

**Start-up meeting**

# **Medication Without Harm: an overview**

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## Outline of the presentation

1. Why medication safety
2. Goal and objectives of the *Challenge*
3. Strategic framework and WHO resources
4. Implementation
5. Measurement needs

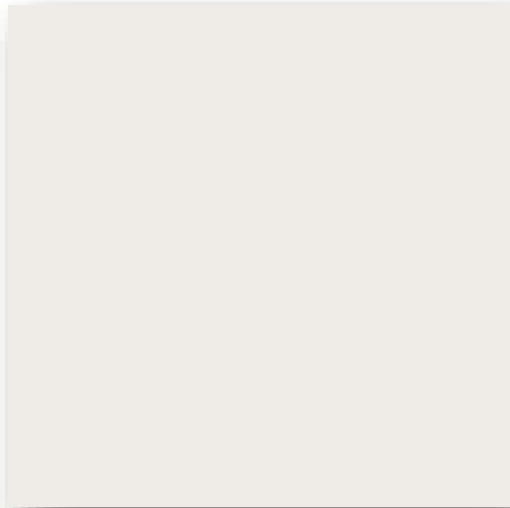


# Good health systems



- Focus not only on good health but also on helping to improve well-being of life.
- Ensure **patient safety** while delivering essential health services.

# Universal Health Coverage



- **All people**

Access to the [safe] health services they need, when and where they need them, without financial hardship

- **Essential health services**

Health promotion to prevention, treatment, rehabilitation and palliative care



World Health  
Organization

SEVENTY-SECOND WORLD HEALTH ASSEMBLY  
Provisional agenda item 12.5

A72/26  
25 March 2019

**MEDICATION  
WITHOUT HARM**  
Global Patient Safety Challenge

## Editorials

### The third global patient safety challenge: tackling medication harm

Aziz Sheikh,<sup>a</sup> Neelam Dhingra-Kumar,<sup>b</sup> Edward Kelley,<sup>c</sup> Marie Paule Kierny,<sup>d</sup> & Liam J Don

The World Health Organization (WHO) has announced its third global patient safety challenge,<sup>1</sup> which aims to reduce the global burden of iatrogenic medication-related harm by 50% within five years. The intention is to match the global reach and impact of the two earlier global patient safety challenges: *Clean care is safer care* and *Safe surgery saves lives*.<sup>2,3</sup> The third challenge, *Medication without harm*, invites health professionals and systems and practices of medication management. This challenge also commits WHO to using its convening and coordinating powers to drive forward a range of global actions on medication safety.<sup>4</sup>

Here, we focus on three priority areas of medication safety that most affect patients, just as hand hygiene and the surgical checklist were chosen as the flagships of the first two challenges. These three areas are high-risk situations, polypharmacy and transitions of care. Each area is associated with a substantial burden of harm and therefore, if appropriately managed, could reduce the risk of harm to many patients.

Certain classes of medications are particularly liable to produce adverse reactions. They tend to have a narrow therapeutic index, meaning that small dosing errors can cause catastrophic outcomes. For example, the use of warfarin for anticoagulation is a high-risk clinical situation involving a medication because its use carries associated risks of bleeding if the international normalized ratio is too high and risks of further thrombosis if it is too low. The Clinical Excellence Commission has summarized high-risk medications in the acronym a PINCH (anti-infective

agents; potassium and other electrolytes; insulin; narcotics and other sedatives; chemotherapeutic and immunosuppressive agents and heparin and anticoagulants).<sup>5</sup> However, this classification is not exhaustive; for example, other medications carry risks for those with underlying diseases, such as chronic kidney disease. Focusing on certain key classes of medications has enabled investigators to develop interventions that reduce inadvertent harm caused by these medications. Such interventions can involve low-technology solutions, such as patient medication diaries, or harness the potential of digital technology, as with clinical decision support systems linked with electronic health records.<sup>6</sup>

As people tend to live longer, receive treatment for more than one condition at a time and have access to an increasing number of therapeutic options, they tend to take multiple medications. This intake increases the likelihood of drug interactions. Elderly patients may also find it difficult to adhere to complex regimens, increasing the likelihood of patient-induced errors. Progress has been made in identifying medication history and drug-drug combinations that are particularly problematic, enabling risk-stratification and risk-reduction approaches through, for example, de-prescribing initiatives in Canada<sup>7</sup> and the United States of America.<sup>8</sup> However, these initiatives are only addressing a part of the problem of polypharmacy.

