive and equitable access, in order to optimize the use of limited expert resources, improve the quality of interpretation, and ensure timely diagnosis across diverse settings;

Concerned that uncoordinated adoption, absence of national policy frameworks, weak data protection and fragmented infrastructure may lead to unsafe deployment of teleradiology services;

Considering that the effective and ethical adoption of teleradiology, where appropriate, requires robust national policy frameworks, regulatory standards, interoperability guidelines and secure data protection mechanisms to ensure complete patient information, patient consent, patient safety and confidentiality;

Recognizing the importance of international solidarity, cooperation and investment to facilitate the sharing of expertise and best practices in teleradiology, particularly through partnerships among countries, while respecting patient privacy and respecting national data sovereignty;

Conscious of the need to integrate teleradiology into national and regional health and digital strategies as a core component of strengthening health systems and accelerating progress towards achieving universal health coverage and health equity,

1. URGES Member States, taking into account national and regional context and capacities, and priorities:

(1) to integrate teleradiology within national health, digital health and diagnostic strategies, aligned with universal health coverage objectives;

(2) to develop or strengthen national policies, standards and regulatory frameworks for safe, ethical and effective teleradiology, including data governance, patient privacy, information and cross-border consultations;

(3) to explore sustainable finance options, where appropriate, for infrastructure and expand the use of digital platforms to enable reliable, secure and sustainable image acquisition, transmission and reporting, in order to enable the reliable and secure transmission and storage of medical images;

(4) to strengthen workforce capacity through education, training and mentorship programmes for all professionals involved, in partnership with academic and professional institutions;

(5) to promote the integration of teleradiology systems into national health information systems;

(6) to promote regional and international cooperation and knowledge-sharing to maximize the impact of limited radiology expertise and facilitate the exchange of best practices and technical knowledge with consideration of developing countries, including but not limited to small island developing States;

- (7) to give due consideration to equity, including the needs of underserved, rural and remote areas and including vulnerable populations, in line with national priorities and existing health system arrangements;
- (8) to support the safe trustworthy, accurate, robust and ethical use of artificial intelligence and decision-support tools in teleradiology workflows, in an inclusive and equitable manner with appropriate validation, transparency and human oversight according to appropriate regulatory protocols;

2. REQUESTS the Director-General:

- (1) to develop and disseminate normative guidance, standards and technical tools that enable safe, ethical, and effective teleradiology implementation, including interoperability and data protection;
- (2) to provide technical assistance to Member States, especially in developing countries, to support policy development, capacity-building and infrastructure planning;
- (3) to facilitate global and regional collaboration and partnerships, for training, research and knowledge exchange in radiology and digital health;
- (4) to improve data collection on global teleradiology capacity through existing WHO instruments;
- (5) to promote regional cooperation and knowledge exchange to support training, quality assurance and mutual assistance among Member States;
- (6) to implement paragraphs (1) to (5) above in accordance with the Fourteenth General Programme of Work, 2025–2028, and within available resources, including through future resource mobilization efforts, and in the context of the implementation of relevant resolutions and strategies, including resolution WHA76.5 on strengthening diagnostics capacity, resolution WHA78.13 (2025) on strengthening medical imaging capacity, and the global strategy on digital health 2020–2025 (extended to 2027)¹⁹ and its successor;
- (7) to report on progress in implementing this resolution, using existing reporting streams, to the Eighty-third World Health Assembly in 2030.

¹⁹ See decision WHA78(22) (2025).

Agenda item 12.4**Reducing the burden of stroke: strengthening prevention, acute care, rehabilitation and health system readiness**

The Seventy-ninth World Health Assembly,

Having considered the consolidated report by the Director-General;²⁰

Recalling the commitment made by Heads of State and Government to reduce premature mortality from noncommunicable diseases by one third by 2030, and the need to accelerate progress towards these goals, as appropriate, as set out in Sustainable Development Goal 3.4, and the extension of WHO's global action plan for the prevention and control of noncommunicable diseases 2013–2020 to 2030,²¹ the intersectoral global action plan on epilepsy and other neurological disorders 2022–2031 (decision WHA75(11) (2022)),²² and the global strategy on digital health 2020–2025;²³

