Webinar on Safer Primary Care

Chaired by Sir Liam Donaldson, WHO Envoy for Patient Safety

You are invited to a webinar as part of the launch of the
WHO Technical Series on Safer Primary Care

- Patient engagement
- Education and training
- Human factors
- Administrative errors
- Diagnostic errors
- Medication errors
- Multimorbidity
- Transitions of care
- Electronic tools

Friday 16 December 2016 | 13:30-15:00 (Geneva time)

Webinar link: https://goo.gl/gsELp2
Technical series: www.who.int/patientsafety/topics/primary-care

World Health Organization

Webinar on Safer Primary Care

Friday 16 December 2016 - 13:30-15:00 (Geneva time)

The *WHO Technical Series on Safer Primary Care,* presented as nine monographs, explores issues and potential solutions for improving patient safety in primary care. The series aims to build capacity of national health care systems to develop, design and deliver safer primary care.

On the launch of the technical series, this webinar aims to provide insight into the rationale behind the development of the series, an introduction to each monograph by the respective authors, and share practical guidance for implementation. The development of the technical series was coordinated by the WHO Patient Safety and Quality Improvement (PSQ) Unit, of the Service Delivery and Safety (SDS) Department, with contributions from experts around the world.

Agenda

13:30	Introduction	Sir Liam Donaldson, WHO Envoy for Patient Safety
		Edward Kelley, Director, WHO/SDS
	Background	David Bates, Harvard University, USA
	Reflections	Debra de Silva, The Evidence Centre, UK
	Patient engagement	Jose Valderas, University of Exeter, UK
	Education and training	Jeff Markuns, Boston University, USA
	Human factors	John Beasley, University of Wisconsin, USA
	Administrative errors	Meredith Makeham, Macquarie University, Australia
14:00	Discussion	
14:15	Diagnostic errors	Hardeep Singh, Baylor College of Medicine, USA
	Medication errors	Rupert Payne, University of Cambridge, UK
	Multimorbidity	Stewart Mercer, University of Glasgow, UK
	Transitions of care	Paresh Dawda, Australian National University, Australia
	Electronic tools	Andrew Ellner, Harvard University, USA
14:40	Discussion	
14:50	Implementation and next steps	Neelam Dhingra, Coordinator, WHO/PSQ
14:55	Closing remarks	Sir Liam Donaldson, WHO Envoy for Patient Safety