Reducing medication-related harm in the field of 'transitions of care' is the third priority area. Failure to effectively communicate information on medicines and/or underlying risk factors may cause medication errors when patients move between care settings (e.g. from primary to hospital care) and/or between care providers within the same setting (e.g. from out-patient respiratory to out-patient cardiovascular clinics). Initiatives

designed to across such operating p cation rece High 5s Pre patients fol charge from records del allergies an cloud-base health reco

The th third global not mutual may be expe tion of adve and miscon professions on those pa of death or medication

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References  
Available at: [www.who.int/news/95/8/17](http://www.who.int/news/95/8/17)

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## Patient safety

### Global action on patient safety

#### Report by the Director-General

1. In January 2019, the Executive Board at its 144th session noted an earlier the Board then adopted resolution EB144.R12.

2. The global landscape of health care is changing and health systems are complex environments. While new treatments, technologies and care models potential, they can also pose novel threats to safe care. Patient safety is now being and growing global public health challenge. Global efforts to reduce the burden not achieved substantial change over the past 15 years despite pioneering wor settings. Safety measures – even those implemented in high-income settings – have impact, and most have not been adapted for successful application in low- and mi

3. All Member States and partners are striving to achieve universal hea Sustainable Development Goals. However, the benefits of increased access to undermined by service structures, cultures and/or behaviours that inadvertently l lead to fatal consequences. Global action on patient safety will enable universal delivered while reassuring communities that they can trust their health care syst their families safe. Policy-makers will want to assure that, in planning and reso universal health coverage, they are not presiding over flawed and wasteful mode

#### GLOBAL BURDEN OF PATIENT HARM IN HEALTH CARE

4. It is estimated that 64 million disability-adjusted life years are lost every y care worldwide. This means that patient harm due to adverse events is probably o of death and disability in the world.<sup>2</sup> Available evidence suggests that annuall events due to unsafe care occur in hospitals in low- and middle-income cou

<sup>1</sup> See document EB144/09 and the summary records of the Executive Board at its 144th session section 2 and seventeenth meeting, section 3.

<sup>2</sup> Presentation at the 'Patient Safety – A Grand Challenge for Healthcare Professionals and Roundtable at the Grand Challenges Meeting of the Bill & Melinda Gates Foundation, 18 October (<https://globalhealth.harvard.edu/quality/powerpoint>, accessed 5 November 2018). Forthcoming paper National Academies of Sciences, Engineering, and Medicine. Crossing the global quality chasm: Improving patient safety worldwide. Washington (DC): The National Academies Press; 2018 (<https://www.nap.edu/catalog/24841/global-quality-chasm-improving-health-care-worldwide>, accessed 13 February 2019).

## Medication Without Harm



### WHO Global Patient Safety Challenge



World Health  
Organization

WHO Bulletin (August 2017)

## Goal of the Challenge



Reduce the level of **severe, avoidable harm**  
related to medications by 50% over 5 years, globally.

## Objectives of the Challenge

- **RAISE** awareness of the problems of unsafe medication practices and medication errors, and *the Challenge* as a vehicle to address this issue
- **DEVELOP** guidance/ materials/ technologies/ tools to support the setting up of safer medication use systems for reducing errors
- **BUILD** capacities of HCP to reduce the risk of medication-related harm through education and training, developing competencies
- **EMPOWER** patients/ families to become actively engaged in decisions, ask questions, spot errors, manage their medications
- **ENGAGE** & seek commitment of key stakeholders/ partners/ industry to raise awareness of medication-related harm and support implementation of *the Challenge*



# The 4 Domains of the Strategic Framework



# Health care Professionals



# 5 Moments for Medication Safety



## Starting a medication

- ▶ What is the name of this medication and what is it for?
- ▶ What are the risks and possible side-effects?



## Taking my medication

- ▶ When should I take this medication and how much should I take each time?
- ▶ What should I do if I have side-effects?



## Adding a medication

- ▶ Do I really need any other medication?
- ▶ Can this medication interact with my other medications?



