Shaping the Challenge – the Strategic Framework

The lessons for success drawn from earlier Global Patient Safety Challenges include high visibility, political and professional commitment, multileveled 'spearheading' interventions and WHO's ability to lead and mobilize the global community to reach the proposed goals. The Strategic Framework for this Challenge should galvanize commitment to reduce medication errors and medication-related harm and strengthen measurement and safety monitoring systems.

Four fundamental problems lay the ground for the strategic framework:

- Patients and the public are not always medication-wise. They are too often made to be passive recipients of medicines and not informed and empowered to play their part in making the process of medication safer.
- Medicines are sometimes complex and can be puzzling in their names, or packaging and sometimes lack sufficient

or clear information. Confusing 'look-alike sound-alike' medicines names and/or labelling and packaging are frequent sources of error and medication-related harm that can be addressed.

- Health care professionals sometimes prescribe and administer medicines in ways and circumstances that increase the risk of harm to patients.
- Systems and practices of medication are complex and often dysfunctional, and can be made more resilient to risk and harm if they are well understood and designed.

The actions planned in this Challenge are based on four domains of work, one for each fundamental problem identified. These are:

- patients and the public
- medicines
- · health care professionals
- · systems and practices of medication.

In each of these domains, there are many ways in which using medications can cause avoidable harm. There are many ways, too, in which care could be made safer.





Key action areas

The actions embraced by the Challenge fall into three categories:

Early priority actions. Ask countries and key stakeholders to make strong commitments, prioritize and take early action, and effectively manage three key areas to protect patients from harm, namely:

- high-risk situations
- polypharmacy
- · transitions of care

Developmental programmes. Ask countries to convene experts, health care professionals and leaders, key stakeholders and patient representatives to design targeted programmes of change and take action to improve safety in each of the four domains of the Challenge framework: 1) patients and the public; 2) medicines; 3) health care professionals; and 4) systems and practices of medication.

Global action. WHO aims:

- a) to provide guidance and develop strategies, plans and tools to ensure that the medication process has the safety of patients at its core, in all health care settings;
- b) to strengthen human resource capacity through leadership development and skill-building;
- c) to strengthen the quality of monitoring data;
- d) to promote and support research in this area as part of the overall agenda of patient safety research;
- e) to continue engaging with regulatory agencies and international actors and continuously improve medication safety through improved packaging and labelling; and
- f) to develop mechanisms for the engagement and empowerment of patients to safely manage their own medications.



A mother's call for medication without harm

My oldest daughter, Martha went to study nursing with a strong desire of caring for the sick. But she had some health concerns of her own. She had chronic hypokalemia or low potassium that required supplementation from time to time and her EKG's were always abnormal. Even when further cardiac tests were done, the abnormal results were seen as normal for her and the results were simply filed away, and Martha and I remained unaware of her heart condition. Later, she developed mood swings that were seen as symptoms of bipolar affective disorder and she was prescribed lithium which helped to regulate her moods. We read the information sheet together and looked up the drug online, but we were not aware of a warning in her medical file specifically advising against prescribing lithium and we were not told of severe adverse reactions to look for. Even though her heart began to race at times, the lithium dosage was increased. Then 13 days later, her father went to wake her up one morning, and found Martha on her bedroom floor where she had died. She had not been able to get to the door to call for help.

At just twenty-two years old, our daughter had suffered a fatal cardiac arrhythmia.

Although a tragic series of medical errors and the adverse medication reaction took Martha's life, no reporting took place and her death was simply identified as 'natural'. It took six years of great effort, extensive media coverage, and two further death reviews to finalize Martha's death investigation and create meaningful changes to help prevent similar fatalities. So as patients and families, what can we do to help avoid medication-related harm? There are two things that stand out: 1) We can encourage reporting and can even report an adverse medication event ourselves; and 2) We can take an active role in the patient's own medical care and medication management.

Let's honour those like Martha who have been harmed, not by covering up what happened, but by demanding transparency and centralized reporting so these tragic events can lead to improved medication safety for everyone.

High-risk situations

The impact of medication errors is greater in certain clinical circumstances, such as with inpatients in hospital, rather than in ambulatory care. This may be related to the more acute or serious clinical situations in these settings and the use of more complex medication regimes. Young children and the elderly are more susceptible to adverse outcomes, as well as those with concomitant kidney or liver disease. Medication errors in these circumstances often involve the administration of the wrong dose, use of the wrong route, and a failure to follow treatment regimens.

