

GLOBAL PATIENT SAFETY ACTION PLAN 2021–2030

Towards Zero Patient Harm in Health Care

First Draft
August 2020



**A Working Document for
Consultation Purpose only**



**World Health
Organization**



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Organization

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Overview of the Global Patient Safety Action Plan 2021–2030

Vision

A world in which no patient is harmed in health care, and everyone receives safe and respectful care, every time, everywhere

Governments
Health care facilities



Stakeholders
World Health Organization

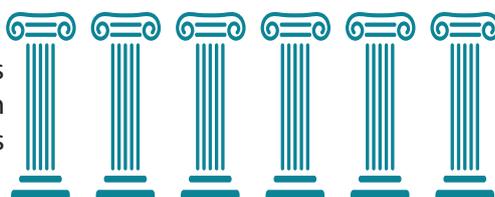
Mission

Drive forward policies and actions to minimize, and where possible, eliminate all sources of risk and patient harm in health care based on science, strategic partnerships and patient-centredness

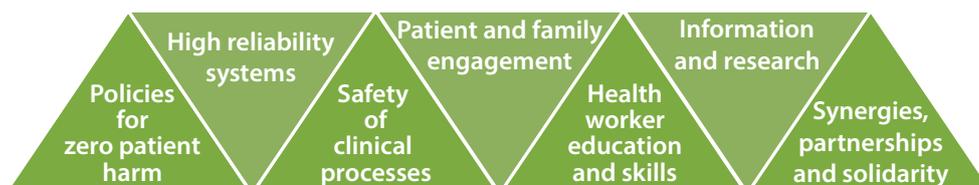
Goal

Achieve the maximum possible reduction in avoidable harm due to unsafe health care globally

Patients and families as partners
Results through collaboration
Data and experiences



Evidence into improvement
Policies and action
Expertise and patient stories



1 Vision, Mission and Goal

6 Guiding Principles

4 Partners in Action

7 Strategic Objectives



Abbreviations

- AHRQ** : Agency for Healthcare Research and Quality
- DALYs** : Disability-Adjusted Life Years
- OECD** : The Organisation for Economic Co-operation and Development
- SDGs** : Sustainable Development Goals
- UHC** : Universal Health Coverage
- WHA** : World Health Assembly
- WHO** : World Health Organization

1. Introduction

Over the next 10 years, the World Health Organization (WHO), its global partners and its Member States will be working tirelessly to help all people of the world to have access to health services.

Universal Health Coverage (UHC) is an inspiring goal that aims, over the next five years, to see one billion more people having access to the safe and quality health services they need without facing financial hardship. That is the target that must be achieved if the world is to get on track and stay on track to meet the Sustainable Development Goals (SDGs). The sustainable development agenda will not be met without ensuring that health services are safe. It will not be worth achieving if health care itself poses a threat to people's health. The benefit of increased coverage would not be fully realized, and people could lose trust in health services. This, in turn, would reduce their confidence to seek health care even when they most needed it.

That is why the World Health Assembly (WHA) in May 2019 adopted a resolution 'Global action on patient safety' (WHA72.6) to give priority to patient safety as an essential foundational step in building, designing, operating and evaluating the performance of all health care systems. The adoption of this resolution was a remarkable milestone in global efforts to take concerted action on patient safety and reduce the burden of patient harm due to unsafe health care.

The resolution asked the Director General of WHO to formulate a Global Patient Safety Action Plan in consultation with Member States and a wide range of partners and other organizations. To respond to WHA resolution (WHA72.6) and moving ahead from global commitments to tangible action, WHO launched a Flagship Initiative "A Decade of Patient Safety 2020 to 2030" in February 2020. This important step defines WHO's contribution to the global patient safety movement.

It will be the driver, through its year-by-year milestones, for successfully implementing the Global Patient Safety Action Plan.

The Global Patient Safety Action Plan, set out in this document, will provide a strategic direction for concrete actions to be taken by countries, partner organizations, care facilities and WHO to implement WHA resolution (WHA72.6). As a result, it will strengthen health systems globally to diagnose, treat, cure, and care whilst striving to: "First do no harm," the celebrated maxim of the Greek physician, Hippocrates (460-375 BC).

Background

Every point in the process of care can contain an inherent risk. Its nature and scale vary greatly based on the context of health care provision and its availability, infrastructure and resourcing within and across countries. The challenge for all health systems, and all organizations providing health care, is to maintain a heightened awareness to detect and ameliorate safety risks as well as address all sources of potential harm.

Patient safety is a framework of organized activities that creates cultures, processes, procedures, behaviours, technologies, and environments in health care that consistently and sustainably: lower risks, reduce the occurrence of avoidable harm, make error less likely and reduce its impact when it does occur.

Patient safety is also a strategic priority for modern health care and is central to countries' efforts in working towards UHC.

As a theme of scholarship and research, patient safety draws on the concepts and methods of many disciplines including: health services research, applied psychology,

behavioural science, ergonomics, communication science, accident theory, and systems research.

The emergence of patient safety thinking

In the period immediately after the Second World War, when many countries were developing their health care systems, the idea of safety was limited to traditional hazards such as fire, equipment failure, patient falls, and the risks of infection. There was also a belief that well-trained staff-doctors and nurses-would always behave carefully and conscientiously and seek to avoid or minimize what were seen as inevitable “complications” of care. Postoperative bleeding, foetal distress during childbirth, wound infections were, at that time, and have remained since, consistent harms or complications associated with care. There are many more.

Equally, there have long been events in health care that were unexpected complications, for example: transfusion of the wrong blood group, administration of too high a dose of medication for a child, carrying out a surgical procedure on the wrong side of the body, and many more, sometimes resulting in the death of patients.

For most of the 20th century, whilst such occurrences would occasionally hit the headlines, cause momentary public concern, and be a preoccupation of medical litigation attorneys, they aroused little interest amongst doctors and health care leaders. Why? Essentially, they were seen as the inevitable cost of doing business in the pressurized, fast-moving environment of modern health care that was saving lives and successfully treating many more diseases. Mistakes happen, it was argued. Also, they were viewed largely as local events best dealt with through internal investigation.

Studies in the 1990s began to view the safety of care through a different lens. They showed that the frequency of adverse outcomes amongst hospital patients was substantial and little recognized hitherto. They introduced the term “medical error” to describe this phenomenon and it became widely adopted by policy makers, researchers, clinicians, patient groups and the media. Other terms such as incident, adverse event, serious untoward incident, never event, near miss and close call also came into common usage to describe safety failures in health care.

The paradigm shift in thinking about safety in health care came with the realization that it was not completely different from other high-risk industries and that when things went wrong it was seldom due to an error by a single individual. Rather, the true causation of an accident

in aviation, or an adverse event in health care, was due to human error embedded in a complex amalgam of actions and interactions, processes, team relationships, communications, human behaviour, technology, organizational culture, rules and policies, as well as the nature of the operating environment. With this realization came a deeper understanding that the design and operation of systems could provoke human error or worsen its impact when it occurred.

In this, systems thinking, view of the risks of health care, the term medical error became something of a misnomer since error in itself was not the primary problem; harm to patients certainly could not be corrected solely by urging health workers to be more careful. The use of the term patient safety, a more holistic concept, to describe the safety risks in health care and the measures to address these risks and patient harm, then came in to being from the beginning of the 21st century. It recognized the scale of the problem of inadvertent harm in the delivery of health care, the common causes that allowed similar kinds of adverse events to occur in all countries of the world, the need to see human error as something to be mitigated and prevented rather than eliminated entirely, and the strong parallels with the experience of other high-risk industries, creating opportunities for transfer learning.

The global burden of unsafe care

The magnitude of the problem of unsafe care first came to public attention with the release of a report by the United States Institute of Medicine in 1999 called *To Err is Human*. The Institute of Medicine extrapolated a death rate from two earlier United States studies of the incidence of adverse events in hospital patients to create an estimate that least 44,000 and perhaps as many as 98,000 Americans die in hospitals each year as a result of “medical errors.” Around the same time, the UK Government’s Chief Medical Adviser published *An Organisation with a Memory*. Both reports scoped the subject of safety and harm in health care, drew parallels with other high-risk industries and, *inter alia*, provided the first estimates of burden of patient harm for what was to become a new health priority and a new field of health services research.

In more recent years, the focus has also been on economic losses and access problems due to unsafe care, that may become a major barrier in achieving UHC. Estimates now suggest that, globally, unsafe care results in loss of 64 million disability-adjusted life years annually. This figure puts unsafe care in the league table of top 10 causes of death and disability. Research studies have shown that an average of 1 in 10 patients is subject to an adverse event while receiving hospital care in high income countries.

The estimate for low- and middle-income countries (LMICs) suggests that up to 1 in 4 patients are harmed, with 134 million adverse events occurring annually due to unsafe care in hospitals, contributing to around 2.6 million deaths. Overall, 60% of deaths in LMICs, from conditions amenable to health care, are due to unsafe and poor-quality care. Mostly, people link patient safety with hospital-based care, though unsafe care is a system-wide problem. Half of the global disease burden arising from patient harm originates in primary and ambulatory care.

The economic cost of unsafe care can be understood in two ways: the direct cost due to resource wastages and the indirect costs in loss of productivity in the population. In high-income countries, up to 15% of hospital expenditure can be attributed to wastages due to safety failures. For example, the NHS in England paid £1.63 billion as litigation costs because of safety lapses in 2017–18.

Unsafe medication practices and errors – such as incorrect dosages or infusions, unclear instructions, use of abbreviations and inappropriate or illegible prescriptions – are a leading cause of avoidable harm in health care around the world. Globally, the cost associated with medication errors has been estimated at US\$ 42 billion annually, not counting lost wages, productivity, or health care costs. This represents almost 1% of global expenditure on health. Unsafe and poor-quality care leads to US\$ 1.4 trillion to 1.6 trillion worth lost in productivity each year in LMICs.

Available evidence estimates the direct costs of harm – the additional tests, treatments and health care - in the primary and ambulatory setting to be around 2.5% of total health expenditure - although this probably underestimates the true figure. Harm in primary and ambulatory care often results in hospitalisations. Each year, these may account for over 6% of hospital bed days and more than 7 million admissions in OECD countries - this is in addition to the 15% of acute care activity caused by harm occurring in hospitals alone.

The evolution of the global patient safety movement

In May 2002, the 55th World Health Assembly adopted resolution WHA55.18. This urged Member States to pay the closest possible attention to the problem of patient safety, and to establish and strengthen science-based systems necessary for improving patient safety and the quality of health care.

World Alliance for Patient Safety (2004–2014)

Subsequently, in May 2004, the 57th World Health Assembly supported the creation of an international alliance to facilitate the development of patient safety policy and practice in all Member States, to act as a major force for improvement globally. The *World Alliance for Patient Safety*, a partnership between WHO and external experts, health care leaders and professional bodies, was launched in October 2004.

The creation of the World Alliance for Patient Safety was a hugely significant step in the struggle to improve the safety of health care in all Member States. Working in partnership with WHO, the World Alliance for Patient Safety took on this mantle and a programme of work was initiated backed by a substantial allocation of foundation funding from the United Kingdom government.

The World Alliance for Patient Safety created an environment in which major new initiatives arose that individual partners were not able or willing to undertake alone. It became a vehicle for the sharing of knowledge and resources aimed at improving the safety of health care. It was envisaged that patient safety solutions, identified and evaluated by one or two health systems or major hospital groups, would be adapted for global or multi-country implementation. It was also foreseen that additional coordination and facilitation of international expertise and learning would reduce duplication of effort and minimize the waste of valuable resources.

A fundamental aim of the World Alliance for Patient Safety was to facilitate the development of patient safety policy and practices in Member States. It was planned that this would be accomplished through the fulfilment of a number of core functions and other short-term initiatives as set out by the Alliance in an annual work programme.

Global Patient Safety Challenges

The first programme of work produced by the World Alliance for Patient Safety introduced the concept of a *Global Patient Safety Challenge*. This initiative identifies a patient safety burden that poses a significant risk to health, then develops front-line interventions and partnerships with countries to disseminate and implement the interventions. Each Challenge focuses on a topic that poses a major and significant risk to patient health and safety.

The topic chosen for the first Global Patient Safety Challenge covering 2005 and 2006 was health care-

associated infections. *Clean Care is Safer Care*, the first Global Patient Safety Challenge became a key element of WHO's early work as the global leader on patient safety. It was followed a few years later by *Safe Surgery Saves Lives*, the second Global Patient Safety Challenge. Both Global Challenges aimed to gain worldwide commitment and spark action to reduce health care-associated infections and risk associated with surgery, respectively.

The scale and speed of implementation of these Challenges remains unprecedented. They secured strong and rapid commitment from health ministers, professional bodies, regulators, health system leaders, civil society and health care practitioners.

Other initiatives of the World Alliance for Patient Safety

In addition to designing and implementing the two Global Patient Safety Challenges, the World Alliance for Patient Safety established a range of landmark initiatives in its initial work programme that continued during the Alliance's lifetime, including:

- ▶ **Patients for Patient Safety** programme led by individuals who had suffered harm from health care or by their family members;
- ▶ **Taxonomy for Patient Safety** ensuring consistency in the norms and terminology used in patient safety work as well as a classification framework, the International Classification for Patient Safety;
- ▶ **Patient Safety Research** initiative to identify priorities for patient safety-related research in high-income, middle-income, and low-income countries as well as projects and capacity building;
- ▶ **Patient Safety Solutions** programme to identify, develop and promote worldwide interventions to improve patient safety;
- ▶ **Reporting and Learning best practice guidelines** to aid in the design and development of existing and new incident reporting systems;
- ▶ **Patient Safety Curriculum Guides** (two editions—for *Medical Schools* and a *Multi-Professional* edition) to assist in patient safety education in universities, schools and professional institutions in the fields of dentistry, medicine, midwifery, nursing and pharmacy.

WHO Patient Safety Initiatives (2015–2020)

A WHO Global Consultation on **Setting Priorities for Global Patient Safety** organized in 2016, provided a platform to recognize that the scale of avoidable harm in health care systems around the world is unacceptably high and is showing little sign of improvement. Building on WHO's earlier work carried out jointly with the World Alliance for Patient Safety, this led to consolidating and further developing the second phase of WHO's global patient safety programme.

Over the last five years, WHO has launched **Medication Without Harm**, the third Global Patient Safety Challenge with the aim to reduce the global burden of avoidable medication-related harm by 50%. WHO established major global patient safety programmes, engaged with a very large number of stakeholders and partners. It held large scale and high-level consultations, including:

- ▶ Established a highly interactive **Global Patient Safety Network**, in collaboration with Member States, health care leaders, international experts, and professional bodies;
- ▶ Co-led a series of annual **Global Patient Safety Ministerial Summits** in collaboration with Member States, since 2016;
- ▶ Published the *Technical Series on Safer Primary Care, Safe Childbirth Checklist* and *accompanying Implementation Guide* and *Minimal Information Model for Patient Safety*, among other WHO guidance and tools;
- ▶ Launched the **Global Patient Safety Collaborative** to support low- and middle-income countries in reducing the risk of avoidable patient harm;
- ▶ Organized the first ever **World Patient Safety Day** on 17 September 2019;
- ▶ Facilitated and supported the endorsement of the **World Health Assembly Resolution (WHA72.6) 'Global action on patient safety'** in May 2019 for a comprehensive and multi-faceted patient safety strategy;
- ▶ Organized a high-level forum **Towards an Africa Patient Safety Initiative** together with key partners;
- ▶ Launched a WHO Flagship **A Decade of Patient Safety 2020-2030**.

Third WHO Global Patient Safety Challenge: *Medication Without Harm*

Unsafe medication practices and medication errors are a leading cause of avoidable harm in health care systems across the world. WHO launched its third Global Patient Safety Challenge: *Medication Without Harm*, in 2017. Its aim is to reduce the global burden of avoidable medication-related harm by 50% within five years. The third WHO Global Patient Safety Challenge: *Medication Without Harm*, invites health ministers to initiate national plans addressing four domains of medication safety, namely: patients and the public; medicines as products; health care professionals; and systems and practices of medication. It also commits the WHO to use its convening and coordinating powers to drive forward a range of global actions.

Three key areas of medication safety have been identified as early priorities, these are: high-risk situations; polypharmacy; and transitions of care. Each is associated with a substantial burden of harm and, if appropriately managed, could reduce the risk of harm to large numbers of patients in health systems across the world.

Global Ministerial Summits on Patient Safety and Resolution WHA72.6 ‘Global action on patient safety’

A series of Global Ministerial Summits on Patient Safety held in London, Berlin, Tokyo, and Jeddah have secured high-level commitment to patient safety. The theme of the 2019 Summit in Saudi Arabia was “Promoting patient safety in low- and middle-income countries”. This fourth Global Ministerial Summit on Patient Safety was attended by almost 1500 people, with around 50 national delegations and 30 ministers of health. The Summits bring together international patient safety experts, political decision-makers and other stakeholders involved in the global movement for patient safety. The fifth Global Ministerial Summit on Patient Safety will be hosted by the Swiss government.

On 28 May 2019, the 72nd World Health Assembly adopted a Resolution WHA72.6 on ‘Global action on patient safety’ and recognized ‘Patient safety as a global health priority’. The resolution also endorsed the establishment of World Patient Safety Day, to be observed annually on 17 September, thus underlining global solidarity and commitment to making health care safer.

World Patient Safety Day, 17 September

The first World Patient Safety Day in September 2019 called for global solidarity and concerted action by all countries and international partners. It brought together patients, families, caregivers, communities, health workers, health care leaders and policy-makers to show their commitment to patient safety globally. All key stakeholders- countries, international and national organizations and health care facilities- were encouraged to develop national and local campaigns adapted to their context, based on this global campaign.

COVID-19: A broader concept of avoidable harm

In 2020, the toll from COVID-19 global pandemic has brought increased recognition of risks to patients. The ongoing impact on health care delivery systems around the world will become clearer and fully quantified over time. However, important patient safety implications have emerged and brought a heightened impetus to efforts that promote safer care at every level. Growing clinical familiarity with the COVID-19 virus and its manifestations began to reduce uncertainty, but with the new disease and its novel treatments, came greater risk of avoidable harm. The physical and psychological safety of health workers, together with the capacity and financial stability of health care delivery systems were widely compromised. Situational factors such as staffing shortages, staff redeployment to unfamiliar roles, and work arounds, all disrupted existing care processes in most health systems around the world. In addition, the virus’s indirect effects on access to unrelated areas of care emerged as another form of serious harm. Delays arose from patients not seeking care due to fear, people unable to go to health facilities because of lockdowns, those with complex chronic conditions not receiving their routine ambulatory or preventive care due to health system overload or COVID-19 admissions being given priority. In addition, patients experienced new types of diagnostic errors, some related to the virus and others not as much.

Despite these negative effects and risks, the COVID-19 pandemic has provided some short-term benefits in key areas that could be a catalyst for subsequent improvement strategies. Shared commitment and responsibility have united health care stakeholders like never before. Many spontaneously adopted key safety attributes such as transparency, active communication, collaboration and rapid adoption of patient safety practices. This may only be temporary and in selected settings and countries, but

it illustrates how traditional silos and clinical territories can rapidly dissolve in the interest of fighting a common enemy.

It is sobering to realise that, when the COVID-19 pandemic is over, the chronic and widespread public health crisis of avoidable patient and workforce harm will remain as much of a challenge as it was before. The next five years will be a time for the global patient safety movement to learn from the both negative and positive effects of COVID-19. It will be a time to build safer health care systems that minimize harm to patients and to health workers. This action plan is built from a deep understanding of the nature of avoidable harm in health care and the way in which it threatens patient safety in diverse and complex settings around the world. Thinking through how COVID-19 adds to this context will help to harvest patient safety lessons from both pandemic failures and pandemic transformations. This is all part of the urgent need to hardwire positive changes, to promote the spread of safety strategies and innovations, and to make health care systems more resilient to the impact of harm than ever before.

Mandate

This Global Patient Safety Action Plan (GPSAP) draws its mandate from World Health Assembly Resolution (WHA72.6) 'Global action on patient safety'. The resolution requested the Director-General of WHO "To formulate a global patient safety action plan in consultation with Member States and all relevant stakeholders, including in the private sector". The plan must be submitted to the Seventy-fourth World Health Assembly in 2021 through the 148th session of the Executive Board. The operating paragraphs of WHA72.6 resolution delineate the strategic and operational boundaries of this action plan.

Development Process

This global action plan was co-developed through a participative process with the contribution of leading international experts on patient safety. The draft went through multiple layers of stakeholder consultations including Member States, international organizations, academic institutions, patient groups, inter-governmental organizations, and WHO global, regional and country offices. The initial outline and development pathway of the action plan was developed by the Patient Safety Flagship secretariat at WHO headquarters in Geneva, with the guidance and support by Sir Liam Donaldson, WHO Patient Safety Envoy, and in consultation with relevant technical programmes, units, and departments within the WHO system. A WHO Global Consultation was convened in February 2020 at WHO headquarters in Geneva, for synthesizing the first draft of the action plan. Leading patient safety experts and practitioners from 44 countries provided invaluable, concrete recommendations on what should be the future course of global action on patient safety. Additional inputs were received from experts and stakeholders from 140 countries through the WHO Global Patient Safety Network.

