I'm not a robot

Skip to main content Health technology is the application of organized knowledge and skills in the form of devices, medicines, vaccines, procedures and systems developed to solve a health problem and improve quality of life.* It is used interchangeably with health care technology.World Health Assembly resolution WHA60.26, May 2007 Brief definition: An article, instrument, apparatus or machine that is used in the prevention, diagnosis or treatment of illness or disease, or for detecting, measuring, restoring, correcting or modifying the structure or function of the body for some health purpose. Typically, the purpose of a medical device is not achieved by pharmacological, immunological or metabolic means.* What is medical equipment?Medical equipment are defined as medical devices requiring calibration, maintenance, repair, user training and decommissioning activities usually managed by clinical engineers.Medical equipment is used for the specific purposes of diagnosis and treatment of disease or rehabilitation following disease or injury; it can be used either alone or in combination with any accessory, consumable or other piece of medical equipment. Medical equipment excludes implantable, disposable or single-use medical devices. Medical devices are used for the prevention, diagnosis and treatment of illness and diseases and for rehabilitation. WHO developed guidance on medical... Access to appropriate, affordable, effective, and safe health technologies is paramount, especially in low-resource settings, where burden of non-communicable... The purpose of this document is to provide technical specifications to medical mask manufacturers. The document is intended mainly for manufacturers but...

Following adoption of resolutions WHA60.29 on health technologies and WHA70.12 (1,2) on cancer prevention and control, the World Health Organization... The purpose of this document is to provide technical specifications for manufacturers of blood pressure measuring devices (BPMD). This document is intended... TheHHFA Comprehensive guideserves as the main reference document for planning and implementing a country HHFA. This guide will promote understanding... The focus of the 2022 edition of the Global Atlas is to point out how the status of medical device topicssupports or hinders the accomplishment of... Continuous developments in science and technology are increasing the availability of thousands of medical devices all of which should be of good... The objective of the 2022 Compendium is to compile and highlight emerging innovative health technologiesfor low-resource settings. It presents a... In the face of rapid increases in the number of hospitalizations due to COVID-19 in Latin America and the Caribbean, coupled with shortages of human and... In the countries of the Region of the Americas, there are different forms of organization of health services at the first level of care. Some countries... Cardiovascular disease (CVD) is the leading cause of disease burden globally. According to the 2017 Global Burden of Disease estimates, there were 14 million... Skip to main content Over 1billion people worldwide are at risk of falling into poverty due to out-of-pocket health spending of 10% or more of their household budget.Scaling up primary health care (PHC) interventions across low and middle-income countries could save 60million lives and increase average life expectancy by 3.7years by 2030.An estimated 75% of the projected health gains from the Sustainable Development Goals could be achieved through PHC.Achieving the targets for PHC requires an additional investment of around US$200 to US$328billion a year for a more comprehensive package of health services.The concept of PHC has been repeatedly reinterpreted and redefined in the years since 1978, leading to confusion about the term and its practice. A clear and simple definition has been developed to facilitate the coordination of future PHC efforts at the global, national and local levels and to guide their implementation: "PHC is a whole-of-society approach to health that aims at ensuring the highest possible level of health and well-being and their equitable distribution by focusing on peoples needs and as early as possible along the continuum from health promotion and disease prevention to treatment, rehabilitation and palliative care, and as close as feasible to peoples everyday environment."PHC entails three inter-related and synergistic components, including: comprehensive integrated health services that embrace primary care as well as public health goods and functions as central pieces; multi-sectoral policies and actions to address the upstream and wider determinants of health; and engaging and empowering individuals, families and communities for increased social participation and enhanced self-care and self-reliance in health.PHC is rooted in a commitment to social justice, equity, solidarity and participation. It is based on the recognition that the enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction.For universal health coverage (UHC) to be truly universal, a shift is needed from health systems designed around diseases and institutions towards health systems designed for people, with people. PHC requires governments at all levels to underscore the importance of action beyond the health sector in order to pursue a whole-of government approach to health, including health-in-all-policies, a strong focus on equity and interventions that encompass the entire life-course.PHC addresses the broader determinants of health and focuses on the comprehensive and interrelated aspects of physical, mental and social health and well-being. It provides whole-person care for health needs throughout the lifespan, not just for a set of specific diseases. Primary health care ensures people receive quality comprehensive care ranging from promotion and prevention to treatment, rehabilitation and palliative care as