Having considered the reports by the Director-General on noncommunicable diseases, health systems resilience and universal health coverage;²⁴

Recognizing that cardiovascular diseases, which can lead to stroke, are the leading cause of noncommunicable diseases mortality, accounting for approximately 19 million deaths annually,²⁵ and that stroke is the second-leading cause of death globally and the third-leading cause of disability;²⁶ and that cardiovascular diseases are a principal contributor to disability worldwide;

Noting with deep concern that the burden of stroke has grown rapidly in low- and middle-income countries, which account for approximately 87% of stroke deaths, and that the number of new cases and deaths from stroke increased by 70% and 44%, respectively, between 1990 and 2021;²⁷

Noting with deep concern that stroke remains a leading cause of death and a major cause of disability, with differences in distribution of causes and risk factors across the life course, including for women during pregnancy and the postpartum period and when using oral contraception or experiencing migraines, and further noting that women experience poorer functional recovery and higher mortality than men owing to factors such as age, severity of stroke, pre-stroke dependency

²⁰ Document A79/5.

²¹ [Global action plan for the prevention and control of noncommunicable diseases 2013–2020](#). Geneva: World Health Organization; 2013 (accessed 2 February 2026).

²² [Intersectoral global action plan on epilepsy and other neurological disorders 2022–2031](#). Geneva: World Health Organization; 2022 (accessed 2 February 2026).

²³ [Global strategy on digital health 2020–2025](#). Geneva: World Health Organization; 2021 (accessed 2 February 2026).

²⁴ See documents EB158/6, EB158/26 and EB158/11.

²⁵ [Global Burden of Disease 2023](#). Seattle, WA: Institute for Health Metrics and Evaluation; 2025. (accessed 25 September 2025).

²⁶ Feigin VL, Brainin M, Norrving B, Martins SO, Pandian J, Lindsay P, et al. World Stroke Organization: Global Stroke Fact Sheet 2025. *International Journal of Stroke*. 2025;20(2):132–144. doi:10.1177/17474930241308142.

²⁷ GBD 2021 Stroke Risk Factor Collaborators. Global, regional, and national burden of stroke and its risk factors, 1990–2021: a systematic analysis for the Global Burden of Disease Study 2021. *Lancet Neurology*. 2024;23:973–1003. doi:10.1016/S1474-4422(24)00369-7.

and depression, while men experience a greater burden of stroke at younger ages, including premature mortality and long-term disability, therefore underscoring an approach that identifies and addresses gender inequalities across the life course, among other factors, in stroke research, prevention and treatment;

Acknowledging that the high burden in developing countries is exacerbated by a lack of stroke-ready care, limited access to affordable essential medicines, inadequate rehabilitation services and a high prevalence of uncontrolled risk factors and medical conditions, such as but not limited to hypertension, diabetes, obesity, dyslipidaemia, physical inactivity, tobacco use, harmful use of alcohol, illicit drug use and air pollution, as well as undiagnosed or poorly managed atrial fibrillation and other cardiovascular diseases;

Acknowledging that stroke has substantial social and economic costs, including direct healthcare expenditures and indirect costs owing to loss of productivity and long-term care needs that often result in a reliance on informal caregiving, thereby undermining development and household financial security by increasing out-of-pocket expenditures and long-term dependency;²⁸

Concerned that the health systems of several Member States, particularly in developing countries and in resource-constrained regions, lack comprehensive, coordinated stroke services ranging from primary prevention and stroke-ready emergency systems to timely access to imaging, reperfusion therapies and essential medicines, through to rehabilitation, community support and long-term follow-up care;

Noting the evidence of critical gaps in certain countries across the stroke continuum, such as low detection and treatment rates for hypertension and other risk factors; low public awareness of stroke signs and insufficient prehospital emergency care; limited access to essential neuroimaging; limited availability of stroke units, thrombolysis/thrombectomy and neurosurgery services; suboptimal secondary prevention; inadequate rehabilitation and long-term support capacity; and lack or need for strengthening of national stroke registries and data to guide policy; and shortages of trained health workers across primary, emergency, acute and rehabilitative care pathways, as well as significant geographical disparities in access;