A 'Drafting and Review Task Force' was constituted in taking forward the recommendations from these consultations and prepared the draft action plan. The first draft of the action plan was further discussed with Member States through regional committees and consultations. Additional technical briefings were organized for the UN organizations and permanent country missions in Geneva. The draft action plan was made available online for public consultation on the WHO website for a period of one month. Feedback, comments and technical inputs from Member States and from the outcome of public consultation were reviewed and appropriately addressed by the Drafting and Review Task Force'. An advance draft of the action plan was submitted to the 148th session of the Executive Board for review, discussion and approval.

2.

Vision, Mission and Goal



Vision

A world in which no patient is harmed in health care, and everyone receives safe and respectful care, every time, everywhere.



Mission

Drive forward policies and actions to minimize, and where possible, eliminate all sources of risk and patient harm in health care based on science, strategic partnerships and patient-centredness.



Goal

Achieve the maximum possible reduction in avoidable harm due to unsafe health care globally.

3. Guiding Principles

Creating a system for progressing towards Universal Health Coverage in which patients are safer than they are today, at the point they receive care anywhere in the world, is a major challenge. It is a challenge that is addressed in this Global Action Plan.

The following six guiding principles establish an underpinning set of values to guide the development and implementation of a framework for action proposed in this document. This framework includes seven strategic objectives and 35 strategies that are the foundation of this Global Patient Safety Action Plan. They are discussed in subsequent sections.

Treat patients and families as partners in safe care

Safe health care should be seen as a basic human right. Achieving safe care requires that patients be informed, involved, and treated as full partners in their own care. In many parts of the world, this happens much less than it should. Patients, families and care givers have a keen interest in their own health and that of their communities. Patient safety depends on their full involvement as the users of the health care system and the people who are most familiar with the entire patient journey. Patients and families should be involved at every level of health care, from policy-making and planning committees, to performance oversight, to fully informed consent and shared decision-making at the point of care. Patients, families and communities have essential contributions to make in patient safety.

Achieve results through collaborative working

Over the Decade of Patient Safety 2020-2030, as a global mandate, WHO will provide policy guidance and implementation tools to countries to make health care safer at the point of delivery. There will inevitably be disruptive innovations and newer models of safer care evolving at local level. They should feed into global learning systems to redesign the policy architecture and promote global discourse on patient safety. Rather than unidirectional flow of interventions, there is a need for a collaborative ecosystem where everybody (from global policy makers to front-line care providers) contributes, shares and learns. All patient safety interventions will need to be carefully designed and tailored to meet countries' and communities' priorities as well as their specific implementation needs. WHO will drive harm reduction impact in every country through policy dialogue, strategic support, technical assistance and/or service delivery. Global action can help, but the strength of the plan will lie in the passion and commitment for patient safety shown at the national, sub-national and local levels.

Analyse data and experiences to generate learning

Reporting systems that gather data about adverse events and incidents from the point of care are widespread throughout the world. WHO has produced *"Patient Safety Incident Reporting and Learning Systems: Technical*

Report and Guidance” in 2020. There are other sources of such data, too, including reports from patients and families. These can include standard patient experience surveys that are already in wide use in some countries. Gathering data from these various sources provides a rich opportunity to gain greater understanding of why safety incidents occur and to devise solutions to prevent them. Too often, though, great volumes of data are collected and most of the available time and resources are spent storing it. Less time is spent on analysing it in a way that it is usable for learning and can reliably and consistently improve patient safety. Whilst it is always of interest to use such data to provide information on patterns and trends in the types of harm that occur, the emphasis must be firmly on its capability to make future care safer.

Translate evidence into measurable improvement

An area of weakness in many parts of health care, including patient safety, is the slow translation of evidence of effectiveness into routine practice: what is sometimes called the “knowing-doing” gap. During the process of framing actions to improve patient safety it is important to fully understand the process of change necessary to achieve the desired outcome; this also means working closely with leaders, managers, professional staff and patient representatives in health facilities and clinical services.

Base policies and action on the nature of the care setting

Most of the attention, and of the research endeavour, in patient safety has focussed on the experience of health care systems and large hospital groups in high-income countries. Yet, a great deal of good work has been taking place in low- and middle- income countries. It has become clear, firstly, that patient safety policies and solutions must be adapted to local context. They do not simply translate from one setting to another especially where culture, traditions, health care system design and level of infrastructure can be very different. And secondly, learning does not just flow one way; the experience of finding patient safety solutions in limited resourced settings can be of value to those running programmes in well-resourced health care systems, as well as the usually favoured “north-south” route for advocating best practice.

Use both scientific expertise and stories of care to educate and advocate

Today, to develop safe services for patients does not only involve the skills of planning, design and strategic investment, it involves advocacy, awareness raising, political commitment, persuasion and localism. Traditionally, the scientific and/or technical expertise comes from the policy makers, health system leaders, health care professionals, academics and managers whilst the passion comes from the citizens, civil society and patient advocates. Formulating and delivering a plan requires scientific and/or technical expertise but it also must have the buy-in and positive emotional drive of those who remember that too many past patients and families have suffered loss and serious harm as a result of flawed health care. If these two elements, science and personal experience, are always brought together in advocacy, it will be a winning combination.

4. Partners in Action

Comprehensive action on patient safety across all countries worldwide is a complex endeavour and requires collective efforts of numerous stakeholders ranging from policy makers to health workers. To achieve the goal and strategic objectives of this action plan, it is important that partnerships develop at both the strategic and the operational levels. Collaboration in this way will add particular value to patient safety endeavours and multiply individual organization's efforts.

By working together to achieve the vision of the action plan and improve the safety of care for all, partners can also accelerate progress to achieve their own respective goals. Under subsequent sections, actions to be taken to implement each strategic objective have been elaborated under four broad categories of partners to implement the global patient safety action plan.

Governments

- ▶ National/sub-national governments
- ▶ Parliament and sub-national legislative bodies
- ▶ Ministries of Health
- ▶ National/sub-national specialized agencies/ adjunct bodies e.g., national patient safety and/or quality institutes, centres or agencies, including: - planning agencies, schemes implementation bodies, public health institutions
- ▶ Other ministries directly or indirectly involved in health including ministries of Education, Finance, Labour and Social Affairs, Justice and Territorial Administration
- ▶ National/sub-national regulatory bodies- including standard setting, licensing, accreditation agencies

Health care facilities

- ▶ Tertiary and secondary care facilities and health care organizations
- ▶ Primary health care facilities and service providers
- ▶ Long term care facilities and service providers
- ▶ Palliative care service providers
- ▶ Mental health facilities and service providers
- ▶ Pre-hospital care service providers
- ▶ Specialized clinics and diagnostic service providers
- ▶ Substance abuse facilities and dementia care facilities
- ▶ Outreach health care service providers
- ▶ Community based and home based care health care service providers
- ▶ Sub national and district health services management teams

Stakeholders

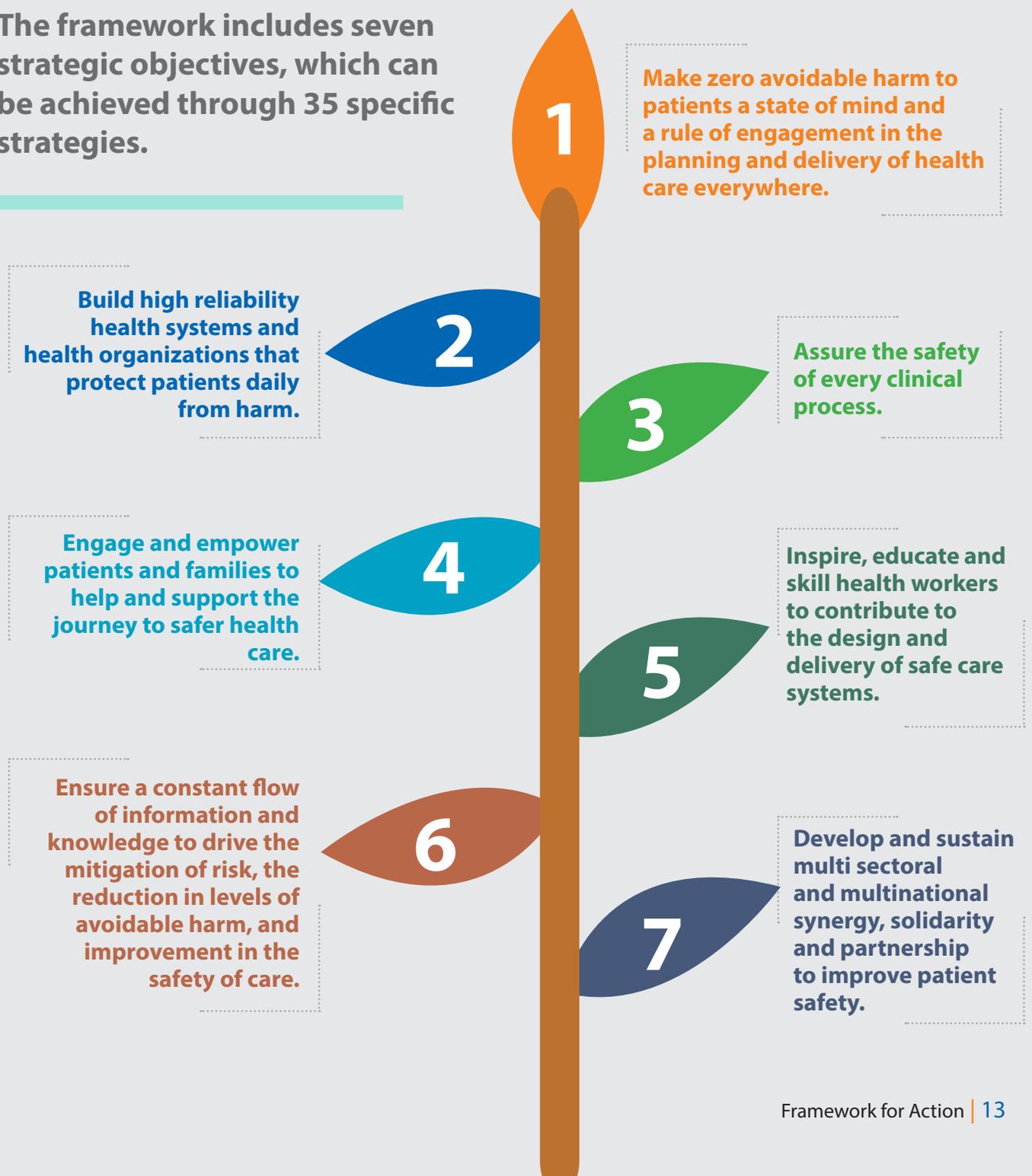
- ▶ Inter-governmental organizations e.g., European Commission, OECD
- ▶ International and national non-governmental and professional organizations
- ▶ International and independent standard setting bodies/ accreditation agencies
- ▶ Academic institutions and other international and national training and capacity building institutions
- ▶ Research institutions
- ▶ International and national consortium/associations of health care providers
- ▶ International and national civil society organizations, including patient organizations
- ▶ Community groups and organizations
- ▶ Media
- ▶ United Nations and other multilateral organizations
- ▶ Development partners, donors and funding agencies
- ▶ Pharmaceutical and medical devices industry
- ▶ Health care information technology industry
- ▶ Private sector entities, including commercial businesses (industry) and health care provider organizations
- ▶ Health insurance and maintenance organizations

World Health Organization

- ▶ WHO at all levels -country offices, regional offices and headquarters
- ▶ WHO Geographically Dispersed Offices (GDOs)

5. Framework for Action

The framework includes seven strategic objectives, which can be achieved through 35 specific strategies.



Strategic Objectives and Implementation Strategies

Few large organizations in any sector across the world operate effectively without a clear, simple set of objectives that govern strategic and operational activities and are understood and owned by all staff. Establishing these at high-level for a system helps to focus all existing policies and activities of the health care system towards a common purpose. If few in number, and appropriately formulated, they can enable progress to be reviewed at strategic level but also at the level of the clinical team. The objectives should not create an extra burden, nor replace existing measures of performance within countries, nor in their systems and facilities. Instead, they should serve to unify the work of the leadership, the endeavours of managers and the care of doctors, nurses and other health professionals. They should provide a test of everything from everyday clinical work to big strategic decisions about the design of health care systems. They should also provide a simple public accountability framework.

That is the purpose of the seven strategic objectives this framework provides for the Global Patient Safety Action Plan. They are broad enough to make sense of the myriad

of tasks required to reduce the risks and to improve the safety of patient care in every part of the world. They are pitched so that it is entirely permissible within their scope to formulate programmes of action that fit with local needs and priorities and that are shaped by the specific context. They do this precisely because they are intended to empower and not to constrain. So, for example, Objective 2 has meaning whether “high reliability” is being developed in a teaching hospital in Western Europe or in rural health centre in a poor country in West Africa. Each will be aiming to do the very best they possibly can within their operating context and resource availability.

In turn, Objective 3, which deals with the important area of designing and operating safe care processes and pathways, is equally applicable to a high technology maternity service in a large Canadian city as it is to a service in a remote part of Sierra Leone trying to reduce maternal deaths from post-partum haemorrhage.

The objectives are also intended to be easily understood and envisioned, readily communicated, and have an uplifting and inspiring tone as well as being few enough in number not to prove daunting and to cause implementation overload.

Framework for Action - The 7x5 Matrix

 1 Policies for zero patient harm	1.1 Patient safety policy, strategy and implementation framework 1.2 Resource mobilization and allocation 1.3 Protective legislative measures	1.4 Safety standards, regulation and accreditation 1.5 World Patient Safety Day and Global Patient Safety Challenges
 2 High reliability systems	2.1 Transparency, openness and 'No blame' culture 2.2 Good governance for the health care system 2.3 Leadership capacity for clinical and managerial functions	2.4 Human factors (or ergonomics) for health systems resilience 2.5 Emergency preparedness plan and processes
 3 Safety of clinical processes	3.1 Safety of high-risk clinical procedures 3.2 Global Patient Safety Challenge: <i>Medication Without Harm</i> 3.3 Infection prevention and control & antimicrobial resistance	3.4 Safety of medical devices, medicines, blood and vaccines 3.5 Patient safety improvement programmes in priority clinical areas
 4 Patient and family engagement	4.1 Co-development of policies and programmes with patients 4.2 Learning from patient experience for safety improvement 4.3 Patient advocates and patient safety champions	4.4 Patient safety incident disclosure to victims 4.5 Patient involvement in implementation of action plan
 5 Health worker education and skills	5.1 Patient safety in professional education and training 5.2 Centres of excellence for patient safety education and training 5.3 Patient safety competencies as regulatory requirements	5.4 Linking patient safety with appraisal system of health workers 5.5 Safe working environment for health workers
 6 Information and research	6.1 Patient safety incident reporting and learning systems 6.2 Patient safety surveillance and information system 6.3 Patient safety improvement programmes	6.4 Patient safety research programmes 6.5 Digital technology for patient safety
 7 Synergies, partnerships and solidarity	7.1 Stakeholders engagement 7.2 Common understanding and shared commitment 7.3 Patient safety networks and collaboration	7.4 Cross geographic and multisectoral initiatives for patient safety 7.5 Linkages with technical programmes and initiatives

Strategic Objective 1

Make zero avoidable harm to patients a state of mind and a rule of engagement in the planning and delivery of health care everywhere.



This first objective, dealing with the idea of zero harm, has been very carefully judged. Arguments rage in global health circles about the wisdom of setting a central or overarching goal. On the one hand, some people say that without a compelling vision, a programme will have no chance of adoption amongst the many global health programmes that set their direction on a highly desirable and beneficial outcome for humanity. On the other hand, others claim that setting an unreachable goal is demoralising and demotivating and will not attract people to its cause.

The need for a bold holistic objective to address the very existence of harm itself, stems from the need to accept full accountability for solving definitively the problems that underlie safety, risk and harm in health care. The discourse on patient safety and its multi-faceted nature, over the last 20 years, has not been enough to infuse leaders, clinicians, and managers with the focus and commitment to drive major improvements in patient safety. Nor have the shocking numbers that paint the stark picture. To this day, health care systems and facilities deliver very variable levels of performance in patient safety. This can be seen

across the world, within countries, between regions, localities, throughout fields of care, and even within individual episodes of care. Errors provoked by flawed systems are common and continue to harm people. These problems are not unique to any one health system but over the years they have proved mostly intractable.

Yet, the reduction of the currently unacceptable levels of avoidable harm is entirely within reach. Certainly, zero harm is unlikely to be achieved in any foreseeable timescale. But, no one would argue that any harm caused to a recipient of health care should be tolerated. For this reason, the Global Patient Safety Action Plan sets a vision and philosophy of zero harm rather than a concrete target. Getting the numbers down to zero will not be possible for now. However, a mind set of zero harm and a frame of reference for planning and delivering health care would be a seismic shift from the current status quo that lives with high levels of avoidable harm. Basing every thought in every plan, every step in the design of every programme, every decision in every clinical encounter, every opportunity to learn when something goes wrong, on this philosophy would create a new paradigm in

health care. It will be truly transformative, and, far from being purely idealistic and intangible, has the potential

to make huge reductions in death, disability, physical and psychological injury from unsafe care.

Strategic Objective 1:

Make zero avoidable harm to patients a state of mind and a rule of engagement in the planning and delivery of health care everywhere

STRATEGY 1.1: Develop a comprehensive patient safety policy, strategy, institutional framework and implementation plan for the country's health system and all its components a key priority in delivering Universal Health Coverage (UHC) for the population.	Actions for Governments <ul style="list-style-type: none">▶ Create and implement a national patient safety policy, strategy and framework shaped by the context for health care in the country, including: overall health priorities and goals; current levels and sources of avoidable harm; resources available; both public and private sector service providers; advice from patients and the public as to priorities; and patient representatives input to the design of the plan.▶ Establish a comprehensive communication programme to raise and maintain public and professional awareness of patient safety and secure maximum engagement in special initiatives and campaigns (such as Global Patient Safety Challenges and World Patient Safety Day).▶ Create a national patient safety charter that includes institutional standards and patients' and health care providers' rights.▶ Map the existing policy and strategy landscape on related themes such as surgical safety, medication safety, blood safety, radiation safety, immunization safety, injection safety, medical device safety, infection prevention and control, antimicrobial resistance and quality of care, and align and synergise patient safety policy framework with them.
	Actions for Health Care Facilities <ul style="list-style-type: none">▶ State a clear public commitment that the organisation is working to orientate culture and practices towards zero avoidable harm; this can be reinforced by adding patient representatives as board members and by creating a patient council to advise on safety matters.▶ Align and implement processes and practices at the facility level with patient safety guidelines, protocols and standard operating procedures.▶ Review progress on patient safety performance at the organization's main board meetings and at all other key boards and committees.
	Actions for Stakeholders <ul style="list-style-type: none">▶ Advocate for patient safety to be a strategic priority for Member States and health care organizations.▶ Engage with professional organizations and patient organizations in the development and implementation of the patient safety goals, objectives and values.▶ Participate in, support and facilitate patient safety programmes at local, national and global level.
	Actions for the World Health Organization <ul style="list-style-type: none">▶ Create a vision of Zero Avoidable Harm and support its implementation at global level with high level advocacy and guidance.▶ Identify patient safety as a key strategic priority in WHO's work across the UHC agenda, and in global strategies and interventions for achieving UHC.▶ Develop, disseminate and support the implementation of guidance for formulating national patient safety policy, strategy, framework and implementation plans.