close as feasible to peoples everyday environment.Why is primary health care important?Member States have committed to primary health care renewal and implementation as the cornerstone of a sustainable health system for UHC, health related Sustainable Development Goals (SDGs) and health security. PHC provides the programmatic engine for UHC, the health-related SDGs and health security. This commitment has been codified and reiterated in the Declaration of Astana, the accompanying World Health Assembly Resolution 72/2, Global Monitoring Reports on UHC, and the United Nations General Assembly high-level declarations on UHC. UHC, the health-related SDGs and health security goals are ambitious but achievable. Progress must be urgently accelerated, and PHC provides the means to do so.PHC is the most inclusive, equitable, cost-effective and efficient approach to enhance peoples physical and mental health, as well as social well-being. Evidence of wide-ranging impact of investment in PHC continues to grow around the world, particularly in times of crisis such as the COVID-19 pandemic.Across the world, investments in PHC improve equity and access, health-care performance, accountability of health systems, and health outcomes. While some of these factors are directly related to the health system and access to health services, the evidence is clear that a broad range of factors beyond health services play a critical role in shaping health and well-being. These include social protection, food systems, education and environmental factors, among others.PHC is also critical to make health systems more resilient to situations of crisis, more proactive in detecting early signs of epidemics and more prepared to act early in response to surges in demand for services. Although the evidence is still evolving there is widespread recognition that PHC is the so-called front door of the health system and provides the foundation for the strengthening of the essential public health functions to confront public health crises such as COVID-19.WHO responseWHO is helping countries to reorient their health systems towards PHC as a key means towards achieving UHC, SDG3 and health security. Health systems should be fit for people, fit for context and fit for purpose. Health system strengthening involves strengthening of health governance and financing; the health workforce; gender, equity and rights; information systems; quality and patient safety; maternal, newborn, child and adolescent health through to healthy ageing; sexual and reproductive health; medicines and medical supplies; emergency preparedness, response and recovery; work on communicable and non-communicable diseases, among others.WHO has identified three strategic areas of work to strengthen PHC worldwide.Providing a one-stop mechanism for PHC implementation support to Member States, tailored to country context and priorities. This includes putting into action the Operational Framework for PHC and capitalizing on investment opportunities from the COVID-19 response, building back better PHC-based health systems during recovery efforts. This core function is driven by and builds on existing work and experiences from countries and regions from across the world.Producing PHC-oriented evidence and innovation, with a sharper focus on people left behind. This work is based on existing implementation evidence, best practice guidance and implementation solutions, expertise from successful countries, and literature published to drive innovative solutions. Key deliverables include monitoring and measurement guidance to assess PHC progress in countries and, subsequently, a global report on PHC progress, as well as an innovative capacity building effort as part of the WHO Academy.Promoting PHC renewal through policy leadership, advocacy and strategic partnerships with governments, non-governmental organizations, civil society organizations, development partners, UN sister agencies, donors and other stakeholders at global, regional and country levels. Among other initiatives, this workstream will establish an external Strategic Advisory Group on PHC to advise the WHO on PHC renewal worldwide, it will create a PHC award for recognizing PHC excellence globally, and it will promote new PHC partnerships and collaborative networks incorporating new stakeholders such as young health leaders, parliamentarians and civil society at large. Abortion Abuse of older people Adolescent and young adult health Adolescent pregnancy Ageing and health Alcohol Ambient (outdoor) air pollution Anaemia Animal bites Antimicrobial resistance Anxiety disorders Arsenic Asbestos Assistive technology Asthma Autism Bacterial vaginosis Biodiversity Bipolar disorder Blindness and vision impairment Blood safety and availability Botulism Breast cancer Brucellosis Burns Buruli ulcer (Mycobacterium ulcerans infection) Campylobacter Cancer Candidiasis (yeast infection) Cardiovascular diseases (CVDs) Cervical cancer Chagas disease (also known as American trypanosomiasis) Chikungunya Child maltreatment Child mortality (under 5 years) Childhood cancer Chlamydia Cholera Chromoblastomycosis Chronic obstructive pulmonary disease (COPD) Civil registration and vital statistics Climate change Colorectal cancer Commercial determinants of health Community-based health insurance Condoms Congenital disorders Coronavirus disease (COVID-19) Corporal punishment and health Crimean-Congo haemorrhagic fever Deafness and hearing loss Deliberate events Dementia Dengue and severe dengue Depressive disorder (depression) Diabetes Diarrhoeal disease Dioxins Diphtheria Disability Dracunculiasis (Guinea-worm disease) Drinking-water Drowning E. coli Ebola disease Echinococcosis El Nio Southern Oscillation (ENSO) Electricity in health-care facilities Electronic waste (e-waste) Emergency contraception Endometriosis Epilepsy Essential medicines Falls Family planning/contraception methods Female genital mutilation Food