Conscious of the need for dedicated global leadership and coordinated action requiring the strengthening of WHO's technical capacity for noncommunicable diseases and the establishment of multisectoral national stroke units within Member States²⁹ to close the existing gaps and inequalities in the stroke care pathway, thereby reducing premature mortality and disability and strengthening health system resilience in line with Sustainable Development Goal 3.4;

Emphasizing that effective stroke care requires action across the life course and across health system levels, including strengthened primary prevention, and that many evidence-based and cost-effective interventions exist to reduce stroke incidence and improve outcomes, including hypertension control; diabetes and dyslipidaemia management; screening for atrial fibrillation; salt reduction; promotion of healthy diets and physical activity; effective tobacco cessation; adoption of alcohol strategies, interventions and policies in line with the global alcohol action plan 2022–2030³⁰ to effectively implement the global strategy to reduce the harmful use of alcohol as a

²⁸ [Stroke. Fact sheet](#). Geneva: World Health Organization; 2025 (accessed 2 February 2026).

²⁹ See document WHA75/2022/REC/1, Annex 8: Implementation roadmap 2023–2030 for the global action plan for the prevention and control of noncommunicable diseases 2013–2030.

³⁰ [Global alcohol action plan 2022–2030](#). Geneva: World Health Organization; 2024 (accessed 2 February 2026).

public health priority; responses to illicit drug use; reduction of air pollution; as well as timely and coordinated emergency medical services; access to organized stroke unit care and reperfusion therapies such as thrombolysis and mechanical thrombectomy; availability of anticoagulation for atrial fibrillation; and access to long-term rehabilitation, community reintegration and social support, while noting with concern that the adoption, scale-up and equitable implementation of these interventions remain insufficient in many countries;

Emphasizing the critical need to continue to integrate stroke prevention, control and management into national cardiovascular disease and neurological disorders strategies and universal health coverage plans to foster equitable access to the full spectrum of care, particularly persons in vulnerable situations, and to reduce health inequalities;

Acknowledging the central role of health system strengthening, digital health, diagnostics including imaging, workforce training and rehabilitation services integration in achieving measurable reductions in stroke mortality and disability;

Noting the absence of a focused WHO resolution addressing stroke comprehensively that takes into account prevention, acute care, rehabilitation and system readiness and that recognizes the specific time-dependent nature requiring coordinated emergency care, and cognizant of the opportunity to stimulate coordinated national and global action;

Affirming the importance of standardized national stroke registries and surveillance systems to accurately monitor the incidence, prevalence, mortality, disability, quality of care and patient-reported outcomes, which is essential for evidence-based policy-making and resource allocation,

1. URGES Member States,³¹ in accordance with national contexts and capacities, and where appropriate:

- (1) to include stroke as one of the major public health concerns within national cardiovascular disease and neurological disorders strategies and universal health coverage planning, with dedicated objectives across the prevention, acute care and rehabilitation continuum;
- (2) to implement and strengthen population-level prevention measures as well as measures to reduce health inequalities proven to reduce stroke risk, including but not limited to implementation of large-scale detection and control programmes for hypertension, diabetes, obesity and dyslipidaemia; adoption of legislation, regulation, policies and actions, as appropriate, to reduce excessive levels of saturated fats, free sugars and sodium in food products; support for effective tobacco cessation; adoption of alcohol strategies, interventions and policies in line with the global alcohol action plan 2022–2030 to effectively implement the global strategy to reduce the harmful use of alcohol as a public health priority; promotion of healthy diets and physical activity and implementation of health literacy and school-based education programmes to foster healthy habits among children and adolescents; and actions to reduce household and ambient air pollution, in line with national circumstances;
- (3) to foster primary care readiness by developing and implementing national stroke care pathways for stroke prevention by scaling up and conducting systematic screening for risk factors, including hypertension, hyperglycaemia/diabetes, dyslipidaemia and atrial fibrillation; fostering continuous supply and affordable access to essential medicines for

³¹ And, where applicable, regional economic integration organizations.

blood pressure, glycaemic and lipid control and antiplatelet and anticoagulant therapies as appropriate; integrating counselling for lifestyle risk modification into routine primary care contacts by using evidence-based and effective methods; and establishing global coverage targets on hypertension prevention and control;