<p>STRATEGY 1.2:</p> <p>Mobilize and allocate adequate resources for patient safety implementation throughout every level of the health care system.</p>	<p>Actions for Governments</p> <ul style="list-style-type: none"> Establish a national patient safety multidisciplinary task force, including representation from patients and the public, to drive progress and advise on the targeting of resources. Explore whether the system of funding of health care in the country can be adjusted to fairly reward health organizations that achieve good performance on patient safety. <p>Actions for Health Care Facilities</p> <ul style="list-style-type: none"> Produce an annual costed and prioritized patient safety improvement plan to minimize risk of harm (and potential harm) to patients and health workers. Make the organization’s overall business plan and its patient safety improvement plan a single integrated document. Ensure that the inadequate level of staffing and skill mix does not compromise patient safety in any service area. <p>Actions for Stakeholders</p> <ul style="list-style-type: none"> Advocate for resources to tackle the most serious patient safety problems. Engage the private sector to help it to define its role in improving patient safety. Publicize patient safety solutions to garner public support. <p>Actions for the World Health Organization</p> <ul style="list-style-type: none"> Create institutional structures and define responsibility and provide adequate financial and human resources for WHO patient safety activities at global, regional and country levels. Mobilize resources for global campaigns, initiatives, programmes and consultations.
<p>STRATEGY 1.3:</p> <p>Use selective legislation to facilitate the delivery of safe patient care and the protection of patients and health workers from avoidable harm.</p>	<p>Actions for Governments</p> <ul style="list-style-type: none"> Review and adjust legislation governing the country’s health system to facilitate the formulation and implementation of patient safety policies, practices and behavioural norms. Focus attention particularly on the potential for legislation to: protect health workers and patients from retaliation or punitive action in case of reporting of an adverse event; introduce mandatory licensing schemes for health care providers, incorporating patient safety aspects; recognize patient safety as a human right and incorporate access to safe medicines, medical devices and blood products. <p>Actions for Health Care Facilities</p> <ul style="list-style-type: none"> Leverage opportunities through existing national legislation to strengthen measures to protect patients and health workers from avoidable harm and to systematically improve patient safety. Advocate to law makers and national government for new legislation where this could make it easier to meet patient safety goals and standards. <p>Actions for Stakeholders</p> <ul style="list-style-type: none"> Coordinate professional organisations, civil society, patient and community groups, and other patient safety interests to identify scope for new legislation then advocate to lawmakers and national government for enactment of such measures. <p>Actions for the World Health Organization</p> <ul style="list-style-type: none"> Create a repository of policy, legal and regulatory best practices in Member States. Provide technical support to develop and amend laws and regulations for improving patient safety.

STRATEGY 1.4:

Align all health care regulatory, accreditation, and inspectorial activities with the goal of improving performance on patient safety.

Actions for Governments

- ▶ Define and incorporate patient safety standards, including patient engagement, in licensing, regulatory and accreditation requirements for health care facilities.
- ▶ Include and/or augment patient safety and patient engagement as a key component of licensing, regulatory and accreditation standards and award criteria.
- ▶ Include patient safety, patient engagement, and patient rights components in health system performance assessment.
- ▶ Mandate patient safety dimensions in licensing and re-licensing schemes for health professionals.

Actions for Health Care Facilities

- ▶ Implement the licensing, regulatory and accreditation requirements for patient safety and patient engagement in all service areas.
- ▶ Communicate to all staff on a regular basis about patient safety licensing, regulatory, and accreditation systems that the organization is signed up to.
- ▶ Incorporate a culture of continuous improvement of patient safety.
- ▶ Feed information back to national government on the ways in which licensing, regulatory and accreditation systems could be improved to better facilitate the achievement of higher standards of patient safety and patient engagement.

Actions for Stakeholders

- ▶ Convene researchers and research bodies to create an evidence-base (including commissioning new research where necessary) on the effectiveness of licensing, regulatory and accreditation systems in improving patient safety.
- ▶ Bring together experts, health system leaders and civil society to establish the best ways to help patients and families to interpret and, use, and contribute to patient safety performance information produced from the processes of licensing, regulation and accreditation of health care providers.

Actions for the World Health Organization

- ▶ Organize technical support and expert guidance for Member States wishing to build patient safety strengthening measures, including patient engagement, into their national health care licensing, regulation and accreditation systems.
- ▶ Provide normative guidance on patient safety standards, linking to this Global Patient Safety Action Plan.

STRATEGY 1.5:

Create maximum awareness of World Patient Safety Day and Global Patient Safety Challenges, as a way of maintaining a high public and political profile for patient safety.

Actions for Governments

- ▶ Use World Patient Safety Day every year on 17 September to restate the government's and national health system's commitment to achieving the highest standard of safe care and to educate the public on the importance of patient safety.
- ▶ Adapt and develop national campaigns aligned with the theme of World Patient Safety Day each year.
- ▶ Showcase each year what the government is achieving in its journey to zero avoidable harm.
- ▶ Set up national leadership, coordination and expert advisory structures to deliver the goals of the Global Patient Safety Challenges.

Actions for Health Care Facilities

- ▶ Observe and celebrate World Patient Safety Day every year.
- ▶ Adapt and develop local campaigns aligned with the national campaign and the theme of World Patient Safety Day each year.
- ▶ Showcase the patient safety work and achievements at the point of care over the previous year as part of the World Patient Safety Day communications.
- ▶ Implement the actions required by the Global Patient Safety Challenges at health care service delivery level.

Actions for Stakeholders

- ▶ Help to shape and amplify the messages of World Patient Safety Day every year through networks and partners.
- ▶ Collaborate in implementation of existing WHO Global Patient Safety Challenges.
- ▶ Participate in the design of new Global Patient Safety Challenges.

Actions for the World Health Organization

- ▶ Develop, each year, a global campaign for World Patient Safety Day including the selection of theme, key messages, development of communication materials, collation and dissemination of success stories.
- ▶ Launch events for World Patient Safety Day and coordinate action through WHO regions, Member States, professional organizations and civil society.
- ▶ Evaluate the impact of World Patient Safety Day.
- ▶ Design WHO Global Patient Safety Challenges based on lessons from previous Challenges.
- ▶ Develop implementation tools and provide technical support to Member States for delivering the goals and tasks of the Global Patient Safety Challenges.

Strategic Objective 2

Build high reliability health systems and health organizations that protect patients daily from harm

A key success factor in high-risk industries, other than health care is the emphasis placed on preventing accidents, harm and mistakes that have serious consequences. The concept that has emerged from this approach is *resilience* which is an organization's capacity and capability to constantly maintain a safe state of operating and to recover quickly and restore this safe state when something goes wrong. Such organizations have an ability to anticipate problems, use data to monitor processes and work conditions, respond to signals in anticipation of challenges, and competently feed learning from successes and failures forwards.

The promotion of the concept of resilience has led on to its practical application in the idea of **High Reliability Organizations**. The academic work in this field is extensive and has sought to identify organizations whose safety performance is impeccable, especially in domains that are complex and where failure can be catastrophic. Most studies have been in industries and operating situations outside health care. However, the concept has prompted a debate in the patient safety movement about whether too much faith has been placed in learning from failure and not enough emphasis on understanding what creates success.

These two schools of thought have been called Patient Safety 1 and Patient Safety 2. In reality, both are needed if transformational change is to be achieved in patient safety. It should be possible to learn from avoidable patient safety incidents and their causes as much as episodes of peer-reported excellence or positive deviance. The scientific discipline of patient safety, and the tools and approaches developed to learn from incidents, has an established ontology with standardized concepts and agreed definitions and preferred terms for reliable study. Socio-technical systems are complex. The contributing factors thought to have played a part in the origin of an incident in one care setting, could be the very same factors which permit excellence to permeate in another. Those responsible for improving and sustaining safety in organizations must invest in learning mechanisms responsive to cues from the good and the bad. However, it is fair to say that less strategic attention has been given to how to build High Reliability Organizations in health care. That it is why it is important that it should be one of the seven strategic objectives in this Global Action Plan.

Characteristics of High Reliability Organizations

The work of Karl Weick and Kathleen Sutcliffe has attracted a great deal of interest from the patient safety community. Early on in their book, *Managing the Unexpected*, they quote a seasoned military officer who spent his career on aircraft carriers on the challenges of maintaining exemplary safety performance:

“Well, just imagine that it’s a busy day, and you shrink San Francisco Airport to only one short runway and one ramp and one gate. Make planes take off and land at the same time, at half the present time interval, rock the runway from side to side, and require that everyone who leaves in the morning returns that same day. Make sure the equipment is so close to the edge of the envelope that it’s fragile. Then turn off the radar to avoid detection, impose strict controls on radios, fuel the aircraft in place with their engines running, put an enemy in the air, and scatter live bombs and rockets around. Now wet the whole thing down with sea water and oil, and man it with 20-year-olds, half of whom have never seen an airplane up-close. Oh, and by the way, try not to kill anyone.”

Karl Weick and Kathleen Sutcliffe point out that mistakes and accidents are quite rare on such aircraft carriers; they are high reliability enterprises.

Based on the study of many organizations and situations, these researchers have distilled five characteristics of a High Reliability Organizations:

- ▶ **Preoccupation with Failure.** High Reliability Organizations stand out because they treat every small lapse as a potential symptom of an important system weakness that could have major consequences down track.
- ▶ **Reluctance to Simplify.** Another feature of High Reliability Organizations studied by Weick and Sutcliffe is the unwillingness to respond to the complexity of processes, technologies and delivery environments by adopting a simplified view of them in order to stay focussed on a small number of key tasks. Some aspects of understanding a complex operation can be simplified but a much more nuanced and holistic acceptance of the complex elements and how they are interconnected is essential to staying safe.
- ▶ **Sensitivity to Operations.** In High Reliability Organizations there is a strong emphasis on senior management being tuned in to what is happening on the front-line of delivery. This situational awareness is crucial to maintaining strong defences against untoward events, especially those with high impact.

- ▶ **Commitment to Resilience.** Weick and Sutcliffe see the hallmark of a High Reliability Organization is not that it is error-free but that errors do not disable it. Resilience is an amalgam of keeping errors small and allowing continued safe functioning.
- ▶ **Deference to Expertise.** The fifth and final consistent feature of High Reliability Organizations is their policy of cultivating diversity so that someone will understand each of the complex aspects of the system. Authority will migrate to the person with the greatest expertise whatever their status within the organization. Hierarchies are generally bad for maintaining safe systems, as is deference to authority rather than to expertise.

Safety Culture and Leadership

When culture is mentioned in relation to patient safety, most people’s thoughts will turn to the frequently discussed concept of the no-blame culture. Since most mistakes are honest failures, provoked by poorly designed systems, to blame and punish an individual is unfair and misguided. A culture that is based on blame and retribution will ultimately be unsafe because individuals will be afraid to admit their mistakes and will instead hide them. If a culture of blame and fear is dominant in a health organization, it is quite impossible to have a meaningful programme of patient safety at all.

Despite its success as a policy in other sectors, such as aviation, the idea of a no-blame stance in response to serious avoidable events that harm patients has not made sense to the public and media. This is because it seems to dismiss any form of accountability for individuals. Attempts have been made to deal with the terminology aspect of this by adopting the term “just culture.” A just culture recognizes the complexity of situations and events and acknowledges that, whilst most patient safety failures are the result of weak systems, there is a minority of situations where an individual should be held to account; for example, where there has been reckless behaviour or wilful misconduct.

One informal definition of culture is: “The way we do things around here.” To which is sometimes added: “When no one is looking.” So, a true patient safety culture would have other good habits such as: using data, openness, transparency, being fully patient centred. To strengthen the leadership and patient safety culture, true transparency to both providers and patients at every level of the system is required. Transparency to share information but also transparency in reducing the hierarchical approach.

Developing and sustaining a strong patient safety-orientated culture requires strong leadership at all levels: in Ministries of Health, in health care facilities, and in every clinical team. There is a need for a new generation of patient safety leaders who are skilled and passionate: to create the conditions, organizational and team cultures for safer care; to ensure that all systems and procedures comply with the highest standards; and to guide and motivate staff.

Human Factors (or Ergonomics)

Human factors (or ergonomics) is key to the creation of high-reliability, resilient health care systems and organizations. One of the biggest contrasts between health care and other high-risk industries is the emphasis given by the latter to human factors in understanding how safety problems develop and how this knowledge can be applied to building a system's defences to make it more resilient to accidents and adverse events.

The description '**human factors**' is today used interchangeably with the older term '**ergonomics**' and they are often used together – human factors (or ergonomics) or HFE. This important discipline of science and practice is concerned with understanding interactions among humans and other elements of a system. The human factors (or ergonomics) profession applies theory, principles, data and methods from relevant fields to design for human well-being and overall system performance. Its practical application grew strongly after the second world war and made major contributions to safety in aviation and other fields. In aviation, driven by human factors (or ergonomics) perspectives, the standardized redesign of cockpits, strengthening communications, introducing strict protocols for handling in-flight emergencies, and investment in simulation training has greatly improved safety.

Similarly, human factors (or ergonomics) is critical to the design of safe and resilient health care and patient safety systems. The human factors (or ergonomics) multidisciplinary, integrative approach looks at the person embedded in a socio-technical context, considering health workers in the work environment and the patient on the journey of care. Attention to human factors (or ergonomics) is evident in resilient and equitable health care systems. On the other hand, poor human factors (or ergonomics) is evident in inflexible or error-prone health care systems and is a consistent factor in adverse health care events. For some years, health care leaders and managers have been interested in the benefits to their health systems and organizations of the human factors approach and the potential gains in improved performance in patient safety, but implementation of the

approach has so far been on a very limited scale. However, incorporating essential elements of human factors (or ergonomics) across all health care contexts is one of the keys to achieving the strategic objectives of this plan. These elements include:

- ▶ **Person-centred approach**, focusing on supporting human performance, effectiveness, and wellbeing in the health care context. This protects patients as well as care givers.
- ▶ **Participatory approach** to health care system design, engaging all stakeholders (e.g., caregivers, patients, managers) in the design and decision process to ensure appropriate and workable solutions.
- ▶ **Design-driven approach**, focusing on the design of the system for all sizes and types of health care organizations at all stages of care, and identifying the gaps in the system. This draws on the relevant disciplines that are required and integrates the knowledge and findings to come up with a solution.
- ▶ **Systems approach**, considering multiple levels: the micro level of the patient; the macro level of the organization; and the meso level, the interaction among the individuals the organizations and the socio-technical systems. The human factors (or ergonomics) approach takes into account not only the people in the system but also the environment, the surroundings and the physical context as well as the procedures, artefacts, safety checks, teamwork, risks, organizational culture and structure, and national regulations and policies. Consideration and integration of all these factors is required to produce a system that is resilient and can enhance safety.
- ▶ **Continuous learning and refinement**, improving work systems iteratively through monitoring, reporting, evaluation, training, refining practices, and redesigning.

Transformational Leadership

The action required in this Global Patient Safety Action Plan is transformational in nature. Transformational change must be led by high quality leaders. The key areas of this leadership that will determine the effectiveness of the strategic objectives include:

- ▶ The regular and consistent communication of a vision of patient-centred, harm free, safe services as the central purpose of all health care;
- ▶ Making the vision, guiding principles, strategic objectives and strategies set out here become the

currency through which the business of patient safety worldwide is conducted;

- ▶ Identifying, surfacing and addressing the issues in the design, organization and delivery of services

which will have the biggest impact on the safety and resilience of services;

- ▶ Creating a sense of 'team' with clinical leaders (avoiding 'us and them'), listening and acting upon their concerns and ideas.

Strategic Objective 2:

Build high reliability health systems and health organizations that protect patients daily from harm.

STRATEGY 2.1:

Develop and sustain a culture of openness and transparency that promotes learning, not blame and retribution, within each organization providing patient care.

Actions for Governments

- ▶ Implement administrative and (if necessary) legal protection for those reporting adverse events or raising concerns about the safety of services.
- ▶ Publicly reassure the country's health workers that policy will be based on learning from patient safety failures and refining the work system, rather than unfairly punishing individuals.
- ▶ Appoint an independent organization with receiving, analyzing, synthesizing and publicly reporting information on the safety of health care in the country and commenting upon progress.

Actions for Health Care Facilities

- ▶ Establish and promote a non-punitive policy for responding to and learning from adverse events and errors, whilst clarifying the rare circumstances where individual accountability will apply (just culture).
- ▶ Develop a system for rapidly implementing recommendations from analyses of adverse events.
- ▶ Conduct a regular survey of the organization's patient safety culture using one of the widely used validated tools.
- ▶ Reduce hierarchical structures, attitudes and behaviour throughout the organization, promoting a speak-up culture.
- ▶ Promote transparency with patients; ensure that patients have access to their medical records and that full informed consent is practiced.

Actions for Stakeholders

- ▶ Work with professional bodies to strengthen openness and learning in clinical cultures.
- ▶ Provide public education on good patient safety practices and on how to be part of the health care team.
- ▶ Encourage members of the public to report to patient safety systems and to learn from publicly reported safety data.
- ▶ Engage patients and families and seek their advice in building learning cultures in health care.

Actions for the World Health Organization

- ▶ Promote and explain to health ministers and health system leaders, the benefits of a non-punitive, learning culture.
- ▶ Provide technical support to Member States to establish a good patient safety culture (adapted to the local context) in all health care organizations.
- ▶ Make available research and best practice materials to assist in the development of good patient safety cultures.
- ▶ Assist with the development of national patient safety incident reporting and learning systems that include patient reports.

STRATEGY 2.2:

Develop and operate effectively a good governance framework within each component of the health care system.

Actions for Governments

- ▶ Establish arrangements to strengthen Institutional structures for patient safety at national, sub national and local level of health care planning and provision.
- ▶ Map the existing organizational structures related to inpatient safety, all safety allied clinical areas and health programmes, quality in the health system, and develop an optimal governance structure for patient safety.
- ▶ Define roles and responsibilities within the institutional framework, with clear demarcation of authorities and responsibilities, channels of reporting and communication, and conflict resolution.
- ▶ Create a statutory requirement and accountability mechanism for all health organizations to operate transparently in respect of their record on patient safety.

Actions for Health Care Facilities

- ▶ Establish a clear specification of roles and responsibilities to identify, mitigate and (where possible) eliminate risks to patients and staff.
- ▶ Identify responsible officers to follow through agreed specific actions to reduce risks and improve patient safety.
- ▶ Design and implement an effective clinical governance structure to fully engage point of care providers in the organization's patient safety policies and programmes. Include patient representatives where possible.

Actions for Stakeholders

- ▶ Bring together all key stakeholders (including national professional associations, academic experts, researchers, civil society) to pool experience and knowledge, nominate patient representatives, and to generate ideas about how to build institutional governance mechanisms for patient safety within health care systems.

Actions for the World Health Organization

- ▶ Establish a global governance mechanism for patient safety with participation of Member States, WHO Collaborating Centres, international professional associations, standard setting agencies, patient organizations and research institutes.

STRATEGY 2.3:

Develop clinical and managerial leadership capacity and capability at all levels (national, regional, facility, care team) to ensure a strong and visible focus on the aspirational goal of harm-free health care.

Actions for Governments

- ▶ Create a national leadership academy for patient safety, including patients as teaching faculty.
- ▶ Establish a leadership capacity development programme in patient safety for clinical and managerial leaders and citizen leaders of civil society.
- ▶ Establish a patient safety leader's group for early career professionals in existing health care positions.

Actions for Health Care Facilities

- ▶ Appoint a board level patient safety leader for the organization who is knowledgeable about human factors and ergonomics and high reliability organizations.
- ▶ Designate patient safety leadership roles in every clinical service and train, develop and support existing staff to fill them.
- ▶ Make a leaders' succession plan to ensure continuity, sustainability and cultural consistency of the patient safety programmes in each clinical service.
- ▶ Include patient representatives as advisers to patient safety leaders.

Actions for Stakeholders

- ▶ Convene wide-ranging discussions amongst stakeholders to identify priorities for leadership development in patient safety.
- ▶ Participate in patient safety leadership development and training programmes bringing in the perspective of stakeholders to help shape the curriculum.

Actions for the World Health Organization

- ▶ Develop a leadership competency framework for patient safety with accompanying assessment tool.
- ▶ Formulate guidance on implementation of the leadership competency framework at country level and work with Member States in implementing the framework.
- ▶ Design and implement a special programme to build the capacity and capability of patient safety leaders in low- and middle-income countries, including patient and citizen leaders.

STRATEGY 2.4:

Bring a strong human factors (or ergonomics) perspective and input to strengthening the resilience of health organizations and clinical practices.

Actions for Governments

- ▶ Establish an expert group to report on the ways in which HFE principles and training could drive sustained improvements in patient safety.
- ▶ Incorporate HFE expertise into the design, purchasing, deployment, use and evaluation of equipment, devices and information technology as well as in the design of tasks and procedures.
- ▶ Ensure that all licensing, regulatory and accreditation requirements for patient safety involve HFE principles and training.

Actions for Health Care Facilities

- ▶ Assess gaps in relation to HFE in service delivery processes, workplace designs, and care environments.
- ▶ Appoint a HFE expert to the organization's senior management team.
- ▶ Provide all health care staff with training on HFE.

Actions for Stakeholders

- ▶ Encourage researchers and research bodies to conduct and commission high quality studies on the use of HFE to improve the safety of health care and reduce the level of avoidable harm.
- ▶ Mobilize the expertise and practical know-how of those in other high-risk industries to inform the design of action programmes to improve patient safety and build resilient health care organizations.

Actions for the World Health Organization

- ▶ Foster the development of a global network of individuals and organizations with expertise, academic knowledge and experience in HFE to focus their attention on improving patient safety and resilient health care.
- ▶ Incorporate HFE principles into global patient safety standards and other related guidance.

STRATEGY 2.5:

Formulate, regularly rehearse and update emergency preparedness plans for mitigating the impact of disease outbreaks, natural disasters, and major accidents.