additives Food safety Foodborne trematode infections Fragility fractures Free health care policies Gambling Gonorrhoea (Neisseria gonorrhoeae infection) GuillainBarr syndrome Health literacy Health-care waste Healthy diet Heat and health Hepatitis A Hepatitis B Hepatitis C Hepatitis D Hepatitis E Herpes simplex virus HIV and AIDS HIV drug resistance Household air pollution Human papillomavirus and cancer Human rights Human T-lymphotropic virus type 1 Hypertension ICD-11 Immunization coverage Infant and young child feeding Infertility Influenza (avian and other zoonotic) Influenza (seasonal) Injuries and violence Ionizing radiation and health effects Japanese encephalitis Lassa fever Lead poisoning Legionellosis Leishmaniasis Leprosy Listeriosis Low back pain Lung cancer Lymphatic filariasis Malaria Malnutrition Marburg virus disease Maternal mortality Measles Meningitis Menopause Mental disorders Mental health Mental health at work Mental health in emergencies Mental health of adolescents Mental health of older adults Mercury Middle East respiratory syndrome coronavirus (MERS-CoV) Migraine and other headache disorders Millennium Development Goals (MDGs) Mpox Multi-drug resistant gonorrhoea Multiple sclerosis Musculoskeletal health Mycetoma Mycotoxins Natural toxins in food Newborn mortality Newborns: improving survival and well-being Nipah virus Noma Noncommunicable diseases Nursing and midwifery Obesity and overweight Occupational health: health workers Older children and young adolescent mortality (5 to 14 years) Onchocerciasis One Health Opioid overdose Oral health Oropouche virus disease Osteoarthritis Palliative care Parkinson disease Patient safety Pesticide residues in food Physical activity Plague Pneumonia in children Podoconiosis (non-filarial lymphoedema) Poliomyelitis Polycystic ovary syndrome Post COVID-19 condition (long COVID) Post-traumatic stress disorder Pre-eclampsia Prequalification of medicines by WHO Preterm birth Primary health care Protecting workers' health Quality health services Rabies Radon Refugee and migrant health Refugee and migrant mental health Rehabilitation Respiratory syncytial virus (RSV) Rheumatic heart disease Rheumatoid arthritis Rift Valley fever Ringworm (tinea) Road traffic injuries Rubella Salmonella (non-typhoidal) Sand and dust storms Sanitation Scabies Schistosomiasis Schizophrenia Self-care for health and well-being Sepsis Sexually transmitted infections (STIs) Shingles (herpes zoster) Snakebite envenoming Social determinants of health Sodium reduction Soil-transmitted helminth infections Spinal cord injury Sporotrichosis Substandard and falsified medical products Sugars and dental caries Suicide Syphilis Taeniasis/cysticercosis Tetanus The top 10 causes of death Tobacco Trachoma Trans fat Trichomoniasis Trypanosomiasis, human African (sleeping sickness) Tuberculosis Tungiasis Typhoid Ultraviolet radiation Universal health coverage (UHC) Urban health Vector-borne diseases Violence against children Violence against women West Nile virus White phosphorus Yaws Yellow fever Youth violence Zika virus Zoonoses Skip to main content Today, there are an estimated 2 million different kinds of medical devices on the world market, categorized into more than 7000 generic devices groups.A medical device can be any instrument, apparatus, implement, machine, appliance, implant, reagent for in vitro use, software, material or other similar or related article, intended by the manufacturer to be used, alone or in combination for a medical purpose. Policies, strategies, and action plans for health technologies, specifically for medical devices, are required in any national health plan. Within the context of a robust health system they ensure access to safe, effective, and high-quality medical devices that prevent, diagnose, and treat disease and injury, and assist patients in their rehabilitation.WHOs Global Model Regulatory Framework for Medical Devices including in vitro diagnostic medical devices supports Member States to develop and implement regulatory controls and regional guidelines for good manufacturing to ensure the quality, safety and efficacy of medical devices available in their countries. The Organization also works with Member States and collaborating centres to develop guidelines and tools, including norms and standards on medical devices.Additionally, WHO supports Member States in establishing mechanisms to assess national needs for health technologies in particular medical devices and to assure their availability and use, particularly in low-resource settings. A web-based health technologies database serves as a clearing house and provides countries guidance on appropriate medical devices according to levels of care, setting, environment, and intended health intervention, tailored to the specific needs of country or region. Development of medical devices policiesHuman resources for medical devicesRegulation of medical devicesHealth technology assessment of medical devicesHealth technology managementPriority and essential medical devicesPolicy-makers, biomedical engineers working in health care settings and government institutionsHospital and clinical managersDonors of medical devices and NGOs working in health technologyAcademic institutions studying health technologyDistrict, national, regional and global health managers Member States recognized in World Health Assembly (WHA) resolutions WHA60.29 (2007) and WHA 67.20 (2014) that medical devices are indispensable for health-care delivery but that their selection, regulation and use present enormous challenges, especially for low- and middle-income countries (LMIC).In order to increase access to appropriate, safe, affordable, effective medical devices of quality for all; the WHO Medical Devices has enable the WHO Global Fora on Medical Devices. The WHO Global Fora on Medical Devices serve as opportunities to share WHO initiatives to support country needs towards Universal