(4) to strengthen emergency care systems so that patients with suspected acute stroke receive timely triage, rapid transport and access to imaging and reperfusion therapies where clinically indicated by:

(a) defining and designating stroke-ready levels of emergency care facilities with minimum capability standards in terms of imaging, laboratory access, trained staff and capacity for thrombolysis;

(b) establishing prehospital stroke recognition and triage protocols, public awareness campaigns for early presentation and streamlined referral pathways between primary care, emergency services and stroke units;

(c) raising awareness of health personnel in emergency care systems about the differences in stroke symptoms among women and men to ensure equitable care for all;

(5) to expand access to timely diagnostic imaging, including computed tomography and magnetic resonance imaging or validated alternatives, where appropriate, and essential laboratory tests required for acute stroke management;

(6) to scale up evidence-based acute interventions, including intravenous thrombolysis where indicated and systems to enable endovascular thrombectomy in referral centres, as well as the implementation of standardized care bundles for acute intracerebral haemorrhage, including rapid blood pressure control and coagulopathy reversal, and specialized management pathways for subarachnoid haemorrhage, ensuring access to neurosurgical care in referral centres with protocols for timely transfer and interfacility cooperation;

(7) to invest in multidisciplinary stroke units and rehabilitation, ensuring inpatient stroke units with multidisciplinary teams including, inter alia, physiotherapy, occupational therapy, speech and language therapy, nursing and medical care, early supported discharge models, palliative and end-of-life care, where appropriate, and community-based rehabilitation and social support for survivors to optimize functional recovery and reintegration;

(8) to facilitate the development and maintenance of national stroke registries and surveillance systems to collect standardized data, including information on incidence and data on key indicators of stroke disaggregated by sex, mortality, risk factors, service availability, reperfusion therapy rates, time-to-treatment, rehabilitation access, functional outcomes, patient-reported outcomes and long-term quality of life, to guide policy, monitor progress and enable quality improvement;

(9) to strengthen the health workforce by incorporating stroke prevention, acute care and rehabilitation into pre-service curricula and continuing professional development for physicians, nurses, allied health professionals and community health workers; support task-sharing, where appropriate, with clear competency frameworks and clinical governance; and implement retention and incentive strategies for underserved areas;

(10) to promote equitable and affordable access by targeting investments and service expansion to underserved, rural and low-income populations, ensuring financial protection mechanisms to reduce out-of-pocket costs for stroke care and rehabilitation;

(11) to adopt and implement clinical protocols and quality-assurance mechanisms, including national clinical guidelines for stroke prevention and care, audit and peer-review systems, performance indicators and continuous quality improvement processes across the stroke care pathway;

(12) to foster regional and intercountry collaboration in respect of shared training, referral networks, pooled procurement for essential medicines and consumables such as telemedicine/teleradiology arrangements, and regional centres of excellence that can provide mentorship and surge capacity during emergencies;

(13) to explore and mobilize, as appropriate, sustainable financing for stroke prevention and care, including domestic and international resources, innovative pooled financing mechanisms, alignment with relevant donor programmes and integration of stroke services into universal health coverage benefit packages to foster long-term affordability and scalability;

(14) to engage communities and civil society, including stroke survivor organizations and caregivers, in designing and monitoring policies and services, supporting public awareness and secondary prevention adherence, and reducing stigma associated with disability;

(15) to integrate digital health solutions including, inter alia, registries, telemedicine, teleradiology, clinical decision support and mobile health for follow-up and rehabilitation, in a manner that ensures interoperability, data protection, inclusion and alignment with national digital health strategies;

(16) to build workforce capacity by training health professionals across the continuum of care, from primary care providers to emergency personnel, neurologists and rehabilitation specialists, in evidence-based stroke management;

2. REQUESTS the Director-General:

(1) to develop normative guidance and technical tools for Member States on comprehensive stroke prevention, acute care readiness, rehabilitation and long-term support that focus on advancing health equity, rights and gender equality;

(2) to integrate stroke into existing global cardiovascular and neurological disorders strategies that can be adapted according to national context;

(3) to support Member States, especially developing countries, in strengthening their capacity for stroke system models adapted to resource levels;