Actions for Governments

- ▶ Formulate and publish a national emergency preparedness plan taking account of global guidance and scientific advice.
- ▶ Incorporate patient safety basic principles, concepts and elements in emergency preparedness plans.
- ▶ Maintain a risk register of all known and potential threats to the safe and effective functioning of health care systems.
- ▶ Test the resilience of the plan by regular simulation exercises and strengthen it accordingly.

Actions for Health Care Facilities

- ▶ Identify those scenarios that have the potential to rapidly overwhelm the organization and its operating units.
- ▶ Prepare an emergency plan for all known and potential contingencies in line with the government's guidance.
- ▶ Test the resilience of the plan by regular simulation exercises and strengthen it accordingly.

Actions for Stakeholders

- ▶ Provide support and expertise in the development and resilience testing of emergency preparedness plans.
- ▶ Work with civil society to mobilize the public, raise awareness and engage communities in emergency preparedness.
- ▶ Identify and facilitate opportunities for widening multisectoral involvement in emergency preparedness and response.

Actions for the World Health Organization

- ▶ Provide normative guidance for emergency preparedness especially the response to threats to the safe and effective functioning of health care services.
- ▶ Incorporate patient safety basic principles, concepts and elements in emergency preparedness plans.

Strategic Objective 3

Assure the safety of every clinical process



As patients seek help from a health care system, for advice, investigation, diagnosis, treatment, and rehabilitation, they enter a series of care processes that are often extensively interconnected. The number and range of clinical processes and procedures is huge and varies from the relatively simple, such as prescribing a medicine, to the much more complex, such as major heart surgery. In the latter, every part of the preparation, the operation itself and the aftercare involves many processes each involving separate steps and stages, even routinely encompassing 60 people and sometimes more.

A high proportion of the patient safety incidents that occurs in health care systems around the world is because of flaws in the design or operation of clinical processes. For example, research and patient safety incident reports show that patients' conditions are often misdiagnosed, because of clinical misjudgements, or when the correct test was not carried out, or test results were lost, or because of miscommunication between different parts of the same health care system, among other reasons. Prominent among these reasons is failure to communicate well with the patient. In different parts of the world, in

surgical services, the wrong procedure is carried out, the wrong blood group or component is transfused, or the wrong prosthesis is inserted, or the wrong patient is operated on. Patients die or are harmed because of failure to deliver care in a way that protects them from acquiring serious infection. Mothers and babies die during or after birth because of unsafe practices, failure to take the right action at the right time, or because of shortages of staff or equipment. Large numbers of patient safety incidents occur because of errors in the prescribing, ordering, storage, dispensing, preparation and administration of medicines and/or a failure to monitor.

In many low-income, and some middle-income countries, the context of health care provision is very different. At times, such facilities may be unable to provide the bare minimum to complete clinical work to a basic standard, let alone carry out tasks taking safety into account; for example: no running water or soap; no sterilized instruments; no operating masks; no support to repair or maintain infrastructure, including electricity; ineffective clinical waste disposal systems; no robust supply chains and inadequate storage conditions for medicines; no technical support for

the maintenance of devices; no fire safety measures; poor housekeeping and security; no information technology or data sources. If these lack of basic infrastructure sources of harm are not addressed, there is little virtue in enforcing checklists or complex patient safety interventions drawn from high-income settings.

A much broader approach to patient safety is required for countries with limited resources receiving visits from clinical experts from more affluent countries. This is an important form of support but sometimes, rather than advice or training in surgical technique, what is needed from visitors to a hospital in a low-income country is someone who knows how to establish a safe clinical waste facility, or teach the maintenance of a neonatal incubator, or address the nutritional status of patients.

This broader thinking on what constitutes safe clinical care is also required in those countries where there is conflict and political instability. Here, there will already be lack of resources but the presence of weakened health systems, greatly increased the need for health care. Large cross-border refugee or migrating populations and encampments, as well as frequent disease epidemics, create enormous challenges. The humanitarian agencies have much wisdom and experience to contribute here.

These examples highlight the need for a systems approach in the design of clinical processes. The requirements for safe design will vary depending on the circumstances and situations, so processes must be tailored accordingly. All of the factors that impact on the clinical process must be considered in process design - the environment, the surroundings the physical context, the procedures, artefacts, safety checks, teamwork, risks, organizational culture and structure, as well as national regulations and policies.

Ultimately, the design and operation of safe clinical processes means overcoming the challenges of their diversity and complexity. There are more than 4,000 medical and surgical procedures that can be carried out. For doctors and nurses managing clinical processes, the amount of information they need to guide them is increasing all the time. Every day, nearly 7,000 papers are

published and listed in the main clinical science database. So, it is incredibly difficult for the busy individual clinician to keep abreast of what is the latest, and what is the best evidence.

There are a number of generic features of clinical processes that determine whether they are at risk of delivering an unsafe outcome. For example, incorrect identification is responsible for medication errors and wrong site, wrong-patient surgery. Improving critical communication amongst health care professionals and with patients is crucial and would prevent millions of adverse events. The design of the packaging and labelling of medicines contributes to medication errors and deaths in many clinical areas.

Then there are key clinical areas where adverse outcomes consistently occur because of failures in the safety of care. For example, reporting data and research studies show that patient falls account for a substantial proportion of avoidable harm. They occur in hospitals and health care facilities in all parts of the world but 80% of them happen in low- and middle-income countries. Falls can have serious consequences: fractured hips, brain bleeds and sometimes death. Underlying process failures include poor supervision of elderly patients, neglecting to carry out assessment for ambulation, and hazardous environments. Successful solutions have involved more cohesive teamwork, good monitoring data, creating the right culture, critical review of environmental hazards, and strongly enforcing best practice protocols for making prevention of falls a priority.

There is also a range of other clinical programmes that have organizational frameworks, leadership and delivery mechanisms at global, regional, country, health facility and community level. Most may not have direct interaction or linkage with the Patient Safety Programme.

These programmes include immunization, blood transfusion, radiation therapy, injections, childbirths, surgery, mental health, ageing populations, primary care, injury prevention, noncommunicable and communicable diseases; patient safety plays a central role in all these areas but the potential to identify sources of risk and harm and design ways to combat them has been under-explored.

Strategic Objective 3:

Assure the safety of every clinical process.

<p>STRATEGY 3.1:</p> <p>Identify all high-risk clinical procedures and mitigate their risks with emphasis on creating standard operating procedures.</p>	<p>Actions for Governments</p> <ul style="list-style-type: none">▶ Create expert groups to assess, map and widely communicate the key areas of risk in each area of clinical practice.▶ Establish, each year, a special initiative to reduce severe harm and death nationwide in a specific clinical area.▶ Create a database of knowledge and tools to enable organizations and health care professionals to mitigate the risks associated with clinical processes. <p>Actions for Health Care Facilities</p> <ul style="list-style-type: none">▶ Identify the highest-risk clinical processes within the spectrum of care delivered to patients by the organization.▶ Develop a package of action to make the highest-risk procedures safer and monitor progress toward improvement.▶ Promote the wider use of validated standard operating procedures in all clinical areas.▶ Designate or appoint clinical risk managers in large health care facilities.▶ Develop a robust process of informed consent that includes key risks to watch out for. <p>Actions for Stakeholders</p> <ul style="list-style-type: none">▶ Encourage and facilitate professional organizations to systematically identify the sources of harm and death in each area of clinical care and formulate solutions.▶ Form collaborative working arrangements with private sector partners to identify risks inherent to their products and services to mitigate them.▶ Set up mechanisms for patients and families to co-design health care processes that are safer when delivered. <p>Actions for the World Health Organization</p> <ul style="list-style-type: none">▶ Convene professional bodies, experts, academia, and patient and family representatives to promote greater understanding and awareness of the risks of clinical processes and the ways to mitigate them.▶ Encourage and facilitate work to identify and reduce the risks of health care for particular groups of patients (e.g. the elderly, mothers and babies, those with mental health problems).
<p>STRATEGY 3.2:</p> <p>Implement a programme to transform the safety of medication management and use based on the third WHO Global Patient Safety Challenge: <i>Medication Without Harm</i>.</p>	<p>Actions for Governments</p> <ul style="list-style-type: none">▶ Take early action to protect patients from harm arising from: high-risk situations, polypharmacy, and transitions of care.▶ Convene national experts, health system leaders and practitioners in multidisciplinary task teams to produce guidance and action plans for each of the four domains (Patients and the Public, Medicines, Health Care Professionals, Systems and Practices of Medication) of the third WHO Global Patient Safety Challenge <i>Medication Without Harm</i>.▶ Put mechanisms in place, including the use of tools and technologies, to enhance patient awareness and knowledge about the medicines and medication use process, and patients' roles in managing their own medications safely.▶ Designate a national coordinator to spearhead the third WHO Global Patient Safety Challenge: <i>Medication Without Harm</i>.▶ Encourage reporting of adverse medication (drug) events (ADEs) and medication errors.

Actions for Health Care Facilities

- ▶ Establish a leadership group within the organization to implement the third WHO Global Patient Safety Challenge: *Medication Without Harm*, taking account of national guidance and priorities.
- ▶ Appoint a Medication Safety Officer within the organization; raise awareness about medication risks and good safety practices in every clinical service within the organization.
- ▶ Identify medication-related errors and harm through the organization's patient safety incident reporting and learning system, investigate their root causes and take action.
- ▶ Monitor progress in reducing medication-related harm within the organization's services. Alert national authorities to any apparently new source of medication-related harm.
- ▶ Implement measures to improve patient medication literacy and, as part of this, help all patients served by the organization to download the mobile phone application WHO Med Safe that allows the patient to focus on key points in the medication process to mitigate risk (*5 Moments for Medication Safety*).

Actions for Stakeholders

- ▶ Ensure that patients, families and civil society are closely involved in all aspects of the *Challenge* and developing tools to help patients protect themselves from harm.
- ▶ Fully engage educational and research institutions, regulatory authorities, health professional societies, pharmacy bodies, patient advocacy groups, donors and the pharmaceutical industry to implement the *Challenge*.

Actions for the World Health Organization

- ▶ Lead the process of change and take global action to make progress in the four domains of the *Challenge* framework.
- ▶ Facilitate the development and implementation of country programmes.
- ▶ Set out research priorities and promote an international research study on the burden of medication-related harm, including hospital admissions due to medication effects.
- ▶ Create and implement a communications and advocacy strategy and promote the global campaign "Know. Check. Ask."
- ▶ Develop tools and methodologies to monitor progress and evaluate the impact of the *Challenge*.
- ▶ Establish a much greater understanding of the special problems of medication-related harm in low- and middle-income countries.
- ▶ Reshape the *Challenge* to meet needs in diverse settings.
- ▶ Mobilize resources to enable implementation of the *Challenge*.

STRATEGY 3.3:

Put in place rigorous and evidence-based measures for infection prevention and control (IPC), to minimize the occurrence of health care-associated infections and antimicrobial resistance.

Actions for Governments

- ▶ Ensure that WHO IPC minimum requirements are in place as a starting point to build strong and effective IPC programmes to provide minimum protection and safety to patients, health workers and visitors; this represents the first step towards the achievement of the full WHO IPC core components.
- ▶ Establish a national IPC programme with clearly defined objectives, functions and activities for the purpose of preventing health care-associated infections and combatting antimicrobial resistance through good IPC practices.
- ▶ Ensure that IPC programmes, matching national priorities are in place in every organization providing health care within the country.

- ▶ Build capacity for comprehensive, effective IPC programmes in every health care setting in the country.
- ▶ Establish systems for surveillance of health care-associated infection and antimicrobial resistance, to monitor IPC practices and assess progress and improvement over time and against best practice and best performance benchmarks.
- ▶ Adapt WHO technical guidance and implementation strategies to the national context and mandate its use in all health care facilities within the country.

Actions for Health Care Facilities

- ▶ Ensure that WHO IPC minimum requirements are implemented in the health care facility.
- ▶ Establish an IPC programme, based on good practice, with a dedicated team in each acute health care facility within the organization to prevent health care-associated infection and to combat antimicrobial resistance; similar teams should be in place for other health care facilities based on critical mass.
- ▶ Implement IPC education and training for all health workers by using team- and task-based strategies that include bedside and simulation training.
- ▶ Perform health care-associated infection (including antimicrobial resistance) surveillance to guide interventions and detect outbreaks with rapid feedback of results (including reporting to national networks) to health workers, stakeholders and public health authorities.
- ▶ Implement multimodal IPC strategies; audit the compliance with IPC standards and feedback results to the leadership of the organization and staff.
- ▶ Adhere to bed occupancy and health worker staffing levels appropriate to the national standards and contextual factors.
- ▶ Ensure a clean and hygienic environment that incorporates Water, Sanitation and Hygiene (WASH) infrastructure and availability of appropriate IPC materials and equipment.
- ▶ Implement the evidence-based processes for segregation, transportation and disposal for infectious waste.

Actions for Stakeholders

- ▶ Maintain networks and groups with expertise and research involvement in the area of IPC to assist in producing guidelines and advising on their application in different health care settings and contexts.
- ▶ Link the work of all relevant programmes and professional organizations to national IPC programmes.
- ▶ Convene and engage patients, families and civil society in the design, implementation and evaluation of IPC programmes at all levels.

Actions for the World Health Organization

- ▶ Provide leadership, connectivity and coordination to support successful programmes of IPC in the diversity of health care settings across the world.
- ▶ Design and run campaigns and advocacy initiatives to raise awareness, generate enthusiasm and gain commitment for IPC programmes to reduce harm and prevent death.
- ▶ Facilitate and help mobilize funding for IPC country capacity-building.
- ▶ Measure progress of IPC programmes around the world and extract key learning for global dissemination.

- ▶ Provide technical guidance in key areas of IPC work that may change from time-to-time but currently includes: Hand hygiene; Surgical site infections; Combatting antimicrobial resistance; Injection safety; Ebola response and recovery; Sepsis and catheter-associated bloodstream infections; Catheter-associated urinary tract infections; COVID-19.

STRATEGY 3.4:

Comprehensively assure the safety of medical devices, medicines, blood and blood products, vaccines and other medical products at all stages.

Actions for Governments

- ▶ Create a national plan to assure the safety of medical devices, blood and blood products, vaccines and other medical products from their production, storage, supply, through to their use in the hospital, clinic, or community.
- ▶ Provide adequate policy, legal and regulatory provision to ensure that the plan can be implemented safely and effectively to fulfill its purpose.
- ▶ Establish, within the national plan, a blood policy and legislative framework to include: defined donor selection criteria with mechanism to enforce it; policy and guidelines for clinical use of blood and blood products; regulation and licensing of blood transfusion services; a central agency for regulating and ensuring safety in transfusion services; standards for blood bank and transfusion services; a national haemovigilance system with standardized channels of reporting, analysis and feedback; the promotion of 100% voluntary unpaid blood donation.

Actions for Health Care Facilities

- ▶ Use only authorized medical devices that meet the prescribed safety standards.
- ▶ Ensure operating manual and safety instructions of equipment is always available at point of use and that new staff receive induction training on use.
- ▶ Adopt standard operating procedures for transfusion services and participating in an external quality assessment programme.
- ▶ Adopt standard operating procedures and safety protocols for immunization services.

Actions for Stakeholders

- ▶ Maintain mutually agreed international safety standards for medical devices, blood and blood products, medicines and vaccines.
- ▶ Engage with industry leaders to improve products and devices in their respective fields.

Actions for the World Health Organization

- ▶ Develop normative guidance for ensuring safety of medical products.
- ▶ Support Member States in developing, implementing and strengthening safety surveillance programmes of medical products.
- ▶ Promote and support development of global campaign and observing and celebrating World Blood Donor Day on 14 June annually.

STRATEGY 3.5:

Launch and maintain active patient safety improvement programmes in a wide range of clinical areas determined by national and local priorities.

Actions for Governments

- ▶ Establish a range of clinically-led patient safety improvement programmes each year (consistent with the national patient safety strategy; see Strategy 1.1) that target systemic themes (e.g. diagnostic safety), patient groups (e.g. dementia patients), or settings (e.g. primary care).
- ▶ Provide guidance and leadership support to annual patient safety improvement programmes, evaluate them and disseminate lessons learned.

Actions for Health Care Facilities

- ▶ In conjunction with patient advisers, establish a clinical leadership group within the organization to interpret and drive forward the annual national patient safety improvement priorities together with local priorities for clinical services.

- ▶ Evaluate the impact of each priority programme and where there have been gains take action to sustain them.
- ▶ Feedback information on successes and failures to national level.
- ▶ Designate or appoint a clinical risk manager for each service.

Actions for Stakeholders

- ▶ Share expertise and provide guidance on the adaptation of patient safety solutions to different health care settings.
- ▶ Provide guidance on improvement programmes that are important from a patient perspective and provide patient representatives to advise on specific programmes.

Actions for the World Health Organization

- ▶ Collate information on priority patient safety improvement programmes in each of the WHO Regions and identify and disseminate knowledge of successes.

Strategic Objective 4

Engage and empower patients and families to help and support the journey to safer health care



Patient engagement and empowerment is perhaps the most powerful tool to improve patient safety. Patients, families, and other informal caregivers bring insights from their experiences of care that cannot be substituted for, or replicated by, clinicians, managers or researchers. This is especially so for those who have suffered harm. Patients, families, and caregivers can serve as vigilant observers of a patient's condition and can alert health care providers when new needs arise. Given proper information, the patient and family can help to be the eyes and ears of the system.

The majority of countries, particularly the low- and middle-income countries, do not have a strong patient voice campaigning for improvements in patient safety. Patients' voices are not prominent in many health care systems. It may not be happening within countries due to cultural reasons; failure to identify suitable patient advocates and champions or encourage them to raise their voice; lack of leadership and understanding; absence of organizational infrastructure or space within governance structures; or lack of funding.

Since 2005, WHO has had a **Patients for Patient Safety Programme** that has been co-developed and co-maintained with a team of patient safety advocates and champions comprising patients, who are surviving victims of harm, or family members who have lost a loved one to unsafe care. Its aims emphasize patients' rights, transparency, and partnership with health care providers to enhance the patient's role in patient safety. This is a unique international network of patient safety advocates and champions. In its years of existence, the group has established itself as a global voice in the most important concern that patients have: the safety of their care. The group issued the **London Declaration**, outlining four broad areas of action. These were:

- ▶ Devising and promoting programmes for patient safety and patient empowerment;
- ▶ Developing and driving a constructive dialogue with all partners concerned with patient safety;
- ▶ Establishing systems for reporting and dealing with health care harm on a worldwide basis;

- ▶ Defining best practices in dealing with health care harm of all kinds and promoting those practices throughout the world.

Co-production with patients builds a strong foundation for health care system improvement. Patients travel through the entire health care system, so they are more likely, than providers, to have a holistic view of it rather than be focused on one small part of the system. Patients and families are the end users of the health care system. They are often the only ones to have full insight into the outcome of their care. Their perspective on how care can be made safer is invariably very valuable. The intense public and personal interest in, and knowledge of, health could be harnessed to make patients more frequent partners in improving patient safety.

The WHO Framework on Integrated People-centred Health Services (IPCHS) is a call for a fundamental shift in the way health services are funded, managed and delivered. It supports countries' progress towards Universal Health Coverage by shifting away from health systems designed around diseases and health institutions towards health systems designed for people.

WHO recommends five interwoven strategies that need to be implemented:

- ▶ Engaging and empowering people and communities;
- ▶ Strengthening governance and accountability;
- ▶ Reorienting the model of care;
- ▶ Coordinating services within and across sectors;
- ▶ Creating an enabling environment.

Much is made of the current emotional distance and empathy gap between patients and health professionals who provide their care. Sometimes complainants are taken to be the main voices of patients. The COVID-19 pandemic has shone a new light on this with the public expressions of gratitude for what is done by health workers around the world and concern at the conditions under which many are labouring. This speaks well for the opportunity for stronger partnerships based on compassion between patients and health care providers in future.

Patient and family engagement needs to be made an integral part of patient safety: as a pillar of health care practice, by building it into every health care organizational and governance structure, by having it a subject of community and national oversight, and by giving it an equal seat at the table in global patient safety

leadership and planning fora. This would enable the voice and experience of patients and families to have a powerful and beneficial influence from global and national policies through to bedside and clinic practices; all strategies would be seen through the lens of the patient.

While it is pivotal to identify patient advocates and champions to increase patient and family engagement, equally important is to identify, grow and incentivize health care leaders with values aligned to this. Such leaders would champion patient participation in their governance structures, in their strategic priorities and in their budgets. Their moral imperative would be to integrate patient and citizen roles into their organisation's work and to create a culture of safety and respect that encourages active listening to the voices of patients within their organizations. This works both ways. A culture that is safer for patients will usually also be safer for health workers.