Health Coverage (UHC) and the achievement of the Sustainable Development Goals (SDGs). The Fora also serve as occasions to listen to regional and country activities on medical devices issues. The Fora present the WHO resources available to Member States in a range of topics concerning medical devices:policy of medical devicesregulation of medical devicesnomenclature of medical devicesmedical devices innovationselection and prioritization of medical deviceshuman resources for medical devicesmanagement of medical devicesamong othersThe programmes of the WHO Global Fora have include presentations on the a huge range of topics on medical devices and also help present WHO projects, initiatives, tools, resources and work in progress. Skip to main content What are misinformation and disinformation? How do they differ? Misinformation is the spread of false information without the intent to mislead. Those who share the misinformation may believe it is true, useful or interesting, and have no malicious intent towards the recipients they are sharing it with. Disinformation is designed or spread with full knowledge of it being false (information has been manipulated), as part of an intention to deceive and cause harm. The motivations can be economic gain, ideological, religious, political or in support of a social agenda among others. Both misinformation and disinformation may cause harm, which comprises threats to decision-making processes as well as health, environment or security. The key difference between disinformation and misinformation is not the content of the falsehood but the knowledge and intention of the sender. How does information manipulation affect public health? Disinformation in public health is a distinct type of information risk which, unlike misinformation, is created with malicious intent to sow discord, disharmony and mistrust in targets such as government agencies, scientific experts, public health agencies, private sector and law enforcement, among others.The potential impacts of disinformation can be understood through examples during the COVID-19 pandemic. The COVID-19 pandemic had two key elements that created the perfect storm for disinformation to proliferate and spread. First, it swiftly caused global fear, uncertainty and doubt. Second, it occurred at a point in history where we can easily access, create and share information (as well as misinformation and disinformation) widely over the internet, mobile telecommunications, media and social media platforms. As the pandemic took hold, many posts appeared on social media and spread through instant messaging communications, stoking uncertainty about the treatment, the safety and effectiveness of vaccines, the usefulness of social distancing, and more. This caused social protest, turmoil, delayed vaccine uptake and led to higher death rates in some instances. Why would anyone spread health-related disinformation? The creation and spread of disinformation during public health crises is a not a new phenomenon and has existed in different forms for centuries. Disinformation has been noted in association with events such as the bubonic plague in as far back as the 14th century, cholera outbreaks in the 19th century and the influenza pandemics including the devastating 191819 pandemic in the 20th century. Modern day disinformation campaigns have been associated with the emergence of the HIV in the 1980s and more recently the spread of Ebola, COVID-19 and mpox. The motives of those who create disinformation are complex. In the older historical examples, the objective of the disinformation campaigns was to find ways to blame marginalized groups for the spread of disease and cause them harm. More modern disinformation campaigns evolved to be a part of geopolitical tensions as different groups sought to find ways place to accuse each other of causing the emergence of a disease and, additionally, to hamper the efficacy of their public health interventions (e.g. vaccine uptake and social isolation policies during COVID-19). Often, it is part of a larger agenda to sow confusion over facts and their sources, exacerbate divisive political fissures, erode trust in civil and scientific institutions, or undermine citizen confidence in governance. It can also be used for financial gain, to build a social media following, or to make a particular group appear superior to another based on how they are responding to a public health crisis. Security agencies have noted how extremist groups have leveraged disinformation to build their popularity for recruitment and legitimization. Understanding the history and background of the disinformation is critical to develop countering strategies. How can Member States counter health-related disinformation? WHO and partners have developed various strategies and tools which can be applied to tackle misinformation and disinformation. Disinformation is often difficult to detect and mitigate. This is because successful disinformation campaigns typically draw on elements of truth that may be manipulated, distrust against governments and institutions, and conspiracy theories already present and circulating within groups. However, Member States can use a range of tactics to counter disinformation, including:raising awareness of disinformation and information manipulation;promoting critical thinking;promoting digital, health and scientific literacy programmes;promoting trusted sources of information and voices of authority these should provide clear and timely information about the event and evolving situation including knowns and unknowns, what is being done and when updates will be provided;supporting fact-checking activities which includes the use of fact-checking technologies and human fact-checkers;working with relevant stakeholders, such as the security sector, social media providers, law enforcement, cyber agencies, NGOs and international organizations to tackle this new threat; andidentifying