Understanding the situations where the evidence shows there is higher risk of harm from particular medicines, is key to this Challenge. Tools and technologies may help health care professionals using high-alert medications (those that are associated with a high risk of severe harm if used improperly), and also enhance patient knowledge and understanding of these medications.

Polypharmacy

Polypharmacy is the routine use of four or more over-the-counter, prescription and/or traditional medications at the same time by a patient. Polypharmacy has increased dramatically with greater life expectancy and as older people live with several chronic diseases. Polypharmacy increases the likelihood of side effects, as well as the risk of interactions between medications, and may make adherence more difficult. If a patient requires many medicines, they must

be utilized in an optimal manner, so that the medicines are appropriately prescribed and administered, to ensure that they produce direct and measurable benefits with minimal side effects. The standardization of policies, procedures and protocols is critical to polypharmacy. This applies from initial prescribing practices, to regular medication reviews.

Patients can play a vital part if provided with the right information, tools and resources to make informed decisions about their medicines. Technology can also serve as a useful aid.

Transitions of care

Transitions of care occur when a patient moves between facilities, sectors and staff members; for example: a transfer from the emergency room to the intensive care unit, from a nursing home to a hospital, from a primary care doctor to a specialist, or from one nurse to another during a shift change. Transitions of care increase the possibility of communication errors, which can lead to serious medication errors. Patients are at increased risk during transitions of care and so serious mistakes can and do occur at these times, in particular.

Good communication is vital, including a formal comparison of medicines pre- and post-care, so-called medication reconciliation. Patients can be valuable and active participants in this process by maintaining a current medicine list that is updated when any medicine changes occur.



Political leadership, commitment and support

The third Global Patient Safety Challenge on Medication Safety invites WHO Member States to prioritize medication safety at the national level. Demonstrable commitment and leadership are needed to significantly reduce the level of severe, avoidable harm related to medications in their countries over a period of five years. The emphasis is on countries working out their own priorities and action programmes using the Challenge framework to support their work.

A five-point plan has been developed to facilitate adoption:

- **1.** Take early action to protect patients from harm arising from: high-risk situations; polypharmacy; and transitions of care.
- 2. Convene national experts, health system leaders and practitioners to produce guidance and action plans for each of the targeted domains.
- 3. Put mechanisms in place, including the use of tools and technologies, to enhance patient awareness and knowledge about medicines and medication use process, and patients' role in managing their own medications safely.
- Designate a national coordinator to spearhead the Global Patient Safety Challenge on Medication Safety in your country.
- 5. Assess progress regularly.

The success of the Challenge will depend on the high prioritization of medication safety within health care systems, achieving widespread buy-in by stakeholders, a shift to the mainstream of care provision activities and taking concrete action to prevent harm.





WHO action

In driving forward the Global Patient Safety Challenge on Medication Safety, WHO will provide support with action in 10 key areas:

- Lead the process of change and take global action to make progress on the domains of the Challenge framework.
- 2. Facilitate the development and implementation of country programmes.
- 3. Commission expert reports to provide a starting point for in-country work to develop guidance and action plans in each of the domains of the Challenge.
- **4.** Develop strategies, guidelines, plans and tools to ensure safety of medication practices.
- 5. Publish a strategy setting out research priorities and mobilize resources for an international research study on hospital admissions due to medication effects.
- Hold a global launch event and follow-through regional launch events in each WHO region.
- 7. Create and implement a communications and advocacy strategy and a global campaign, and produce promotional and educational materials for use in-country and global components of the Challenge.
- 8. As part of the WHO Patients for Patient Safety programme, ensure that patients and families are closely involved in all aspects of the Challenge and develop a tool to help patients protect themselves from harm.

- **9.** Monitor and evaluate impact of the Challenge.
- **10.** Mobilize resources to enable full and successful implementation of the Challenge.

Throughout the implementation process, WHO will also seek to develop a much greater understanding of the special problems of medication-related harm in low- and middle-income countries and to reshape the Challenge to meet needs in diverse settings.

Collaboration and partnerships

Working with international experts, partners and interested stakeholders, WHO will develop the guidelines, tools, technologies and materials needed, and work in close collaboration with countries to implement the Challenge.

Who should act as a catalyst for change?

Ministries of health and health system leaders
Educational and research institutions
Regulatory authorities
Health care professional societies
Patient advocacy groups
Donors and development partners
Pharmaceutical industry

In addressing the overall goal and action areas of the Challenge, WHO will work with a wide range of stakeholders including: ministries of health, national coordinators or programme managers for medication safety, health system leaders, experts, educational institutions, researchers, safe medication practice centres, regulatory agencies, patient representative bodies and professional societies and industry.