(4) to facilitate global stroke monitoring and reporting, harmonized with existing WHO cardiovascular disease, neurological disorders and universal health coverage monitoring systems;

(5) to promote research and evidence generation on context-appropriate, cost-effective interventions for stroke prevention, acute management and rehabilitation in developing countries;

- (6) to support equitable access to essential medicines and identify priority lists for stroke prevention and acute care, including in respect of medicines for blood pressure and dyslipidaemia management, antiplatelets, anticoagulants, thrombolytic agents and basic imaging capability, advising on procurement strategies and supply-chain resilience, and exploring pooled procurement mechanisms where feasible;
- (7) to encourage regional cooperation and technical partnerships, including, where appropriate, the establishment or designation of regional centres of excellence for stroke care that can provide training, quality assurance and surge capacity support;
- (8) to report on progress in the implementation of this resolution to the World Health Assembly through the report submitted in response to decision WHA72(11) (2019) on follow-up to the political declaration of the third high-level meeting of the General Assembly on the prevention and control of non-communicable diseases, which also covers the outcome of the fourth high-level meeting of the General Assembly on the prevention and control of non-communicable diseases and the promotion of mental health and well-being on progress made in addressing stroke as part of the global noncommunicable disease agenda and of the intersectoral global action plan on epilepsy and other neurological disorders 2022–2031;³²

3. ENCOURAGES relevant stakeholders, including intergovernmental organizations, philanthropic agencies, academic institutions, professional societies, civil society, and private-sector partners and donors, to support Member States and, in line with the Framework of Engagement with Non-State Actors, and where applicable, WHO in implementing the actions provided for in this resolution, as appropriate.

³² See decision WHA75(11) (2022).

Agenda item 12.4**Advancing smart, efficient pharmacovigilance as an essential tool for robust, sustainable, resilient and responsive health systems, for everyone, everywhere**

The Seventy-ninth World Health Assembly,

Having considered the consolidated report by the Director-General;³³

Recalling resolution WHA16.36 (1963) urging the systematic reporting of serious adverse drug reactions and the establishment of international drug safety monitoring, including the WHO Programme for International Drug Monitoring and the designation of the Uppsala Monitoring Centre as the WHO Collaborating Centre for International Drug Monitoring;

Noting resolutions WHA60.20 (2007), WHA61.21 (2008), WHA62.16 (2009), WHA63.12 (2010), WHA65.17 (2012), WHA65.19 (2012), WHA66.22 (2013), WHA67.20 (2014), WHA67.21 (2014), WHA67.22 (2014), WHA68.7 (2015), WHA71.8 (2018) and WHA72.8 (2019), all of which encompass aspects of the need to promote access to quality, safe, effective and affordable medicines and other health technologies³⁴ as appropriate;

Recalling resolution WHA61.21, decision WHA71(9) (2018) and document A71/12, insofar as they address the role of technology transfer and local production of medicines and other health technologies on improving access as appropriate;

Recalling resolution WHA73.1 (2020) on a comprehensive and coordinated response to the coronavirus disease (COVID-19) pandemic, which calls for intensified international cooperation and solidarity to contain, mitigate and overcome the pandemic and its consequences through responses that are people-centred and address gender inequalities;

Reaffirming the commitment to Sustainable Development Goal 3.8 to achieve universal health coverage, including access to safe, effective, quality and affordable essential medicines and vaccines for all;

Acknowledging the lessons from the COVID-19 pandemic and other public health emergencies, which highlighted the essential role of functional pharmacovigilance systems for the rapid detection and management of safety signals associated with novel health products, including vaccines and medical devices, and, equally, of timely, transparent and accurate risk communication as a way to inform the public, support informed decision-making and reinforce confidence in public health interventions;

³³ Document A79/5.

³⁴ Medicines and other health technologies includes pharmaceuticals, vaccines, biopharmaceuticals and medical devices.