## Reviewing my medication

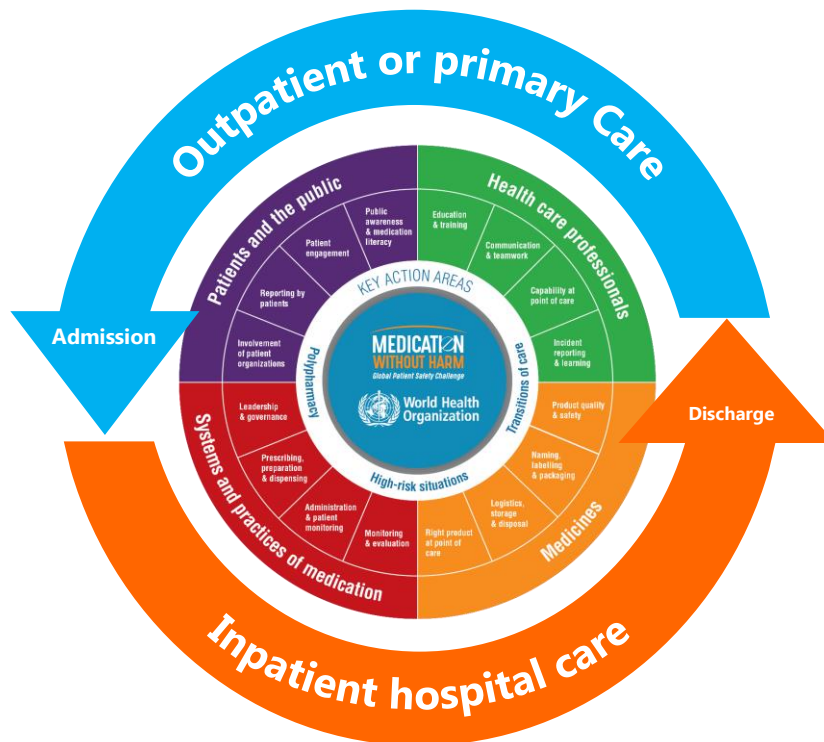
- ▶ How long should I take each medication?
- ▶ Am I taking any medications I no longer need?



## Stopping my medication

- ▶ When should I stop each medication?
- ▶ If I have to stop my medication due to an unwanted effect, where should I report this?

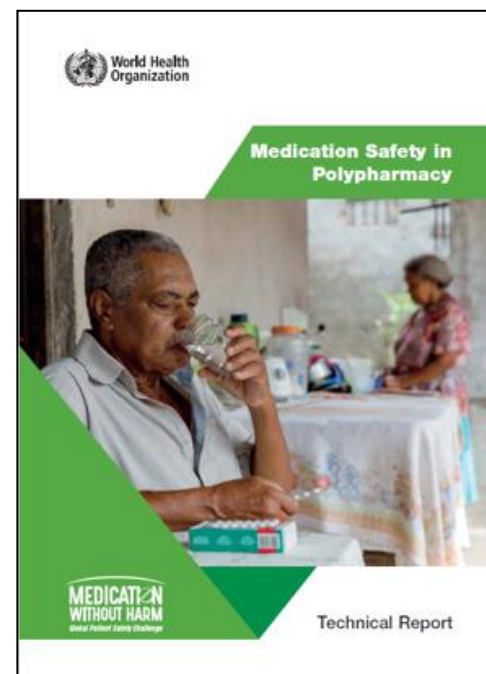
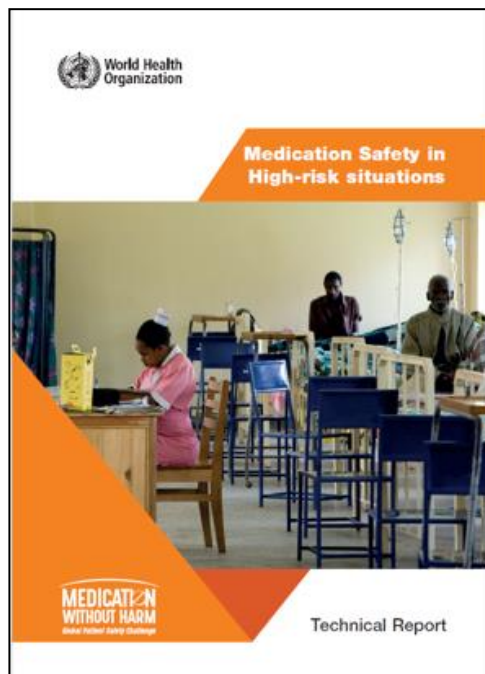
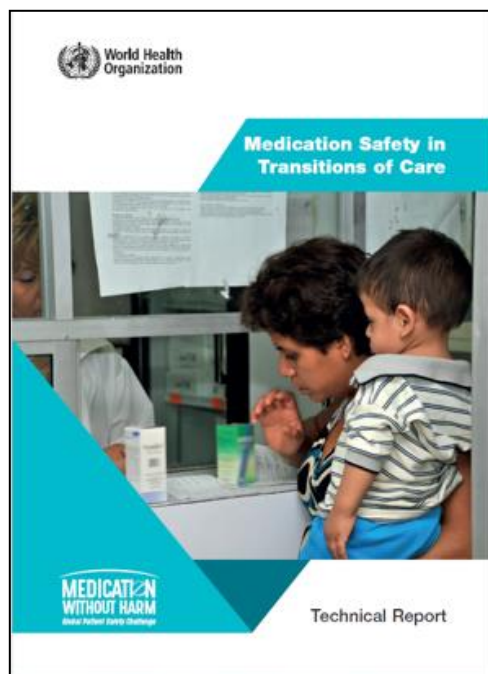
# Early priority actions