Most importantly, patients need to be given the information that they need to manage their own care and take charge of their safety to the greatest extent possible. Health care institutions, supported by national and international entities, should commit to policies to promote transparency to patients, including fully informed consent, patient access to medical records, and full disclosure if patients are harmed by their care. Patients should be able to escalate concerns within a health care organization and should be actively encouraged to submit reports to patient safety reporting systems. These reports should be given full standing as incident reports and not side-lined into a separate category as patient "complaints."

Countries are at different points on the journey to patient engagement. Even those that are farthest along have not tended to focus on patient safety. A shift in emphasis to view patient safety as a fundamental human right, and one that should take priority in patient engagement, is an important principle on which to base strategies. Activities that can help strengthen patient engagement include: strengthening the WHO Patients for Patient Safety Programme and establishing patient safety networks focused on patient safety in every country, embedding patient engagement and family engagement in the principles and practice of patient safety through national patient safety charters, increasing public awareness and education about patient safety, and amplifying the patient voice as a force for improvement of patient safety.

Strategic Objective 4:

Engage and empower patients and families to help and support the journey to safer health care.

<p>STRATEGY 4.1:</p> <p>Engage patient and family representatives as well as community organizations and civil society in co-development of policies, plans, strategies, programmes and guidelines that are aimed at making health care safer.</p>	<p>Actions for Governments</p> <ul style="list-style-type: none"> ▶ Create formal mechanisms to include patients and families in national governance mechanisms, working groups, task forces, and committees that plan and take action to improve patient safety in the country. ▶ Create alliances with existing patient and civil society groups on patient safety. ▶ Embed patient engagement standards in accreditation.
	<p>Actions for Health Care Facilities</p> <ul style="list-style-type: none"> ▶ Invite victims of harm or family representatives to be involved in designing action to reduce the likelihood of a recurrence. ▶ Appoint patient and family representatives to be part of the organization's boards and committees. ▶ Create patient and family advisory councils that are focused on patient safety.
	<p>Actions for Stakeholders</p> <ul style="list-style-type: none"> ▶ Advocate for full participation of patients, families and communities in all patient safety planning and programmes at global, national and local level. ▶ Help create community oversight mechanisms for local health care facilities and local patient assistance programmes for people who encounter problems in their health care.
	<p>Actions for the World Health Organization</p> <ul style="list-style-type: none"> ▶ Create a framework for patient engagement in patient safety that countries and institutions can adopt. ▶ Ensure that patient and family representatives are an integral part of work in implementing all global, regional and national level elements of this Global Patient Safety Action Plan. ▶ Make mandatory the representation of patient safety advocates, champions, patient groups and civil society in all WHO consultations for developing policy, strategy and guidance related to patient safety. ▶ Involve patient representatives in monitoring and accountability mechanisms for all global, regional and national level elements of this Global Patient Safety Action Plan.
	<p>STRATEGY 4.2:</p> <p>Learn from the experience of patients and families who have been exposed to unsafe care to improve understanding of the nature of harm and foster the development of more effective solutions.</p>
<p>Actions for Health Care Facilities</p> <ul style="list-style-type: none"> ▶ Create the culture and organizational framework so that the patients' and families' encounters and experiences with avoidable harm, told by themselves, are an integral part of all patient safety work within the organization's services. ▶ Include a patient and family experience, told by themselves, as a regular agenda item on the organization's main board meeting in order to give the health care leaders a deep insight into the realities of the impact of unsafe care. 	

Actions for Stakeholders

- ▶ Organize national and local workshops, symposia and events to share the experiences and expectations of patients and families, especially those who have suffered avoidable harm.
- ▶ Ensure that professional associations and specialist societies invite patients and family members with patient safety experiences to their annual conferences and scientific events.

Actions for the World Health Organization

- ▶ Create and maintain a library of patients' and families' experience of avoidable harm, from around the world, told by themselves, and make it accessible in modern multimedia formats.
- ▶ Suggest ways in which patients can be included as faculty in patient safety teaching.

STRATEGY 4.3:

Increase public awareness and build capacity of patient advocates and champions for patient safety.

Actions for Governments

- ▶ Develop a national plan to increase public awareness of patient safety issues.
- ▶ Develop a plan for public education in patient safety, including in the schools and communities where feasible.
- ▶ Support and empower the development of national networks of Patient Advocates and Champions to work with the WHO Patients for Patient Safety (PFPS) Programme.
- ▶ Establish, train and support a panel of patient and family advocates for patient safety to act as speakers at national and local conferences.

Actions for Health Care Facilities

- ▶ Conduct a wide-ranging review to assess the strength of the patient's voice for improvement of safety in health care within the organization.
- ▶ Institute measures to fully engage with patients and families to enhance their opportunities to contribute to processes to improve patient safety.
- ▶ Provide informational materials to patients regarding patient safety issues.

Actions for Stakeholders

- ▶ Use networks and collaborations to identify, recruit and train patient advocates and champions for patient safety to serve as patient representatives in government and health care settings.
- ▶ Develop and disseminate informational patient materials on different aspects of patient safety.
- ▶ Participate in public awareness campaigns.
- ▶ Work with the government to support the development of the national Patients for Patient Safety Programme.

Actions for the World Health Organization

- ▶ Empower the WHO Patients for Patient Safety Programme and provide guidance, technical support and information on sources of training to help expand the capacity and capability of patient and family advocacy and positive influence in health care planning and provision.
- ▶ Provide support for public awareness campaigns and promote WHO patient safety materials.
- ▶ Facilitate relationships between civil society, patient advocates, and government agencies.

STRATEGY 4.4:

Establish the principle of openness throughout health care including patient safety incident disclosure to patients and families.

Actions for Governments

- ▶ Develop national guidance for informed consent, for patient access to their medical records, and for patient/family ability to escalate care if they perceive a patient to be deteriorating.
- ▶ Develop a policy that prevents action against patients or providers who raise concerns about the safety of care or risks in the care environment.
- ▶ Develop a guidance framework and procedures for enabling health care providers to disclose to patients and families the adverse events that have caused (or could have caused) inadvertent harm.
- ▶ Consider introducing legislation on disclosure policies to inform patients and families, where guidance has not been effective.

Actions for Health Care Facilities

- ▶ Develop institutional policies for robust informed consent, for patient access to their medical records, and for emergency escalation systems that can be triggered by patients and families.
- ▶ Develop and implement disclosure policies and procedures to inform patients and families of patient safety incidents that caused (or could have caused) inadvertent harm.
- ▶ Create patient safety reporting systems that encourage patient and family reports and hold the institution accountable for learning and improvement.
- ▶ Ensure that patients, families and health care staff (the “second victims”) are given ongoing psychological and other support in the aftermath of a serious patient safety incident.

Actions for Stakeholders

- ▶ Raise awareness about safety reporting systems, right to access medical records, right to informed consent, right to emergency response, and other patient safety avenues available to patients.
- ▶ Raise awareness of civil society, patients and families and seek the full support of professional bodies and their members to a policy of open disclosure of patient safety incidents to patients and family members.
- ▶ Organize a flow of information from stakeholders about practical experience of the open disclosure policy and other transparency initiatives and suggestions for improvement.
- ▶ Raise awareness of civil society, patients and families about the positive purpose of the open disclosure policy and their entitlements under it.

Actions for the World Health Organization

- ▶ Recommend policies on transparency, patient information, and full disclosure, including references for sample policies and advice on implementation.
- ▶ Encourage Member States to introduce policies promoting transparency, including open disclosure policies, as a way of demonstrating their commitment to a positive patient safety culture in their health systems.
- ▶ Provide guidance on best practice in designing and operating open disclosure policies and legislation.

STRATEGY 4.5:

Ensure that patient and family representatives are an integral part in implementing the Global Patient Safety Action Plan.

Actions for Governments

- ▶ Develop a national patient safety charter or bill of rights with legal standing, to include such concepts as patient rights to safety, respect, autonomy, reliable care, information and transparency.
- ▶ Promote the concept of safe, respectful care as a human right.

Actions for Health Care Facilities

- ▶ Pledge to operate according to patient rights as outlined by the charter.
- ▶ Develop policies around the provisions of the charter, including non-discrimination, patient autonomy, informed consent and shared decision making, emergency response, access to medical records, full disclosure of adverse events.

Actions for Stakeholders

- ▶ Disseminate patient safety rights charter and promote the idea of patient safety as a human right; urge patients to speak up.
- ▶ Develop patient informational materials on various components of the patient safety charter.

Actions for the World Health Organization

- ▶ Create a model patient safety rights charter or showcase existing ones; offer rationale for patient safety as a human right and guidance on developing and implementing charters.

Strategic Objective 5

Inspire, educate and skill health workers to contribute to the design and delivery of safe care systems



Whilst all health professionals are committed to keeping their patients safe, the majority will believe they are discharging this commitment through practising within the ethical code of practice which is synonymous with being a member of their profession. Fewer will think beyond this to fully appreciate the scope of the risks involved in the delivery of health care and the scale of avoidable harm, including preventable and treatable harm, that arises on a daily basis within every health care system in the world.

This lack of awareness and understanding of such an important problem amongst many providers at the point of care may seem puzzling. It is certainly not because of any lack of compassion on the part of health professionals. It is because traditional undergraduate, postgraduate and continuing education programmes place emphasis on evidence-based practice and standards that are disease, or clinical condition, orientated. The systems aspects of safety issues are often missing, and programmes provide no training on human factors (or ergonomics).

Moreover, training in the softer clinical skills is largely focussed on listening to, and communicating with, the

patient. All this is important. Indeed, it is essential to delivering safe and quality care and achieving the best outcomes from diagnosis, treatment and other clinical processes of care. However, an approach based on a series of individual episodes of care is not enough. A full appreciation is necessary of the scale and nature of risks in the delivery of care together with knowledge of how to gear practice towards minimizing or eliminating them. That requires a realization that every individual clinical encounter is embedded within a wider system of care delivery that can affect the safety of the patient at any particular moment.

It is essential that all health workers, managers and leaders understand patient safety. In particular, they must be clear about: the nature and importance of risk and how harm is generated, the core concepts of patient safety science, the ways in which the causes of unsafe care are investigated and understood, and the actions necessary to ensure that care and the individual processes that make it up are as safe as is possible.

The WHO has published a *Patient Safety Curriculum Guide for Medical Schools* and also a *Multi-professional Edition*.

Both have been widely disseminated and have been adopted in some countries. Major groups of health care providers around the world have developed patient safety educational curricula. So too have regulatory and professional education bodies in different countries.

Despite this, the influence of these initiatives on existing curricula has been very limited. The challenge is not in creating policies, it is in their implementation. There are multiple barriers to ensuring that patient safety is a major component of education and training programmes. These include: lack of curriculum space, absence of buy-in from stakeholders, weaknesses in educational coordination and planning, limited leadership interest, and insufficient senior medical and nursing champions.

In addition, a number of factors have impeded patient safety education which include:

- ▶ Unfamiliarity of educators or trainers to teach patient safety as a new area of knowledge and learning.
- ▶ Reluctance by academic institutions to teach health care students knowledge outside clinical disciplines because of existing full curricula.
- ▶ Education has not kept up with technological and system advances for safe care.

In many low-income settings there is not even sufficient training within a discipline. For example, radiation therapists might practice in their specialty without having been in any formal, accredited training programme. It makes it even more challenging to then train them in patient safety without that basic training in their speciality.

Also, in such settings, many health care professionals provide a wide range of clinical services. They may do general surgery but also Caesarean sections. They may investigate and care for children with high fevers and adults with malaria. They may treat a wide range of neglected tropical diseases and diagnose cancer without sophisticated technology. It is difficult for people, heavily overloaded with such pressures of complex clinical multi-tasking, to learn additional competencies in patient safety that they can integrate into their practice. The content of

patient safety curricula in low-income countries must take account of the special and diverse circumstances faced by health care professionals working there.

The decision-making for curriculum setting and implementation varies around the world. In many countries, the overall responsibility rests with ministries of education not ministries of health. Accreditation bodies or professional regulators, where they exist, may have overall accountability for what gets taught, when and to whom. Professional bodies and membership associations such as medical and nursing colleges may set and monitor educational standards that then drive curriculum design. Obviously, the educational providers themselves, whether in universities or in free-standing schools and institutes, are important policy-makers too. Leverage from these disparate bodies to achieve change is absolutely essential and currently lacking.

In summary, education and training of health professionals has been under-used and under-valued as a vital tool to address the challenges of achieving improved patient safety as it is understood today.

Traditionally, education of health care professionals gives little attention to the importance of patient safety so that:

- ▶ There is no professional ethos that a practitioner's responsibilities must extend beyond the care of individual patients to ensuring that their service as a whole is safe;
- ▶ There is little understanding of the nature of risk in health care and the importance of strengthening systems;
- ▶ There is minimal emphasis on the importance of teamwork and communication in protecting patients from harm.

Looking at best practice within health care and other high-risk industries, it is clear that new radical approaches, including inter-professional and multi-disciplinary approaches are needed if education and training are to play the full role that they should in improving patient safety.

Strategic Objective 5:

Inspire, educate and skill health workers to contribute to the design and delivery of safe care systems.

STRATEGY 5.1: Incorporate patient safety within all health professional undergraduate and postgraduate education curricula and broader professional development and training programmes, emphasizing an inter-professional approach.	Actions for Governments <ul style="list-style-type: none">▶ Reach agreement with bodies responsible for standards and curriculum-setting in professional education and training that patient safety is a core component.▶ Develop specialized courses on patient safety for in-service training and continuous professional development of health care professionals.▶ Align approaches where possible with the <i>WHO Patient Safety Curriculum Guide</i>.▶ Include patient engagement as a core component.▶ Include patients as part of the teaching faculty wherever possible, to impart the patient viewpoint on patient engagement or other patient safety areas in which they have experience or expertise.
	Actions for Health Care Facilities <ul style="list-style-type: none">▶ Establish a core training module in the basic concepts and principles of patient safety for all professional staff, with certification of satisfactory completion.▶ Provide advanced training in patient safety methods for those with professional and management leadership roles.▶ Design specialized training programmes for staff working in high-risk areas such as intensive care and emergency departments.▶ Include patients as teaching faculty wherever possible.
	Actions for Stakeholders <ul style="list-style-type: none">▶ Convene a forum for representatives of medical and nursing schools, professional bodies and scientific societies and education and training agencies to advise government and health organizations on the design, content and delivery of patient safety education and training programmes.
	Actions for the World Health Organization <ul style="list-style-type: none">▶ Revise and improve the <i>WHO Patient Safety Curriculum Guide</i> based on feedback, experience of use and scientific developments, focusing on inter-professional education.▶ Introduce patient safety modular training through open access platforms such as the WHO Academy.▶ Facilitate the design of patient safety education and training programmes to meet the needs and differing contexts of low- and middle-income countries.
	STRATEGY 5.2: Identify and develop centres of excellence for patient safety education and training.
Actions for Governments <ul style="list-style-type: none">▶ Designate one or more centres in the country to provide leadership, support, research and innovation in patient safety education and training.▶ Advance the use of simulation methods throughout the professional education and training system, identifying centres to lead the development process.	
Actions for Health Care Facilities <ul style="list-style-type: none">▶ Work closely with national patient safety centres and allied agencies to provide a high standard of education and training in patient safety within the organization.▶ Feedback information on innovations and successes within the organization's services to the national centres so that it can be applied more widely.	

	<ul style="list-style-type: none"> Identify staff members who could be developed as trainers for patient safety and facilitate their training and skill acquisition. <p>Actions for Stakeholders</p> <ul style="list-style-type: none"> Bring together all relevant stakeholders to advise and support the drive for excellence in patient safety education and training covering areas such as: the training-the-trainer function, expertise in course and curricular design, teaching and training methods, and further development of simulation techniques. <p>Actions for the World Health Organization</p> <ul style="list-style-type: none"> Establish WHO Collaborating Centres for patient safety education and training. Develop a global network of national centres of excellence for patient safety education and training to share best practice, ideas and innovations.
<p>STRATEGY 5.3:</p> <p>Ensure that patient safety core competencies are part of regulatory requirements for all health professionals.</p>	<p>Actions for Governments</p> <ul style="list-style-type: none"> Work with licensing, regulatory and accreditation bodies to ensure that there are clear linkages between patient safety and individual and organizational performance. Define the core competencies, including patient engagement, for each health care profession and specialist clinical role in order to assure and improve patient safety. <p>Actions for Health Care Facilities</p> <ul style="list-style-type: none"> Conduct periodic competency assessment for health care professionals for patient safety skills. Incorporate patient safety skills in job descriptions of health care professionals. Link patient safety competencies to service standards. <p>Actions for Stakeholders</p> <ul style="list-style-type: none"> Convene experts, researchers, educators and civil society to prepare ideas and initiatives to advance the routine use of patient safety competencies in the health care workforce. <p>Actions for the World Health Organization</p> <ul style="list-style-type: none"> Specify a set of patient safety competencies for different health professionals and align it with WHO UHC competency framework. Work with national professional licensing and regulatory bodies to adopt a common global standard for patient safety competencies and their assessment.
<p>STRATEGY 5.4:</p> <p>Link commitment to patient safety with appraisal systems for health care professionals and managers.</p>	<p>Actions for Governments</p> <ul style="list-style-type: none"> Ensure that health care staff annual performance assessments contain measures related to participation in patient safety programmes. Explore mechanisms, such as incentives and markers of esteem, that recognize exceptional achievement by individual members of staff in improving patient safety. <p>Actions for Health Care Facilities</p> <ul style="list-style-type: none"> Establish an internal appraisal system to monitor skill in understanding sources of harm, participation in solution development and evidence of achieving gains in patient safety in clinical services. Recognize particularly those who have identified sources of risk and implemented successful measures to combat them. Incorporate, into assessments, team-based aspects of patient safety performance.



Actions for Stakeholders

- Bring together the evidence and experience of all relevant stakeholders to provide advice on defining excellence in patient safety work by individuals and teams and advise on the best assessment methods and tools.

Actions for the World Health Organization

- Create a global standard, tools and methods for assessment of performance of individuals and teams involved in patient safety work.

STRATEGY 5.5:
Design care settings, environments and practices to provide the safest circumstances and equipment for health workers.

Actions for Governments

- Define and implement standards and guidelines for personal protection, safety and security of health workers throughout the country's health system.
- Ensure that regulatory and monitoring systems assure the safety in the design and use of medical equipment and technology so that risks to health workers and patients are minimized.
- Develop a national framework for identifying and mitigating hazards and risks in the health care environment.

Actions for Health Care Facilities

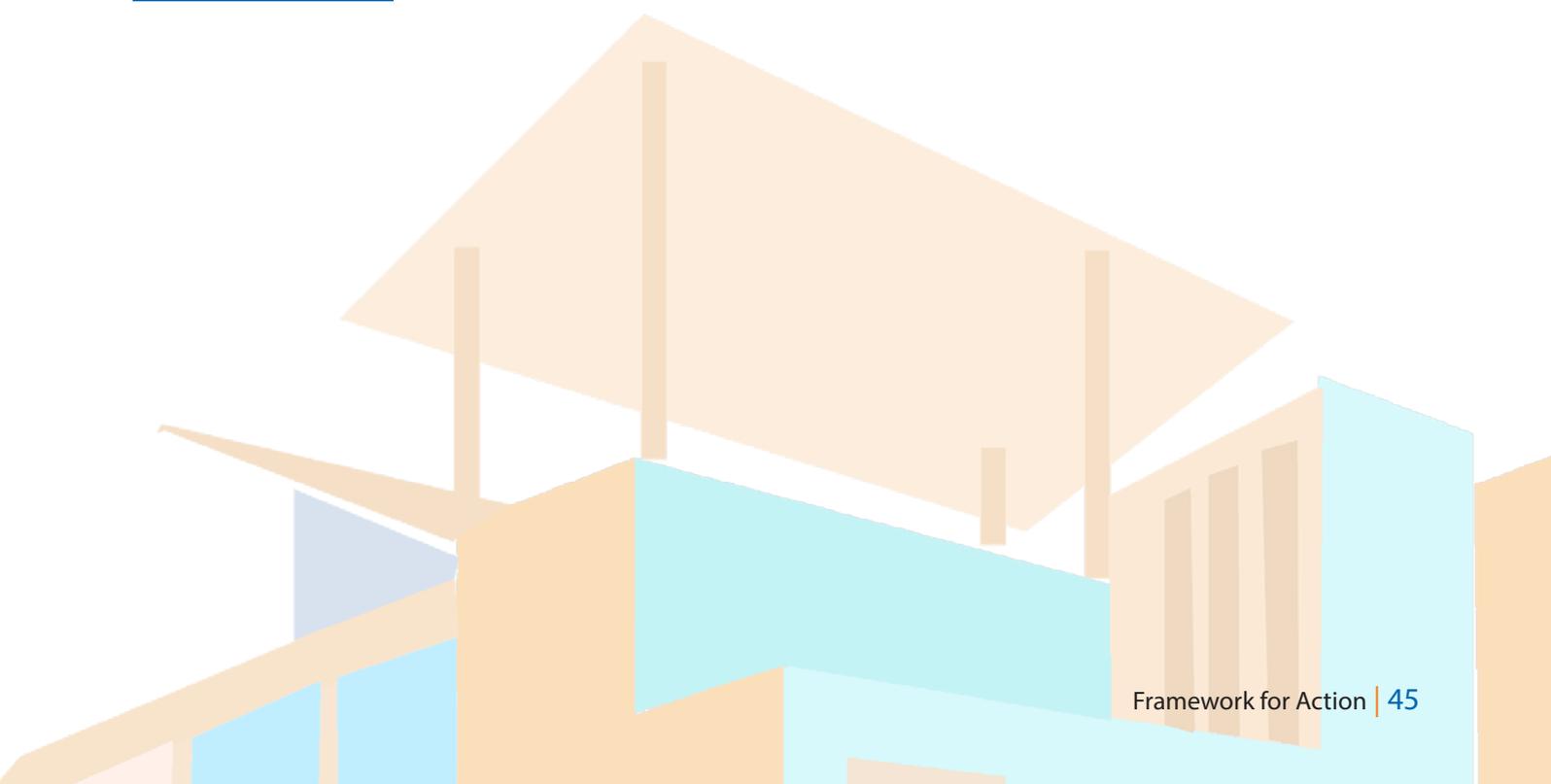
- Maintain levels of personal protective equipment for health workers for expected workload but store appropriate supplies to respond to emergencies.
- Proactively assess all care settings to identify and mitigate hazards and risks to safety using the national framework as a guide.
- Establish a strong programme to support health workers in relation to physical safety, mental health, psychological safety and well-being.