drivers of (mis)trust in populations, and how those drivers are exploited to create disinformation campaigns. These drivers can inform long term solutions to guard against disinformation. How can I protect myself from health-related disinformation? Think critically and pause before sharing. When encountering new information, everyone should ask themselves: Is this content reliable? Who is the author? What is the source of the claims? Is the information outlet reliable?How do I feel about this piece of information? One of the most important things you can do to protect yourself is to find out which sources represent the latest official and evidence-based health or scientific facts about a public health issue or crisis. For example, this could be your countrys Ministry of Health, the World Health Organizations website, or your local health clinic. You can help your community by guiding your family and friends to these trusted sources and advise them to avoid acting on false information thats spread through social media, online advertising or instant messaging. Health technologies include medicines, medical devices, assistive technologies, techniques and procedures developed to solve health problems and improve the quality of life. Such technologies are used in all types of health facilities, play a major role in contemporary health-care systems, and contribute directly to the quality of patient care. However, their use needs to be complemented by good staff training and effective organization of health services. Medical devices Medical devices contribute to the attainment of the highest standards of health for individuals. Without medical devices, common medical procedures from bandaging a sprained ankle, to diagnosing HIV/AIDS, to implanting an artificial hip, or any surgical intervention would not be possible. Medical devices are used in many diverse settings, for example, by laypersons at home, paramedical staff and clinicians in remote clinics, opticians and dentists, and health-care professionals in advanced medical facilities, for prevention and screening and in palliative care. Such health technologies are used to diagnose illness, monitor treatments, assist disabled people, and intervene and treat illnesses, both acute and chronic. Today there are an estimated 2 million different kinds of medical devices on the world market categorized into more than 22 000 generic devices groups. Decisions on selecting medical equipment for a health-care facility must be supported by evidence and based on clinical needs, financial resources, and the local capacity for effective use. What is precision medicine? Precision medicine is an emerging practice of medicine that uses a persons genetic profile to guide decisions made regarding the prevention, diagnosis, and treatment of disease. Knowledge of a patient's genetic profile can help doctors select the right medication or therapy and administer it using the necessary dose or regimen. It offers great potential to target treatment and increase the efficiency of health systems from clinical prevention, through early detection and screening, to treatment, rehabilitation, and palliative care. However, implementing precision medicine requires a transformation of health services and significant resources. It also requires the collection and analyses of large amounts of precision health and genomic data, so patients need to trust that it is kept safe and confidential. Citizens need to be informed, empowered, engaged and in control of their data. Additionally, precision medicine requires significant up-skilling of the health workforce, with a strong focus on digital literacy and the interpretation of biomarker information, as well as establishing a new dimension in the patient-provider relationship. To fully unleash the true potential of precision medicine and accelerate its implementation, including in lower income settings, large collaborative efforts are required that can transform this concept from individual success stories to comprehensive real-world applications in routine clinical practice. Skip to main content Acuity-based triage is the action of sorting and prioritizing patients based on the estimation of the urgency for intervention. This approach is used as the basis for identification of those patients who require immediate medical intervention and those who can safely wait. Acuity-based triage is the standard method of sorting patients in medical settings and can be performed at any point of access to the health care system, including in both pre-hospital ambulance services, busy outpatient clinics and hospitals. Skip to main content - Select language - franais espaol portugus The waste produced in the course of health-care activities, from contaminated needles to radioactive isotopes, carries a greater potential for causing infection and injury than any other type of waste, and inadequate or inappropriate management is likely to have serious public health consequences and deleterious effects on the environment.This handbook the result of extensive international consultation and collaboration provides comprehensive guidance on safe, efficient, and environmentally sound methods for the handling and disposal of health-care wastes in normal situations and emergencies. Future issues such as climate change and the changing patterns of diseases and their impacts on health-care waste management are also discussed.For health-care settings in which resources are severely limited, the handbook pays particular attention to basic processes and technologies that are not only safe, but also affordable, sustainable, and culturally appropriate. The guide is aimed at public health managers and policy-makers, hospital managers, environmental health professionals, and all administrators with an interest in and responsibility for waste management. Its scope is such that it will find application in developing and developed countries alike.