1. Transitions of care
2. Polypharmacy
3. High-risk situations

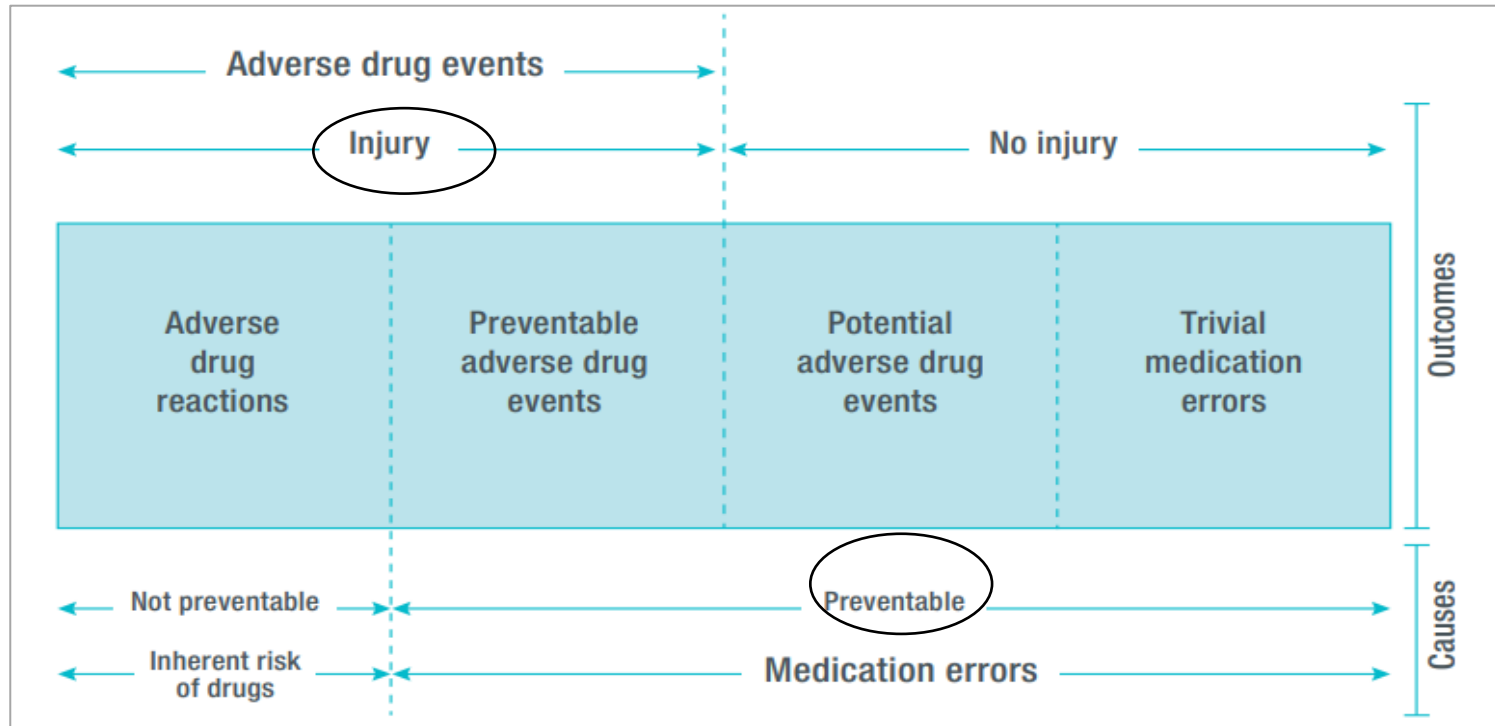
1. Soon, H.C., Geppetti, P., Lupi, C., Kho, B.P. (2021). Medication Safety. In: Donaldson, L., Ricciardi, W., Sheridan, S., Tartaglia, R. (eds) Textbook of Patient Safety and Clinical Risk Management
2. Strategic Framework of the Global Patient Safety Challenge. Geneva: World Health Organization, 2018.