Actions for Stakeholders

- Engage professional bodies, the medical device industry and experts and researchers to provide advice to government and the health care systems on actions to keep health workers safe in all respects.

Actions for the World Health Organization

- Develop norms, standards and guidance for health worker safety aiming to achieve a consistent approach globally.



Strategic Objective 6

Ensure a constant flow of information and knowledge to drive the mitigation of risk, the reduction in levels of avoidable harm, and improvement in the safety of care



Every health programme requires a source of valid, reliable data to provide information and construct measures for its key activities such as: identifying priorities and problems; comparative benchmarking; formulating action; monitoring performance and impact. There has been a long tradition of developing such an information infrastructure in established fields of public health, notably communicable disease prevention and control. Some of this goes back to the late 19th century. Indeed, without good data and information systems, little progress would have been made in reducing the spread and overall burden of infection in the world.

Through the 20th century, a similar approach was taken to non-communicable diseases like cancer, heart disease, diabetes, obesity, hypertension, and many more. Data were collected on risk, causal factors, mortality and other outcomes. These developments have continued into the 21st century and provide an essential resource to underpin national and global non-communicable disease programmes. Similarly, the vitally important programmes to prevent premature deaths, reduce poverty-related illness and improve health of adults and children in many

parts of the world are dependent on good data and its focused analysis; the work to provide the breadth and depth of information required has been crucial to the gains that have been made.

The need for comprehensive information systems is beyond doubt in programmes with clear goals and targeted improved health outcomes.

Despite a decade or more of work in patient safety, the capacity and capability of global, national and local programmes to reduce risk, avoid harm and improve the safety of health care remains severely constrained by the absence of high-quality information systems. There are many different sources of data that can throw light on patient safety including: incident reporting systems, complaints, malpractice claims, patient reported outcomes, avoidable deaths, case note trigger tools, clinical care audits, organizational culture surveys, and significant event audits. Except for patient safety incidents, most of the data were developed for other purposes. They can only be seen as proxy indicators of patient safety, albeit that some are very helpful functioning in that way.

Current data sources are therefore fragmented and disparate and fall well short of the comprehensive, integrated information system needed within patient safety programmes. Still, few health care leaders can confidently describe which data their organizations use to monitor and learn from patient safety incidents. Even fewer understand their strengths and limitations for understanding patient safety. An appraisal of what each data source can add in relation to the key concepts described in the WHO International Classification for Patient Safety would pinpoint where further investment is needed.

Threading through all information flows should be the experiences and views of patients and their families. This is so often missing or not prioritized in the design of all health information systems.

The key role of reporting and learning systems

The greatest investment of time and money has been in establishing and running patient safety incident reporting systems. Some have accumulated large data bases. There is much to be learned from other high-risk industries where reporting, investigation, and response takes place in a culture of “no-blame” and has a strong emphasis on learning. So much so, that reduction in risk and improvement of safety are regularly demonstrated. This is not generally the case in health care, though there are some exemplars around the world mainly at the health facility level.

Many patient safety programmes have raised very high expectations about the potential impact of incident reporting and learning systems. Ideally all occurrences in a health service that have caused, or could have caused harm, would be quickly documented and fully reviewed and investigated. Resulting action would lead to re-design of processes of care, products, procedures and changes to the working practices and styles of individuals and teams. Such actions would usually lead to measurable and sustained reduction of risk for future patients. Some types of harm would be eliminated entirely. Yet, very few health systems or health facilities in the world can approach this ideal level of performance in capturing and learning from incidents of avoidable harm.

A reporting system should aim to be resourced appropriately to the quantity of incidents reported. If too many events are being reported to realistically handle or even look at, let alone review, this lets down those who are taking time out to conscientiously file these reports. In the absence of such a capacity, organizations could be

selective about themes and topics, and specify the types of incidents to be reported. This is moving reporting systems much more into real-time risk management and improvement systems (as they tend to be in other sectors). Local discussion and investigation will produce the deep insights into probable causation.

In order to address the difficulties in enabling patient safety incident reporting to reach its full potential, the WHO published *Patient Safety Incident Reporting and Learning Systems: Technical Report and Guidance*, in 2020.

Thinking more deeply about measurement

Whatever data are used to assess a health system’s or health organization’s level of patient safety, the process should be strongly linked to learning and improvement. If measurement does not have a “learning loop,” it will be of very limited value.

This is easy to say but operationalising this principle is much more difficult. For example, how does the analysis of patient safety incident data:

- ▶ Lead to the reduction of avoidable deaths in a hospital’s intensive care unit?
- ▶ Reduce serious medicine dispensing errors in every pharmacy in a country?
- ▶ Stop all suicides in a mental health unit?
- ▶ Reduce health care associated infection rates in a rural hospital with no fresh running water?
- ▶ Eliminate the transmission of blood borne viral diseases via contaminated needles in a refugee camp?

Measurement in patient safety should be grounded in the data that are collected regularly for operating and managing health care systems. It should also be supported by governance activities that are actually strengthening the information infrastructure in such a way that patient safety can be measured. Most of the discussion about patient safety data is about its reactive use. Much less attention is given to initiatives that use such data for anticipative, proactive learning.

There are also important opportunities to strengthen the capability of information systems, for example linkage of patient safety incident reports to medical records and other data sources and the whole field of big data and artificial intelligence. Such innovations have the potential to provide much deeper insights into the causation of harm as well as ways to reduce it.

A *Salzburg Global Seminar* held at the end of 2019 set out a series of principles for measuring patient safety:

- ▶ The purpose of measurement is to collect and disseminate knowledge that results in action and improvement.
- ▶ Effective measurement requires the full involvement of patients, families, and communities within and across the health system.
- ▶ Safety measurement must advance equity.
- ▶ Selected measures must illuminate an integrated view of the health system across the continuum of care and the entire trajectory of the patient's health journey.
- ▶ Data should be collected and analysed in real time to proactively identify and prevent harm as often as possible.
- ▶ Measurement systems, evidence, and practices must continuously evolve and adapt.
- ▶ The burden of measures collected and analysed must be reduced.
- ▶ Stakeholders must intentionally foster a culture that is safe and just to fully optimise the value of measurement.

These principles will be more challenging to operationalize in some countries, health care organizations and care contexts than others. Countries will have different levels of investment in information systems and, in-turn, their capability for measurement will be hindered by the available technology, expertise and resource allocated. There is no doubt that commitment is needed to progress analytical capability to improve patient safety. In doing so, health care organizations should aspire to move from purely descriptive or diagnostic phases of working – from what happened? and why did it happen? – to predictive (what is likely to happen?) and prescriptive (what can we make happen?) capabilities.

Once priority issues for intervention are identified, established methods of quality improvement can be used to design and redesign systems and processes to improve patient safety. From decades of successful application in health care, the models of change developed through improvement science, can support teams to: articulate the aim of the project and structure plans for developing and testing the changes; monitor the impact of the changes; and sustain success.

Research: Generating knowledge through research offers solutions to unsafe care

One of the major strategic goals of patient safety research is to produce new knowledge that improves the capability of health care systems, as well as the health organizations and practitioners that comprise them, to reduce the harm associated with health care. Ideally, the outcomes of research studies would be generalizable to other health care systems around the world.

When the scale and nature of errors and harm in health care first became apparent, in the late 1990s, through studies of its incidence and prevalence in hospital patient populations, patient safety became a priority for health policy makers in many parts of the world. An active field of research sprung up with considerable resources allocated to this discipline.

Research and development was one of the priority areas when the WHO Patient Safety Programme was first established. Patient safety research has taken a number of directions since then. This includes studies on the extent and causation of harm to patients in various clinical specialities (e.g., anaesthetics), in treatment areas (e.g., medication), in demographic groups (e.g., neonates) and settings (e.g., operating rooms); problems with an established pattern of harm have been re-conceptualised and studied in patient safety terms (e.g., health care infection); technological and other solutions to reduce risk have been evaluated; and the safety concepts and interventions from other disciplines have been applied to medicine and health care.

Over the last decade, there have been attempts to translate this research to improve the safety of care and reduce the relatively high burden of harm. New methodological work is needed in some key areas including: a) greater use of theory and logic models; b) clearer understanding of the relationship between the surrogate end-points employed in many studies and actual harm; c) better descriptions of interventions and their proposed mechanisms of effect and pathways to implementation; d) improved explanation of desired and unintended outcomes; and e) more detailed description and measurement of context and of how this influences intervention effectiveness.

Previous methodological advances should not be set aside lightly. Researchers should be alert to challenges which can arise when unconventional concepts and definitions are used to improve the quality and value of this work. It will

be particularly helpful to use agreed terminology, develop a core set of study patient safety outcome measures (and their hierarchical ordering), and produce more patient safety reporting checklists. Careful alignment to the WHO International Classification for Patient Safety will support the global sharing of data for priority setting, exchange of solutions for common challenges and maximise opportunities to learn from rare events.

The greatest research need for the coming decade is for trials to formally evaluate the effectiveness of policy, public health actions or clinical interventions aimed at improving patient safety. In developing such trials, investigators must learn from progress in other clinical areas (such as cardiovascular and neurological diseases) where testing a range of intervention at scale has been possible through so-called “mega” trials. The parallel is not straightforward, though. Many such trials have involved therapeutic interventions, whereas in patient safety most interventions are likely to be complex, non-pharmacological interventions. The development of trials will require ambition and co-operation amongst investigators seldom previously seen in patient safety research.

There is a great paucity of research on the scale and nature of harm in primary care, in mental health services, and amongst vulnerable groups of patients (such as older adults and disabled people). Also, in low- and middle-income countries, there is an urgent need to identify, develop and test locally effective and affordable solutions and risk-reduction strategies, and to evaluate the impact of patient safety interventions.

The global move from paper-based systems to digital infrastructures is an enabler for patient safety research and innovation to be carried out in timely, efficient and cost-effective ways. Interrogation of electronic health record data could become the default approach to studies into the epidemiology and disease burden from patient safety incidents. Such infrastructures can also be used to develop risk prediction models, augmented by Artificial Intelligence-based analytical approaches, to identify those at greatest risk of harm from patient safety incidents. Developments in health information technology also offer opportunities to support care delivery and self-management through for example professional or patient-facing computerized decision support. The move to digital infrastructures is not without risks – for example, from biased algorithms and for data breaches that can involve entire populations. For the immediate future, these technologies will be limited to well-resourced health systems.

The translation of research into improvements in patient safety does not begin and end with the presentation of the research findings to policy-makers and practitioners. The implementation of new practices almost always involves a process of organizational development, including aspects of professional attitudes and culture. It must be a priority to focus research programmes on problems and apply definitive solutions if health care is to be made safer. Much closer relationships with policy makers will be essential to move from the current “push” model of knowledge translation to a “pull” model in which researchers respond faster to the needs of decision-makers.

Strategic Objective 6:

Ensure a constant flow of information and knowledge to drive the mitigation of risk, the reduction in levels of avoidable harm, and improvement in the safety of care.

<p>STRATEGY 6.1:</p> <p>Establish or strengthen patient safety incident reporting and learning systems.</p>	<p>Actions for Governments</p> <ul style="list-style-type: none"> ▶ Review existing arrangements for reporting and learning from patient safety incidents and make improvements where necessary to the system (<i>WHO Patient Safety Incident Reporting and Learning Systems: Technical Report and Guidance, 2020</i> is an essential source). ▶ Establish a system of alerts for the health care system to draw attention to, and advise action on, patient safety incidents that highlight risks with system-wide implications. ▶ Establish the principle of patient safety incident reporting with involvement of patients and families. ▶ Support and facilitate timely access to data for research and development purposes.
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Actions for Health Care Facilities

- ▶ Appraise the functionality of the current patient safety incident reporting system aligned with WHO Patient Safety Incident Reporting and Learning Systems: Technical Report and Guidance, 2020 and any national guidance.
- ▶ Use the reporting and learning system to identify patient safety priorities to be addressed by improvement activities.
- ▶ Establish (if none present) or adjust the reporting and learning system to an appropriate scale given the capacity of the organization to capture, analyze and investigate incidents; support increased capacity where there are clear benefits in reducing severe harm and death.
- ▶ Engage and enthuse all the organization's staff in the reporting and learning endeavour by feeding back what has been learned and what actions have been taken to improve safety.

Actions for Stakeholders

- ▶ Raise awareness of the importance of reporting patient safety incidents and disseminating the learnings, and the need to promote health organizational cultures and professional values to do this.

Actions for the World Health Organization

- ▶ Provide technical support to Member States in establishing and strengthening the reporting and learning systems.
- ▶ Create a global network of national reporting and learning systems with the purpose of sharing knowledge about patient safety incidents and sources of avoidable harm that could affect multiple countries and health facilities; and disseminating the learnings.

STRATEGY 6.2:

Create an integrated patient safety information system based on all sources of data related to risks and harm inherent in the delivery of health care.

Actions for Governments

- ▶ Strengthen synergies and data-sharing channels between sources of patient safety information for timely action and intervention, including: incident reporting systems (including patient reports); malpractice claims; patient-reported experience and outcome measures; clinical care audits; surveys; significant event audits; and safety surveillance data for blood products, medicines, vaccines and medical devices.
- ▶ Publish an independently audited annual report on patient safety performance of the health system of the country.
- ▶ Institute an independent investigation mechanism in cases of severe harm and death.

Actions for Health Care Facilities

- ▶ Identify and track the sources of avoidable harm across the organization and in each clinical service.
- ▶ Make a public report on a regular basis on the frequency, nature and burden of avoidable harm in each clinical service and implement the plans to reduce it.
- ▶ Produce benchmark analyses to compare the organization's performance in dealing with avoidable harm against "best in class" elsewhere in the country and in the world.

Actions for Stakeholders

- ▶ Convene groups of experts, researchers, and civil society to develop better methodologies and data systems to measure the safety of health care and ways to evaluate progress.

Actions for the World Health Organization

- ▶ Conduct a regular global burden of avoidable harm in health care study.
- ▶ Monitor progress and facilitate achievement of safety-related SDG targets.
- ▶ Include global patient safety targets in the WHO General Programme of Work (GPW) 13 Results Framework: WHO Impact Measurement.

STRATEGY 6.3:

Build and develop capacity and capability of patient safety improvement programmes.

Actions for Governments

- ▶ Develop a focus of national expertise in improvement science adapted to the field of patient safety.
- ▶ Create a knowledge base of effective patient safety solutions and practices for the health system to draw on.
- ▶ Design accountability mechanisms, informed by rigorous evaluation, to ensure that progress is made in reducing harm and improving patient safety throughout the health care system.

Actions for Health Care Facilities

- ▶ Create and develop a team within the organization with improvement science skills to facilitate the work of clinical teams.
- ▶ Select patient safety problems and themes, both organization-wide and in each clinical service, for targeted improvement action.
- ▶ Evaluate the impact of improvement programmes with emphasis on sustaining the benefits over time.

Actions for Stakeholders

- ▶ Bring together expertise and experience in improvement science in other fields of health care and outside the health sector; make these resources available to advise on national and local programmes.
- ▶ Share learning programmes within and between professional bodies and specialist societies to develop effective solutions to avoidable harm and death.

Actions for the World Health Organization

- ▶ Develop normative guidance on learning and improvement methodology for patient safety.

STRATEGY 6.4:

Develop active and funded patient safety research programmes, especially translational research.

Actions for Governments

- ▶ Map, analyze, and prioritize areas where research could yield substantial gains of knowledge about avoidable harm and its reduction in the country's health care system.
- ▶ Ensure that there is sufficient capacity, skill and resources to meet the country's need for patient safety research.
- ▶ Incorporate international research evidence in policy and implementation programmes for patient safety and facilitate its translation in point-of-care practices.

Actions for Health Care Facilities

- ▶ Provide a conducive environment for research exploring the causes of avoidable harm and the development of effective interventions to improve patient safety.
- ▶ Base the design of patient safety improvement programmes in each clinical service on the priorities apparent from local data and use available research evidence on effective solutions and safest practices to improve the system.
- ▶ Partner with researchers on measurement and improvement research.

Actions for Stakeholders

- ▶ Convene research funding bodies, researchers and research partners to advance the agenda of patient safety research.
- ▶ Ensure that patients and families play a substantive role in: setting research priorities, study design, conduct of studies, advocacy for funding, and research governance.

Actions for the World Health Organization

- ▶ Maintain an up-to-date research strategy identifying patient safety research priorities in high-, middle- and low-income countries.
- ▶ Promote high-quality studies of patient safety in under-researched areas e.g., low-income countries, primary care, mental health, older people, disabled people.
- ▶ Help to build stronger research infrastructure in low-income countries.

STRATEGY 6.5:

Develop a digital strategy to improve the safety of health care.

Actions for Governments

- ▶ Develop a new national strategy and tools or harmonize the existing relevant strategy to bring the benefits of digitization, including harnessing artificial intelligence and big data, to efforts to improve the safety of health care in the country.
- ▶ Promote and support digitization of health care processes such as medical records, electronic prescribing and clinical decision support systems.
- ▶ Provide regulatory or legal means to use health care data for timely analytical purposes without compromising the privacy, confidentiality and ethical standard of care of individual patients and citizens.

Actions for Health Care Facilities

- ▶ Develop existing and new digital technologies to enhance the identification and analysis of risk, avoidable harm and patient safety incidents.
- ▶ Implement new and proven technologies to improve the safety of care at scale.
- ▶ Provide feedback on information and experience of using digital technology in the organization's patient safety programmes to those responsible for the national strategy.

Actions for Stakeholders

- ▶ Connect private sector technology innovators to health system and clinical leaders to explore new, more effective ways to identify risk and potential harm and discover new routes to improve patient safety.
- ▶ Promote and fund innovative use of digital technology for patient safety improvement.

Actions for the World Health Organization

- ▶ Explore digital approaches for identifying and communicating sources of risk and avoidable harm that are problematic in health care systems globally.
- ▶ Evolve a policy framework, practice areas and ethical and regulatory considerations in the use of digital technologies to enhance patient safety.
- ▶ Develop a database and taxonomy of the harms potentially associated with digital technologies.

Strategic Objective 7

**Develop and sustain
multisectoral and
multinational synergy,
solidarity and
partnership to improve
patient safety**



Over the last two decades, the approach to improve patient safety has been primarily through the health system lens, with few defined mechanisms and structures to translate patient safety systems elements to the point of care at the patient's end.

Several allied safety-related programmes and clinical programmes operate in isolation with limited interaction, integration or any direct and mandated linkages with the systems elements of patient safety. The missing link has been the lack of institutionalization of patient safety in different programmes and practice areas. Patient safety is an important part of health care delivery at all levels, including community, primary and hospital settings.

It is vital to develop mechanisms to integrate and implement patient safety strategies in all technical global health programmes, vertical disease programmes and risk areas. This will have potential impact in reducing avoidable harm and mitigating the risk of such harm related to health care procedures, products and devices. Key areas within the scope for action include: medication safety, surgical safety, infection control, sepsis management, diagnostic safety, environmental hygiene and infrastructure,

injection safety, blood safety and radiation safety, among others.

The commonalities and uniqueness for each area of safety needs to be recognized and identified. The Global Patient Safety Action Plan seeks to do this through integration and enhancement of the capacity and resources of the uniqueness for greater good.