Recognizing that pharmacovigilance data suggest distinct safety profiles across sex and age, where differences in reporting, outcomes and vulnerability to adverse events may exist,^{35,36}

Recognizing also that despite global progress, significant inequities persist in pharmacovigilance capacity, with many developing countries facing capacity and resource constraints and contributing a disproportionately small share of global safety data, resulting in populations being unequally protected against adverse events and limiting the quality and completeness of global safety data;

Acknowledging the emergence of a multitude of parallel safety monitoring systems in countries across various disease treatment programmes that often operate in silos, and may lead to inefficient use of resources and scattered data;

Recognizing the critical role of national and regional regulatory authorities and global institutions and their collaboration, and the need for comprehensive and integrated pharmacovigilance systems that enable robust, timely evidence-based, benefit-risk assessment of medicines and other health technologies;

Recognizing also that collaboration between national and regional authorities and global institutions is also key to addressing capacity-building gaps;

Recognizing further that good vigilance practices, including in local production, are essential to foster access to safe, effective and quality assured medicines and other health technologies in a country;

Noting the transformative potential of digital technologies, real-world data and artificial intelligence to enhance safety surveillance, signal detection and regulatory decision-making;

Recognizing the challenges related to the principles of data governance, privacy, interoperability, access to data,^{37,38} and acceptance by regulators;

Stressing that smart, risk-based, integrated and collaborative pharmacovigilance strategies can maximize the impact of limited public health resources, enhance the timeliness of safety signal detection, avoid duplication, and foster reliance and work-sharing and harmonized decision-making among Member States and regions;

Acknowledging that misinformation and disinformation about the safety of medicines, vaccines and medical devices, and more broadly about science, can seriously undermine public confidence and trust in these life-saving products and public health programmes and cause harm;

³⁵ Watson S, Caster O, Rochon PA, den Ruijter H. Reported adverse drug reactions in women and men: aggregated evidence from globally collected individual case reports during half a century. *eClinicalmedicine*. 2019 Dec;17:100188. doi: 10.1016/j.eclinm.2019.10.001.

³⁶ Aurich B, Apele-Freimane D, Banaschewski T, Chouchana L, Day S, Kaguelidou F, et al. c4c: Paediatric pharmacovigilance: Methodological considerations in research and development of medicines for children – A c4c expert group white paper. *British Journal of Clinical Pharmacology*. 2021 Oct 26;88(12):4997-5016. doi: 10.1111/bcp.15119.

³⁷ [VigiBase data access conditions](#). Geneva: World Health Organization; 2025 (accessed 29 January 2026).

³⁸ [VigiAccess: frequently asked questions](#). Geneva: World Health Organization; 2026 (accessed 29 January 2026).

Affirming that strengthening pharmacovigilance contributes to public trust in health systems and immunization programmes,^{39,40} improves patient safety, and is an essential component for achievement of the goals of universal health coverage and preparedness for future health emergencies, including the uptake and impact of norms and standards on smart pharmacovigilance; and additionally, that it has a significant economic impact, as it optimizes resource allocation and reduces the broader costs associated with adverse events;

Noting that Member States continue to access and benefit from all the resources and services that are already offered by WHO through the Uppsala Monitoring Centre as the WHO Collaborating Centre for International Drug Monitoring,

1. URGES Member States,⁴¹ in accordance with their national context and priorities:
 - (1) to drive the integration of vigilance systems in order to optimize the use of vigilance data and evidence, for a more comprehensive regulation of medicines and other health technologies and patient care;
 - (2) to strengthen national pharmacovigilance systems including patient or consumer reporting systems so that patients and caregivers can easily report adverse events to health authorities or institutions, and to support education and awareness efforts on how to identify and report such events;
 - (3) to strengthen and modernize national pharmacovigilance systems as an integral part of regulatory systems, where applicable, including where appropriate through adequate governance, domestic and international financing, and human resource capacity (in addition to the resources that are provided by WHO to Member States, free of cost, through the Uppsala Monitoring Centre);
 - (4) to consider or strengthen the application of safety and vigilance principles beyond medicines and vaccines to include other relevant health products;
 - (5) to adopt evidence-based, smart and effective approaches to pharmacovigilance, addressing the most significant risks and prioritizing high-impact activities and products, and to participate where appropriate in regional or global work and reliance mechanisms to optimize resource use;
 - (6) to develop or strengthen relevant legal and regulatory frameworks, guidelines and manuals to support, where appropriate, good pharmacovigilance practices as an essential responsibility of manufacturers, including in local production, for quality assured essential medicines;

³⁹ Iessa N, Sarinic VM, Ghazaryan L, Romanova N, Alemu A, Rungapiromnan W, et al. Smart Safety Surveillance (3S): Multi-Country Experience of Implementing the 3S Concepts and Principles. *Drug Safety*. 2021 Oct;44(10):1085–98. doi: 10.1007/s40264-021-01100-z.