# Technical reports





# Relationship between medication errors and adverse drug events

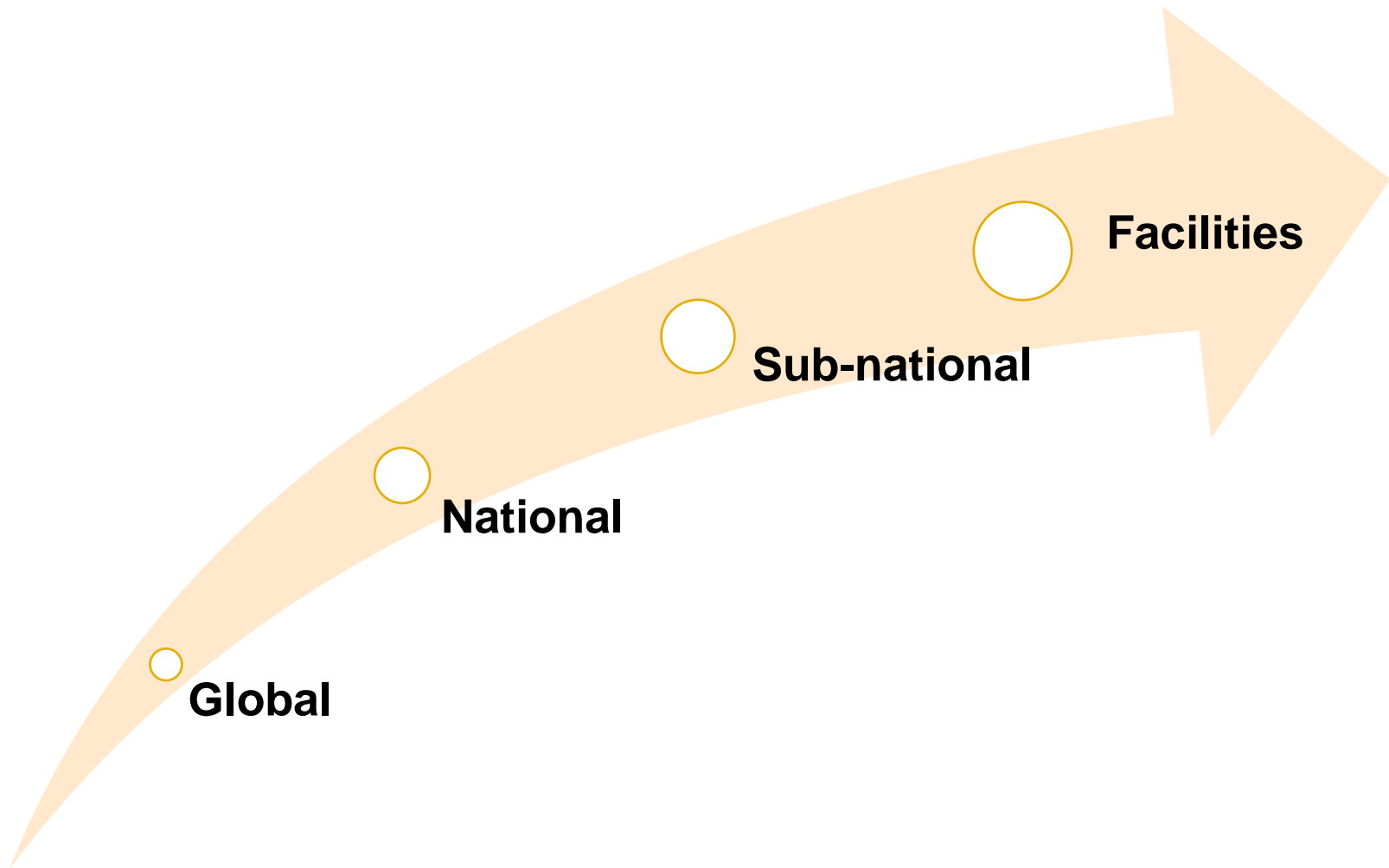


Medication Safety in Transitions of Care. Geneva: World Health Organization; 2019.

## Medication error

“Any preventable event that may cause or lead to inappropriate medication use or patient harm while the medication is in the control of the health care professional, patient, or consumer.”

# Implementation at different levels



## National level implementation



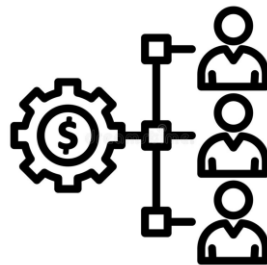
Political commitment &  
public awareness



Coordination  
mechanisms



Advisory &  
technical groups



Stakeholder mapping  
& engagement



Situational analysis

# Development of a national **action plan**



Conceptual  
framework



Activity  
work plan



Monitoring &  
evaluation

## Measurement needs of the Challenge