Due to its integrated role in all health systems, to improve patient safety globally it is essential to work in synergy with an extensive range of partnerships such as Member States, inter-governmental bodies, specialized UN agencies (e.g., UNICEF, ILO), developmental partners, professional organisations, NGOs, civil society, patient organizations, universities, experts and patient safety advocates and champions.

Partnerships have helped to shape the design and delivery of WHO patient safety initiatives. For example, the first WHO Global Patient Safety Challenge: *Clean Care is Safer Care*, brought together almost all the world's experts in health care associated infection prevention and control. They helped to draw up the first ever set of evidence-based

guidelines on hand hygiene issued by WHO to underpin implementation of the Challenge. A coalition of Member States, professional associations, academic centres, NGOs and patient representatives helped to drive forward a programme whose core objectives were adopted to cover 90% of the world's population.

WHO encourages stakeholders to build collaborative initiatives to improve safety of health systems globally and support especially low- and middle-income countries. Initiatives, such as the Global Patient Safety Collaborative, can help to reduce the risk of avoidable harm and improve the safety of at national health care systems as well as at facility level.

To amplify and disseminate good patient safety practices and learning at all levels, it is important to build partnerships and establish networks across the world. All collaborative initiatives and partnerships should be based on mutual respect and trust, clear communication and shared vision of the desired outcome. Strong cohesive coordination, co-planning and co-production could be the foundation of such patient safety partnerships. All patient safety partnerships should be multidisciplinary and multisectoral in composition.

There is a great value to have networks that stimulate dialogue, share adaptable strategies of low-cost interventions, promote continuous learning and key lessons learned that can also work in low- and middle-income countries or fragile states. Patient safety networks that include various types of stakeholders and that are multidisciplinary can be helpful in improving people-

centred, integrated care and move towards Universal Health Coverage. Multiple stakeholders are active in the field of patient safety and a wealth of experience, best practices and lessons learned are available.

In the last few years, WHO has established a Global Patient Safety Network to connect: actors and stakeholders from national and international patient safety and quality agencies and institutions; ministries of health; national, regional, zonal focal points from countries across all six WHO regions; WHO country, regional and global focal points for patient safety and quality of care; international professional bodies and other key stakeholders. The key objectives of this network are to: encourage leadership commitment; collect evidence from a variety of standpoints, inform future policies and practice; strengthen knowledge transfer and technical capacity across borders; institutionalize patient safety for sustainability; encourage the sharing and application of best practices.

WHO's strategic objectives in the area of patient safety are to provide global leadership for patient safety and to harness knowledge, expertise and innovation to improve patient safety in health care settings. WHO's unique convening role at the global level provides a vehicle for improving patient safety and managing risk in health care through inter-national collaboration, engagement and coordinated action between Member States, institutions, technical experts, patients, civil society, industry, as well as development partners and other stakeholders.

Strategic Objective 7:

Develop and sustain multisectoral and multinational synergy, solidarity and partnership to improve patient safety.

STRATEGY 7.1: Fully engage all stakeholders that have the potential to have a positive impact on patient safety.	Actions for Governments <ul style="list-style-type: none"> Conduct an analysis of the roles of all individuals and organizations with a part (or potential part) to play in promoting or advancing patient safety within the country's health system. Establish clear and comprehensive coordination mechanisms for stakeholder engagement.
	Actions for Health Care Facilities <ul style="list-style-type: none"> Map stakeholders for the population served, including patients, families and local community leaders, local chapters of professional associations, technical support and training providers and engage them in the organization's patient safety programmes and initiatives.

	<p>Actions for Stakeholders</p> <ul style="list-style-type: none"> Use influence with professional bodies and different sectors of health care to reduce silo-working and bring together a unified movement to promote safer care and share ideas and experiences. <p>Actions for the World Health Organization</p> <ul style="list-style-type: none"> Map all stakeholders at the global level with defined roles and responsibilities for patient safety as well as those with potential to have an impact but not currently involved. Establish networks of experts and representatives (such as civil society organizations, patients' organizations, professional bodies, research institutions, private sector and industry) that can provide authoritative advice to WHO on particular questions and problems in the field of patient safety. Create multilateral linkages and cooperation between the global patient safety initiative and programmes within the United Nations and humanitarian systems.
<p>STRATEGY 7.2:</p> <p>Promote a common understanding and shared commitment amongst all stakeholders successfully to deliver this Global Patient Safety Action Plan.</p>	<p>Actions for Governments</p> <ul style="list-style-type: none"> Create a clear narrative that fits both with the goals, principles and objectives of the Global Patient Safety Action Plan but also with the national patient safety policy and strategy and the health care context of the country. <p>Actions for Health Care Facilities</p> <ul style="list-style-type: none"> Explain the purpose of the Global Patient Safety Action Plan to all staff, patients and families and engage them in the work to deliver it. Place emphasis, in discussions with staff, in matching the Plan's goals and objectives to the emotions and values of professional staff. <p>Actions for Stakeholders</p> <ul style="list-style-type: none"> Develop, within the patient safety stakeholder community, a clear and compelling narrative that explains the Global Patient Safety Action Plan to all relevant audiences and advocates for its delivery. <p>Actions for the World Health Organization</p> <ul style="list-style-type: none"> Establish a stakeholder forum to enable open and robust feedback on progress with implementation of the Global Patient Safety Action Plan and to provide a means to identify major barriers. Expand and coordinate the expertise of the WHO Collaborating Centres and non-state actors in official relations with WHO to accelerate implementation of the Global Patient Safety Action Plan.
<p>STRATEGY 7.3:</p> <p>Establish networks and consultative meetings to provide authoritative advice in real time.</p>	<p>Actions for Governments</p> <ul style="list-style-type: none"> Establish a national patient safety advisory council to provide advice on the process of implementing the Global Patient Safety Action Plan and the national patient safety policy and strategy. Approach unconventional partners and innovators from outside health care to promote creativity in finding new solutions to reduce avoidable harm and death. <p>Actions for Health Care Facilities</p> <ul style="list-style-type: none"> Set up an in-house academy to train individuals within the organization to consult with, and engage, staff so as to champion the work to promote and deliver safe care within the organization. Participate in patient safety networks for exchanging experiences, resources and improving patient safety practices in day to day clinical care.

	<p>Actions for Stakeholders</p> <ul style="list-style-type: none"> ▶ Participate in global, regional and local initiatives, meetings, and consultations on implementing the Global Patient Safety Action Plan.
<p>STRATEGY 7.4: Foster cross-geographic and multisectoral initiatives to advance action on patient safety.</p>	<p>Actions for the World Health Organization</p> <ul style="list-style-type: none"> ▶ Strengthen the Global Patient Safety Network with inclusion of specialist advisers for specific patient safety subject areas. ▶ Expand and strengthen thematic and regional networks on patient safety.
<p>STRATEGY 7.5: Work closely with other technical programmes to strengthen patient safety, particularly in resource poor settings.</p>	<p>Actions for Governments</p> <ul style="list-style-type: none"> ▶ Participate in international collaborative patient safety initiatives. ▶ Encourage clinical and health care management leaders to seek out examples of best patient safety practice in other countries and adopt the approaches within the national health system.
	<p>Actions for Health Care Facilities</p> <ul style="list-style-type: none"> ▶ Participate in national and inter-country collaborative initiatives to seek out best patient safety practices and performance and bring the lessons from this to the design of services and programmes within the organization. ▶ Set up a scheme to allow the organization's staff to spend time in other health systems where performance in patient safety is strong.
	<p>Actions for Stakeholders</p> <ul style="list-style-type: none"> ▶ Use established international networks and bonds between professional bodies, professional medical societies, research groups and patient associations, in different countries, to express solidarity in support of the goals, principles and objectives of the Global Patient Safety Action Plan.
	<p>Actions for the World Health Organization</p> <ul style="list-style-type: none"> ▶ Mobilize the widest possible range of political commitment and international solidarity to patient safety, including by continuing to foster the annual global ministerial summits. ▶ Expand cooperation with countries for improvement in patient safety through the Global Patient Safety Collaborative. ▶ Achieve a high number of Member States making pledges to the implementation of WHO Global Patient Safety Challenges.
	<p>Actions for Governments</p> <ul style="list-style-type: none"> ▶ Review the scope and distribution of all technical health programmes within the country and identify the need for, and potential benefit of, patient safety expertise.
	<p>Actions for Health Care Facilities</p> <ul style="list-style-type: none"> ▶ Ensure that patient safety is a component of all health programmes that the organization is responsible for, especially those that have not traditionally, explicitly recognized avoidable harm as a problem.
	<p>Actions for Stakeholders</p> <ul style="list-style-type: none"> ▶ Raise the profile of patient safety in global health technical programmes (including where it has not previously been recognized as an area of concern). ▶ Mobilize resources in discussion with donors for action to reduce levels of avoidable harm in resource poor health settings.
	<p>Actions for the World Health Organization</p> <ul style="list-style-type: none"> ▶ Develop clear insights into sources and levels of avoidable harm in services delivered through other global health programmes and identify scope for collaborative action to reduce it.



6. Implementation

The Global Patient Safety Action Plan has been developed with full recognition that countries are at different stages in their efforts to reduce patient harm in health care and to strengthen national health systems. Furthermore, it recognizes that the policy objectives, strategic priorities and effectiveness of interventions across different settings, and by different sub-population groups, vary according to culture, context and resources. There is therefore no single policy, strategic approach, or intervention that can be universally applied to all types of health care settings. These need to be adapted before implementation. This action plan provides seven strategic objectives achievable through 35 strategies that are applicable to all Member States, and presents suggested actions which the implementers can select, prioritize, adapt and implement.

Prioritization, feasibility, and speed of implementation will also vary according to context. Achieving full implementation at national level will be a long-term agenda for most Member States. Therefore, it is recommended that each country assesses its own current situation to identify areas of progress which can be strengthened, as well as the policy opportunities and practice gaps.

Policy and strategic initiatives at sub-national and facility level, can showcase exemplars of effectiveness and build momentum towards wider adoption across a country.

Upstream policy interventions such as regulation, accreditation, leadership, safety culture, and public reporting can be a driving force for patient safety improvement. Such policy interventions have to show their value in significant reductions in harm at the point

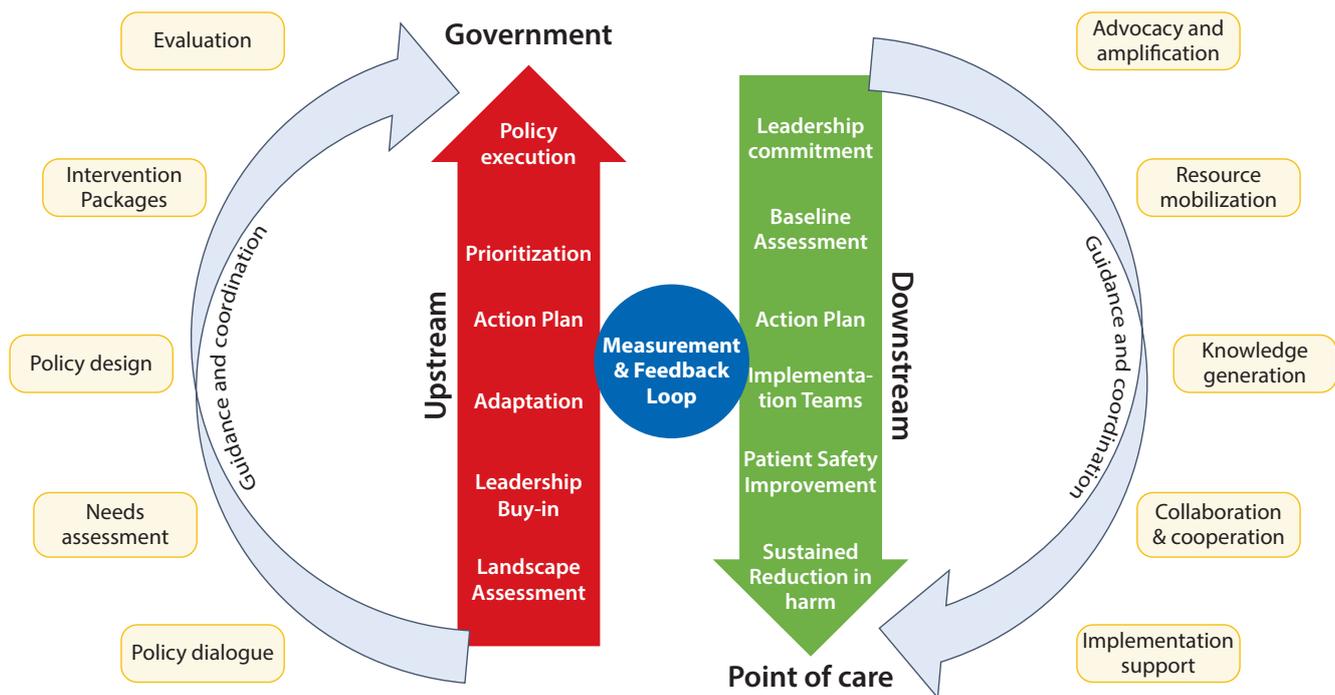
of care delivery. Also, they must be complemented by downstream patient safety improvement interventions such as capacity building, reporting and learning systems, teamwork and communication, patient engagement, as well as solutions to high-risk clinical care processes. Local patient safety improvement initiatives will trigger demand for better-adapted policies and system-level interventions through the feedback loop.

WHO and non-governmental organizations can shape and accelerate patient safety implementation in countries through advocacy, coordination, normative guidance, and technical support. This whole system approach that coordinates interventions at all levels- will create an ecosystem of patient safety improvement globally over the next ten years.

Patient safety is everybody's business. This agenda is beyond the scope of any single agency. Implementation will require effective partnerships. All must contribute to the implementation of this global action plan at the national level, individually and through partnerships in: leadership, policy and governance, coordination, resource mobilization, patient, family and community engagement, promotion and advocacy, and evidence-based practice. It is only through cohesive and complementary actions of all stakeholders that the ultimate vision of 'Zero Harm' can become a reality.

Success should be celebrated and promoted to raise political, stakeholder and public awareness and support. Mobilizing patients, families and communities to engage in planning and implementation of solutions and actions is critical to success.

The Patient Safety Implementation Ecosystem



Steps in implementing the Global Patient Safety Action Plan

If all partners and stakeholders move through key milestones, while implementing the action plan, success will be demonstrated and be measurable. Some countries will be able to progress through them more quickly than others.

Milestone 1 – Conduct a **landscape assessment** of major safety risks and barriers to improvement in the existing health system at all levels, as well as mapping the existing policy, standards, legal and regulatory environment, and institutional mechanisms. There may already be patient safety programmes in place and the performance record of these should be evaluated. Credible assessment tools developed by WHO and other international organizations should assist the process. An analysis of the policy landscape will illustrate missing elements and priority action areas towards safer care.

Milestone 2 – Secure strong **commitment from political and organizational leadership**. The landscape assessment will help make the case for prioritizing patient safety. So too will information on the burden of patient harm and economic impact, especially if data are available in the national and local context. Media coverage of stories of patients experiencing avoidable harm can trigger a public discourse encouraging political leadership

to take action for safer health care. Encouraging health leaders to participate in international platforms such as Global Ministerial Summits on Patient Safety could help in gathering momentum and seeking commitment. Participating in WHO patient safety flagship initiatives such as the WHO Global Patient Safety Challenges could also provide visibility and early gains towards full commitment.

Milestone 3 – Establish a sustainable **mechanism for implementation** of patient safety policies, strategies and plans. A designated centre, institute, department, unit, or at least a national patient safety coordinator is needed to coordinate and oversee nation-wide implementation. Whichever mechanism is adopted, it needs to be translated into the sub-national and health care facility level. If resources are available and the health system is well-developed, these could be stand-alone teams or part of the overall health governance system.

Milestone 4 – **Relate to national context and priorities**. This Global Patient Safety Action Plan provides structure and a framework for action to build a comprehensive programme for patient safety that will flow from national to health facility and clinical team level. It needs to take account of the context of health care within the country, the design and funding of the health care system and existing priorities. Countries already having a national action plan will wish to review it against this global action

plan and update and adjust their plans appropriate to their particular context. An action plan will be shaped by a rigorous consultative process involving all concerned stakeholders including the non-governmental and private sector.

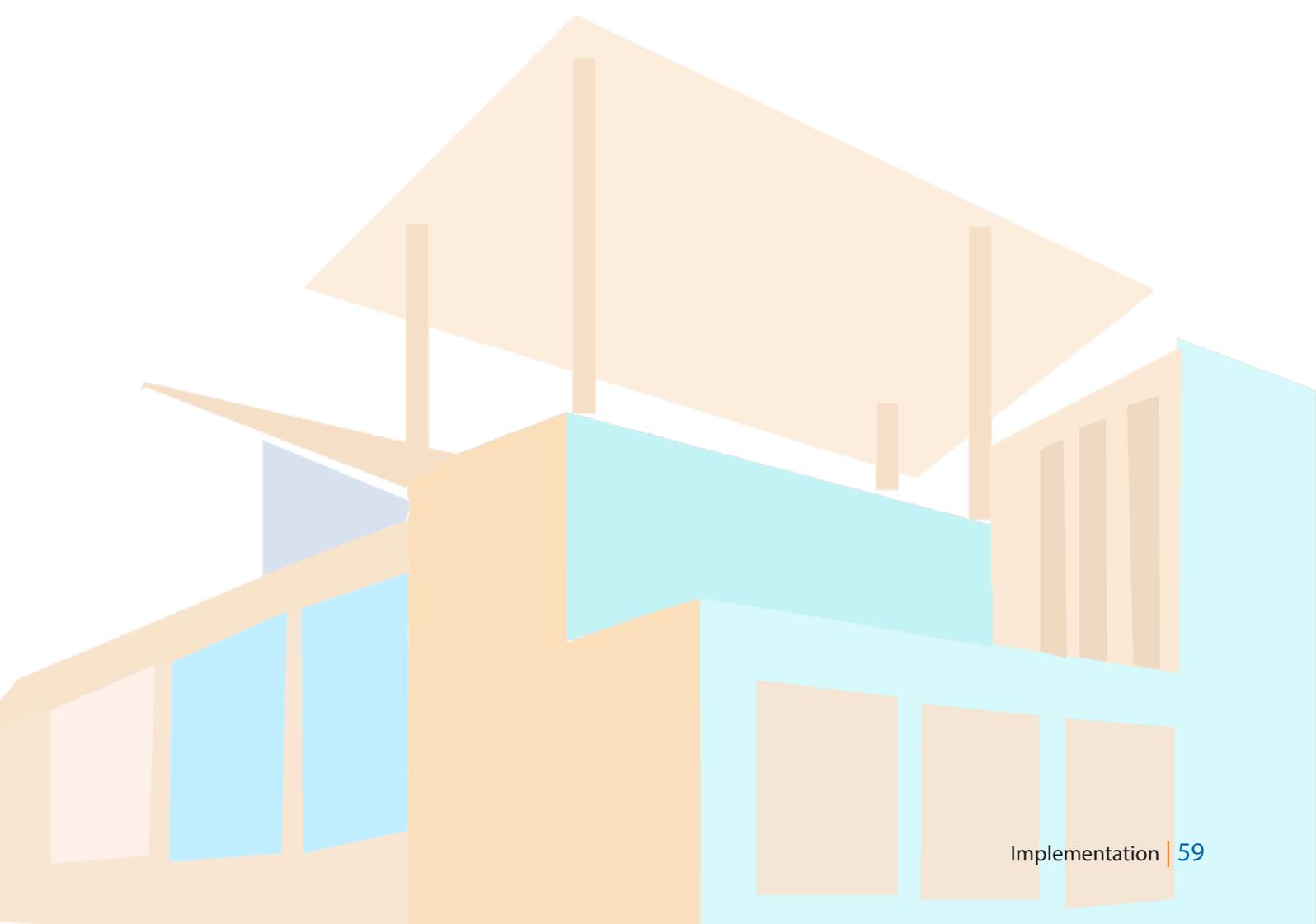
Some of the criteria for prioritizing could be:

- ▶ Core essential and critical action to reduce the highest risks for patients.
- ▶ Interventions that are relatively easy to implement and make high impacts on avoidable harm.
- ▶ Patient safety interventions consistent with existing national or sub-national health priorities.
- ▶ Patient safety interventions that are contributing to better health system performance and improved health outcomes.
- ▶ Interventions that are systemic in nature, benefit large numbers of patients and that will ensure sustainable improvements.

Based on the prioritization and estimated implementation timelines, identify processes and outcomes to be achieved in the short- (2–3 years), medium- (3–6 years) and longer-term (7–10 years). Define indicators to judge performance at national and health care facility level.

Milestone 5 – Decide upon and design the model of change for implementation. A robust change management strategy has to be in place to assure a holistic approach to patient safety, with engagement of key stakeholders with a clear vision and sustainable implementation. Some best practices are:

- ▶ The incremental approach to improvement. Start with small scale implementation with quick turn-around.
- ▶ Recognize and reward teams for their good work.
- ▶ Use a project management approach to implement planned actions. Assign roles and responsibilities to all stakeholders, define timelines as well as designate a key person for coordinating and monitoring implementation.
- ▶ Develop a system of mentorship and coaching. Identify best practices and role models (individual and organizational) that could inspire and instigate improvements.
- ▶ Break the silos. Be in constant touch and cooperation with other related programmes and stakeholders.