⁴⁰ [Unmasking safety signals during a pandemic](#). Technical meeting report. Geneva: World Health Organization; 2022 (accessed 29 January 2026).

⁴¹ And, where applicable, regional economic integration organizations.

- (7) to leverage real-world data, digital platforms and innovative tools, including artificial intelligence and machine learning, in a safe, transparent and ethical manner to improve safety signal detection and response, while also maintaining public trust;
- (8) to promote the integration of sex- and age-related safety considerations throughout the development, regulation and use of medicines and to strengthen pharmacovigilance systems that routinely collect, analyse and use sex- and age-disaggregated data on adverse events for diverse population groups;
- (9) to integrate pharmacovigilance within relevant strategies that advance universal health coverage, ensuring patient safety monitoring across all levels of care;
- (10) to integrate pharmacovigilance training in teaching institutions and strengthen regulatory capacity-building and workforce training in pharmacovigilance;
- (11) to collaborate with local, regional and global stakeholders, including public health programmes, academic institutions, the private sector, where appropriate, and patients' organizations, to strengthen pharmacovigilance and knowledge-sharing;
- (12) to establish or further utilize, where appropriate, pharmacovigilance coordination platforms with partners and stakeholders at the national, regional and global levels for resource optimization and timely decision-making;

2. REQUESTS the Director-General:

- (1) to continue to update the existing or, if necessary, to develop global normative guidance and technical tools in consultation with Member States to support "smart pharmacovigilance", taking into consideration real-world evidence and the ethical use of artificial intelligence for pharmacovigilance purposes, and to align with existing initiatives in this area;
- (2) to consolidate performance metrics for pharmacovigilance systems and provide technical support to Member States, upon their request, in assessing and improving their pharmacovigilance systems, including the uptake and impact of norms and standards on smart pharmacovigilance;
- (3) to continue enhancing international collaboration and information sharing, reliance and work-sharing for effective pharmacovigilance among Member States and regions, and continue to take measures to strengthen health literacy on pharmacovigilance to counter disinformation and misinformation, including by facilitating access to evidence-based and science-based information;
- (4) to support data quality, interoperability and equitable participation of all Member States including developing countries, building on global databases⁴² while respecting data sovereignty and data security;
- (5) to promote capacity development through training programmes for workers in the healthcare and related sectors, including knowledge exchange, and the dissemination of best practices in pharmacovigilance system design and operation;

⁴² See [the global medicines safety database](#) (accessed 30 January 2026).

(6) to report back to the Eighty-first, Eighty-third and Eighty-fifth World Health Assemblies in 2028, 2030 and 2032, respectively, on progress in implementing this resolution, and on the state of global pharmacovigilance systems, including their contribution to universal health coverage and health emergency preparedness.

Agenda item 12.4**Draft global strategy for integrated emergency,
critical and operative care, 2026–2035**

The Seventy-ninth World Health Assembly, having considered the consolidated report by the Director-General,⁴³

Decided:

- (1) to adopt the global strategy for integrated emergency, critical and operative care, 2026–2035;
- (2) to request the Director-General to report on progress made in the implementation of the global strategy to the Health Assembly as part of reporting on resolution WHA76.2 (2023) in 2027 and 2029, and subsequently in 2031 and 2035.

⁴³ Document A79/5.

Agenda item 12.4**Increasing availability, ethical access and oversight of
transplantation of human cells, tissues and organs**

The Seventy-ninth World Health Assembly, having considered the consolidated report by the Director-General,⁴⁴

Decided:

- (1) to defer consideration of the proposed global strategy on donation and transplantation;
- (2) to request the Director-General to continue to develop the proposed global strategy and submit it for consideration by the Eightieth World Health Assembly in 2027, through the Executive Board at its 160th session.

⁴⁴ Document A79/5.