7. Global Patient Safety Targets

The Global Patient Safety Action Plan provides strategic direction to all relevant actors and stakeholders to work towards improving patient safety at all levels of health care. The vision, mission, and goal of this action plan are set out earlier in the document. It is imperative to provide definitive parameters to ascertain that progress is in the right direction with enough pace to achieve the objectives of this action plan. The global patient safety targets are a minimum set of parameters which could be used to track progress and trends.

Each indicator suggested in the table below is linked with one of the strategic objectives and will be instrumental

in monitoring progress in at least one of the strategies outlined in the framework for action. Targets have been proposed to each of these indicators, and efforts should be made to achieve these targets by 2030, in alignment with Sustainable Development Goals.

Governments, international organizations, and health care facilities should adapt their targets aligned with these global measures taking into consideration the local context, priority, baseline, and capacity. These are a minimum set of indicators, and stakeholders could add relevant indicators, suitable to the context.



Strategic Objective 1

Make zero avoidable harm a state of mind and a rule of engagement in planning and delivery of care everywhere

Global Patient Safety Targets by 2030

- ◆ All countries have created and implemented a national patient safety policy and strategy
- ◆ All countries are observing World Patient Safety Day
- ◆ All countries are implementing one or more WHO Global Patient Safety Challenges

Strategic Objective 2

Build high reliability health systems and health organizations that protect patients daily from harm

Global Patient Safety Targets by 2030

- ◆ All countries have designated a national patient safety coordinator
- ◆ All countries are conducting regular patient safety culture surveys at health care facilities
- ◆ All countries have included human factors design and training requirements in their licensing and accreditation programme





Strategic Objective 3

Assure the safety of every clinical process

Global Patient Safety Targets by 2030

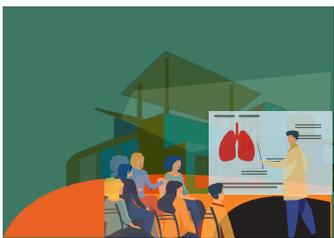
- ◆ 50% relative reduction in health care associated infection (HAI) rate
- ◆ 50% relative reduction in severe, avoidable medication-related harm
- ◆ 50% relative reduction in deaths due to Venous Thromboembolism (VTE) during or after hospitalization
- ◆ 50% relative reduction in deaths due to falls during hospitalization

Strategic Objective 4

Engage and empower patients and families to help and support the journey to safer health care

Global Patient Safety Targets by 2030

- ◆ All policy and guidelines on safer health care are co-developed with participation of patient and family representatives



Strategic Objective 5

Inspire, educate and skill health workers to contribute to the design and delivery of safe care systems

Global Patient Safety Targets by 2030

- ◆ All countries have incorporated patient safety in all undergraduate and postgraduate education and training curricula

Strategic Objective 6

Ensure a constant flow of information and knowledge to drive the mitigation of risk, the reduction in levels of avoidable harm, and improvement in the safety of care

Global Patient Safety Targets by 2030

- ◆ All countries have operational patient safety incident reporting and learning systems working in some or all parts of their health system



Strategic Objective 7

Develop and sustain multisectoral synergies and partnerships that have the expertise and influence for improving patient safety

Global Patient Safety Targets by 2030

- ◆ All countries are participating in annual Global Ministerial Summits on Patient Safety
- ◆ All countries have established the national patient safety network

8. Alignment of Patient Safety with the Sustainable Development Goals (SDGs)

Patient safety is central to the realization of Sustainable Development Goals, in particular SDG3 to “Ensure healthy lives and promote well-being for all at all ages”, and in achieving Universal Health Coverage (Target 3.8). Apart from this core target, patient safety has causality linkages with several other SDGs either as a limiting factor or as an optimal condition. Following are some illustrations on how patient safety contributes to specific targets linked with SDGs.

SDG	Target	How patient safety contributes
SDG 1 No Poverty 	By 2030, reduce at least by half the proportion of men, women and children of all ages in poverty in all its dimensions according to national definitions.	Catastrophic health care expenditure pushes millions of families every year below the poverty line. Patient safety helps in reducing such incidents as well as leaving more finances to cover the cost of care for those who cannot afford it.
SDG 3 Good Health & Well-Being 	By 2030, reduce the global maternal mortality to less than 70 per 100,000 live births Achieve universal access health coverage, including financial risk protection, access to quality essential health-care services	Many of maternal deaths are because of unsafe care in health care facilities Improving patient safety could drastically reduce the wastes in health care as well improve the access by positively influencing health seeking behavior
SDG 6 	By 2030, achieve universal and equitable access to safe and affordable drinking water for all	Water and sanitation in health care facilities is a key component of patient safety. WASH facilities in health care facilities could influence sanitation behaviour of the community
SDG 8 Decent Work and Economic Growth 	Protect labour rights and promote safe and secure working environment for all workers	Focusing on human factors and safety culture could sustainably improve workplace safety in health care settings, which is a major employer in most of the economies

SDG	Target	How patient safety contributes
SDG 10 Reduced Inequalities 	By 2030 Empower and promote the social, economic and political inclusion of all	Empowerment and engagement of patients, families and communities is the cornerstone of patient safety, and promotes equity and inclusiveness in health care
SDG 12 Responsible consumption and production 	By 2020 Environmentally sound management of chemical and all the wastes. In accordance to with agreed international framework	Patient safety programmes promote proper infectious waste management and “Mercury free hospitals” as per Minamata convention

Central role of patient safety in achieving SDG 3 targets

SDG 3 Targets	How health care-associated harm has impact on SDG 3
3.1 By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births	<ul style="list-style-type: none"> ▶ Missed diagnosis of high-risk pregnancy ▶ Obstetrical trauma ▶ Unsafe management of obstetrical complications, such as postpartum haemorrhage and obstructed labour ▶ Labour room malpractices, such as excessive fundal pressure and unnecessary induction, unnecessary episiotomy, and immediate cord clamping ▶ Venous thromboembolism in pregnancy
3.2 By 2030, end preventable deaths of newborns and children under 5 years of age	<ul style="list-style-type: none"> ▶ Complication due to unsafe preterm and intrapartum care e.g., birth asphyxia ▶ Immunization safety issues ▶ Missed diagnosis of congenital anomalies ▶ Errors in paediatric dosages of medicines ▶ In-hospital falls for newborn and infants ▶ Failure to resuscitate ▶ Baby theft and swapping ▶ Newborn sepsis ▶ Errors in oxygenation targets
3.3 By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases	<ul style="list-style-type: none"> ▶ Sharps injuries in health care facilities ▶ Lack of personal protection products ▶ Unsafe blood transfusion ▶ Unsafe injection practices ▶ Occupational tuberculosis exposure ▶ Adverse Drug Events (ADRs) in treatment of tuberculosis and malaria ▶ Misdiagnosis of multidrug-resistant tuberculosis ▶ Medication safety issues in mass drug administration for neglected tropical diseases ▶ Safety issues in snakebite envenoming

SDG 3 Targets	How health care-associated harm has impact on SDG 3
<p>3.4 By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being</p>	<ul style="list-style-type: none"> ▶ Missed early diagnosis and wrong diagnosis of non-communicable diseases ▶ Polypharmacy ▶ Laboratory errors ▶ Prescription and administration errors in insulin ▶ Self-harm behaviour, medication adverse effects, falls in mental health care ▶ Safety issues in chemotherapy and radiotherapy ▶ Failure to rescue ▶ Safety concerns with medical use of ionic radiation
<p>3.5 Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol</p>	<ul style="list-style-type: none"> ▶ Failure to engage patient leading to drop out and relapse ▶ Self-harm and violent behaviour ▶ Drug abuse and addiction ▶ Drug pilferage and misuse ▶ Complications with pharmacotherapy e.g., overdose
<p>3.7 By 2030, ensure universal access to sexual and reproductive health-care services, including for family planning, information and education</p>	<ul style="list-style-type: none"> ▶ Complications from unsafe abortions ▶ Complications in sterilization surgeries, such as surgical site infections and adverse drug events ▶ Non adherence to medical eligibility criteria for contraceptive use leading in inappropriate prescription of contraceptives ▶ Contraceptive failure
<p>3.8 Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all</p>	<ul style="list-style-type: none"> ▶ Extended hospital stays ▶ Readmissions ▶ Litigation cost due to safety incidents ▶ Repeat procedures ▶ Loss of trust leading to diminished health seeking behaviour ▶ Spurious and counterfeit medicines
<p>3.9 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination</p>	<ul style="list-style-type: none"> ▶ Environmental contamination related to health care-associated hazardous and infectious waste ▶ Adverse effects from medical use of mercury ▶ Improper disposal of chemotherapeutic and radioactive agents ▶ Hospital effluent with hazardous and infectious material
<p>3b Substantially increase health financing and the recruitment, development, training and retention of the health workforce in developing countries, especially in least developed countries and small island developing States</p>	<ul style="list-style-type: none"> ▶ Health worker burnout, compromised psychological safety ▶ Violence against health workers ▶ Lack of human factors expertise informing the design of safer care systems ▶ Physical and chemical hazards ▶ Staff skill and training deficits

9. Mapping of WHA Resolution (WHA72.6) to the Global Patient Safety Action Plan

OP. No.	Statement	Linkage with GPSAP Strategies
1	Endorses the establishment of World Patient Safety Day, to be marked annually on 17 September in order to increase public awareness and engagement, enhance global understanding, and work towards global solidarity and action by Member States to promote patient safety	<ul style="list-style-type: none"> ► Strategy 1.5: World Patient Safety Day and Global Patient Safety Challenges
2.1	To recognize patient safety as a health priority in health sector policies and programmes, making it an essential component for strengthening health care systems in order to achieve universal health coverage	<ul style="list-style-type: none"> ► Strategy 1.1: Patient safety policy, strategy and implementation framework ► Strategy 2.2: Good governance for the health care system
2.2	To assess and measure the nature and magnitude of the problem of patient safety including risks, errors, adverse events and patient harm at all levels of health service delivery including through reporting, learning and feedback systems that incorporate the perspectives of patients and their families, and to take preventive action and implement systematic measures to reduce risks to all individuals	<ul style="list-style-type: none"> ► Strategy 6.1: Patient safety incident reporting and learning systems ► Strategy 6.2: Patient safety surveillance and information system ► Strategy 6.3: Patient safety improvement programmes
2.3	To develop and implement national policies, legislation, strategies, guidance and tools, and deploy adequate resources, in order to strengthen the safety of all health services, as appropriate	<ul style="list-style-type: none"> ► Strategy 1.1: Patient safety policy, strategy and implementation framework ► Strategy 1.2: Resource mobilization and allocation ► Strategy 1.3: Protective legislative measures ► Strategy 5.3: Patient safety competencies as regulatory requirements
2.4	To work in collaboration with other Member States, civil society organizations, patients' organizations, professional bodies, academic and research institutions, industry and other relevant stakeholders to promote, prioritize and embed patient safety in all health policies and strategies	<ul style="list-style-type: none"> ► Strategy 7.1: Stakeholders engagement ► Strategy 7.2: Common understanding and shared commitment ► Strategy 7.4: Cross geographic and multisectoral initiatives for patient safety ► Strategy 7.5: Linkages with technical programmes and initiatives

OP. No.	Statement	Linkage with GPSAP Strategies
2.5	To share and disseminate best practices and encourage mutual learning to reduce patient harm through regional and international collaboration	<ul style="list-style-type: none"> ▶ Strategy 6.1: Patient safety incident reporting and learning systems ▶ Strategy 6.2: Patient safety surveillance and information system ▶ Strategy 7.3: Patient safety networks and collaboration ▶ Strategy 7.4: Cross geographic and multisectoral initiatives for patient safety
2.6	To integrate and implement patient safety strategies in all clinical programmes and risk areas, as appropriate, to prevent avoidable harm to patients related to health care procedures, products and devices, for example, medication safety, surgical safety, infection control, sepsis management, diagnostic safety, environmental hygiene and infrastructure, injection safety, blood safety and radiation safety, as well as to minimize the risk of inaccurate or late diagnosis and treatment, and to pay special attention to at-risk groups	<ul style="list-style-type: none"> ▶ Strategy 3.1: Safety of high-risk clinical procedures ▶ Strategy 3.2: Global Patient Safety Challenge: <i>Medication Without Harm</i> ▶ Strategy 3.3: Infection prevention and control & antimicrobial resistance ▶ Strategy 3.4: Safety of medical devices, medicines, blood and vaccines ▶ Strategy 3.5: Patient safety improvement programmes in priority clinical areas ▶ Strategy 7.5: Linkages with technical programmes and initiatives
2.7	To promote a safety culture by providing basic training to all health professionals, developing a blame-free patient safety incident reporting culture through open and transparent systems that identify and learn from examining causative and contributing factors of harm, addressing human factors, and building leadership and management capacity and efficient multidisciplinary teams, in order to increase awareness and ownership, improve outcomes for patients and reduce the costs related to adverse events at all levels of health systems	<ul style="list-style-type: none"> ▶ Strategy 6.1: Patient safety incident reporting and learning systems ▶ Strategy 2.1: Transparency, openness and 'no blame' culture ▶ Strategy 2.3: Leadership capacity for clinical and managerial functions ▶ Strategy 2.4: Human factors (or ergonomics) for health systems resilience
2.8	To build sustainable human resource capacity, through multisectoral and interprofessional competency-based education and training, based on the WHO patient safety curricula and continuous professional development, to promote a multidisciplinary approach, and to build an appropriate working environment that optimizes the delivery of safe health services	<ul style="list-style-type: none"> ▶ Strategy 5.1: Patient safety in professional education and training ▶ Strategy 5.2: Centres of excellence for patient safety education and training ▶ Strategy 5.4: Linking patient safety with appraisal system of health workers ▶ Strategy 5.5: Safe working environment for health workers
2.9	To promote research, including translational research, to support the provision of safer health services and long-term care	<ul style="list-style-type: none"> ▶ Strategy 6.4: Patient safety research programmes, especially translational research

OP. No.	Statement	Linkage with GPSAP Strategies
2.10	To promote the use of new technologies, including digital technologies, for health, including to build and scale up health information systems and to support data collection for surveillance and reporting of risks, adverse events and other indicators of harm at different levels of health services and health-related social care, while ensuring the protection of personal data, and to support the use of digital solutions to provide safer health care	<ul style="list-style-type: none"> ▶ Strategy 6.2: Patient safety surveillance and information system ▶ Strategy 6.5: Digital technology for patient safety
2.11	To consider the use of traditional and complementary medicine, as appropriate, in the provision of safer health care	<ul style="list-style-type: none"> ▶ Strategy 3.2: Global Patient Safety Challenge: <i>Medication Without Harm</i>
2.12	To put in place systems for the engagement and empowerment of patients' families and communities (especially those who have been affected by adverse events) in the delivery of safer health care, including capacity-building initiatives, networks and associations, and to work with them and civil society, to use their experience of safe and unsafe care positively in order to build safety and harm-minimization strategies, as well as compensation mechanisms and schemes, into all aspects of the provision of health care, as appropriate	<ul style="list-style-type: none"> ▶ Strategy 4.1: Co-development of policies and programmes with patients ▶ Strategy 4.2: Learning from patient experience for safety improvement ▶ Strategy 4.3: Patient advocates and patient safety champions ▶ Strategy 4.4: Patient safety incident disclosure to victims ▶ Strategy 4.5: Patient involvement in the implementation of action plan
2.13	To mark World Patient Safety Day annually on 17 September to promote all aspects of patient safety including progress towards reaching national milestones, in collaboration with relevant stakeholders	<ul style="list-style-type: none"> ▶ Strategy 1.5: World Patient Safety Day and Global Patient Safety Challenges
2.14	To consider participating in the annual Global Ministerial Summits on Patient Safety	<ul style="list-style-type: none"> ▶ Strategy 7.4: Cross geographic and multisectoral initiatives for patient safety
3	Invites international organizations and other relevant stakeholders to collaborate with Member States in promoting and supporting patient safety initiatives, including marking World Patient Safety Day annually	<ul style="list-style-type: none"> ▶ Strategy 1.5: World Patient Safety Day and Global Patient Safety Challenges
4.1	To emphasize patient safety as a key strategic priority in WHO's work across the universal health coverage agenda	<ul style="list-style-type: none"> ▶ Strategy 1.1: Patient safety policy, strategy, implementation framework
4.2	To develop normative guidance on minimum standards, policies, best practice and tools for patient safety, including on safety culture, human factors, hygienic infrastructure, clinical governance and risk management	<ul style="list-style-type: none"> ▶ Strategy 1.4: Safety standards, regulation and accreditation

OP. No.	Statement	Linkage with GPSAP Strategies
4.3	To provide technical support to Member States, especially low- and middle-income countries, where appropriate and where requested, to help to build national capacities in their efforts to assess, measure and improve patient safety, in collaboration with professional associations, as appropriate, and to create a safety culture, as well as ensuring effective prevention of health care-associated harm, including infections, by building capacity in leadership and management, and open and transparent systems that identify and learn from the causes of harm	<ul style="list-style-type: none"> ▶ Strategy 6.2: Patient safety surveillance and information system ▶ Strategy 6.3: Patient safety improvement programmes ▶ Strategy 2.1: Transparency, openness and ‘no blame’ culture ▶ Strategy 2.3: Clinical and managerial leadership ▶ Strategy 3.3: Infection prevention and control & antimicrobial resistance
4.4	To provide support to Member States, on request, in establishing and/or strengthening patient safety surveillance systems	<ul style="list-style-type: none"> ▶ Strategy 6.2: Patient safety surveillance and information system
4.5	To strengthen global patient safety networks to share best practice and learning and foster international collaboration including through a global network of patient safety trainers, and to work with Member States, civil society organizations, patients’ organizations, professional associations, academic and research institutions, industry and other relevant stakeholders in building safer health care systems	<ul style="list-style-type: none"> ▶ Strategy 7.1: Stakeholders engagement ▶ Strategy 7.2: Common understanding and shared commitment ▶ Strategy 7.4: Cross geographic and multisectoral initiatives for patient safety ▶ Strategy 7.3: Patient safety networks and collaboration ▶ Strategy 7.5: Linkages with technical programmes and initiatives
4.6	To provide, on request, technical support and normative guidance on the development of human resource capacity in Member States through interprofessional competency-based education and training based on WHO patient safety curricula, and, in consultation with Member States, develop “training-of-trainers” programmes for patient safety education and training, and develop global and regional networks of professional educational councils to promote education on patient safety	<ul style="list-style-type: none"> ▶ Strategy 5.1: Patient safety in professional education and training ▶ Strategy 5.2: Centres of excellence for patient safety education and training
4.7	To develop and manage, in consultation with Member States, systems for global sharing of learning from patient safety incidents, including through reliable and systematic reporting, data analysis and dissemination systems	<ul style="list-style-type: none"> ▶ Strategy 6.1: Patient safety incident reporting and learning systems
4.8	To design, launch and support Global Patient Safety Challenges, and to develop and implement strategies, guidance and tools to support Member States in implementing each Challenge, using the best available evidence	<ul style="list-style-type: none"> ▶ Strategy 1.5: World Patient Safety Day and Global Patient Safety Challenges

OP. No.	Statement	Linkage with GPSAP Strategies
4.9	To promote and support the application of digital technologies and research, including translational research for improving the safety of patients	<ul style="list-style-type: none"> ▶ Strategy 6.5: Digital technology for patient safety
4.10	To provide support to Member States, upon request, in putting into place systems to support the active engagement, participation and empowerment of patients, families and communities in the delivery of safer health care; and in establishing and strengthening networks for engagement of patients, communities, civil society and patient associations	<ul style="list-style-type: none"> ▶ Strategy 4.1: Co-development of policies and programmes with patients ▶ Strategy 4.2: Learning from patient experience for safety improvement ▶ Strategy 4.3: Patient advocates and patient safety champions ▶ Strategy 4.4: Patient safety incident disclosure to victims ▶ Strategy 4.5: Patient involvement in the implementation of action plan
4.11	To work with Member States, international organizations and other relevant stakeholders to promote World Patient Safety Day	<ul style="list-style-type: none"> ▶ Strategy 1.5: World Patient Safety Day and Global Patient Safety Challenges
4.12	To formulate a global patient safety action plan in consultation with Member States and all relevant stakeholders, including in the private sector, for submission to the Seventy-fourth World Health Assembly in 2021 through the 148th session of the Executive Board	
4.13	To submit a report on progress in the implementation of this resolution, for the consideration of the Seventy-fourth, Seventy-sixth and Seventy-eighth World Health Assemblies	



**World Health
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