Webinar link: https://goo.gl/gsELp2

Technical series: www.who.int/patientsafety/topics/primarycare

World Health Organization

Chairperson

Sir Liam Donaldson

WHO Envoy for Patient Safety

World Health Organization

Geneva

Safer Primary Care

Technical Series

World Health Organization
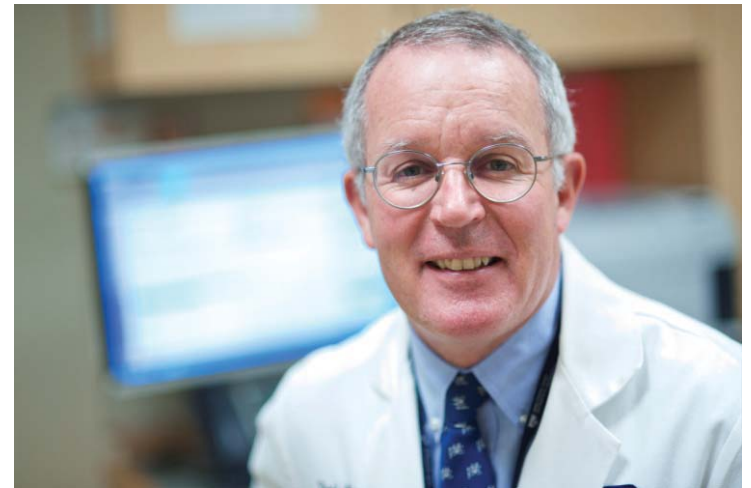

Dr Edward Kelley

Director

Service Delivery and Safety

World Health Organization

Geneva

Background: Safer Primary Care

David W. Bates, MD, MSc

External Program Lead,

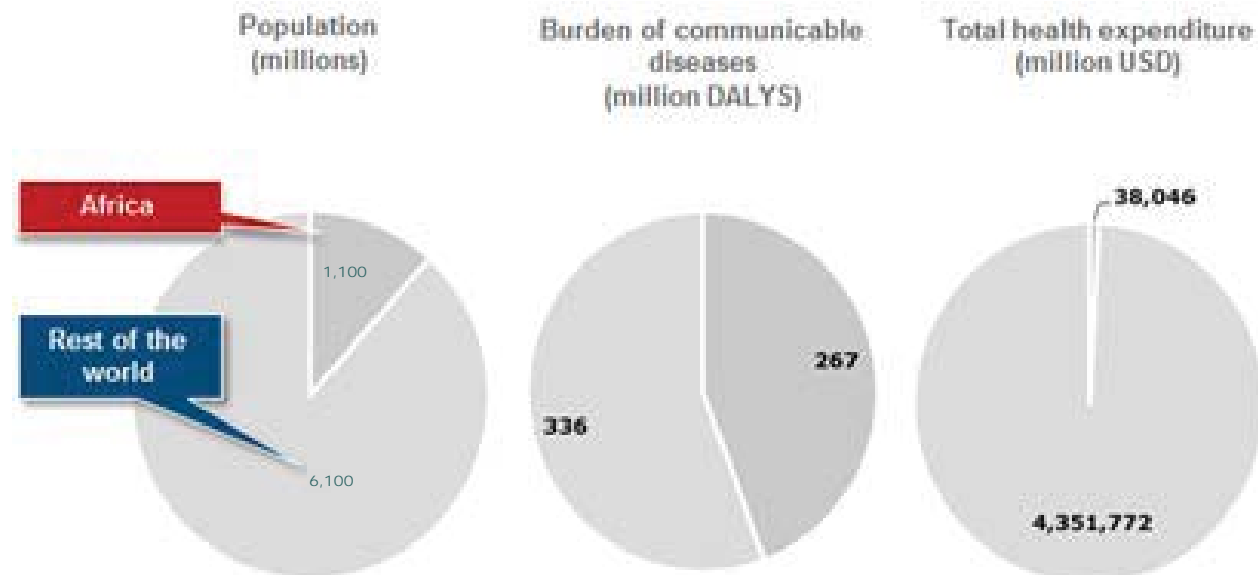Patient Safety Research WHO

Global Picture of Patient Safety

- ❖ Clear from many studies that safety is an important problem in every country evaluated
  - ◆ Adverse event rate in hospitalized patients about 10% in most developed countries
  - ◆ Much less data about developing world
- ❖ Know much more about safety in the hospital than safety outside it
  - ◆ Yet limited data available suggest that the magnitude of the problem is about as big outside hospitals
  - ◆ Most care globally is delivered in Primary Care

Introduction
Facts on health in Africa

High burden of disease

- More than 15% of the world's population

- 47% of the burden of communicable diseases, 25% of global health burden

- Less than 1% of global health expenditure

Population (millions)

Burden of communicable diseases (million DALYS)

Total health expenditure (million USD)

Africa

Rest of the world

1,100

6,100

336

267

38,046

4,351,772

EMRO/AFRO Results

- ❖ Health care is causing permanent disability and death in developing and transitional countries

- ❖ Much of this harm is preventable (~75%)

- ❖ This was done in hospitals; results in primary care would likely be similar

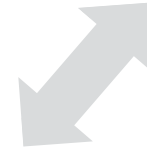- ➤ Underscores the importance of this current work

Safer Primary Care

REFLECTIONS

Professor Debra de Silva

Themes

- Good communication
- Engaging with people
- Win hearts and minds
- Technology
- Work collaboratively
- See the big picture

Key issues

- People using health services are increasingly asking for more responsive, open and transparent health care systems.

- Primary care providers are ideally placed to engage patients

- Engaging patients and families is equally important in all countries across the world, although the specific approaches may vary for according to the characteristics of:
  - patients (e.g. demographic characteristics, health literacy)
  - health care professionals (e.g. knowledge and attitudes)
  - health conditions (e.g. illness severity)
  - tasks (e.g. whether a required patient safety behaviour challenges clinicians' clinical abilities)
  - health care setting (e.g. primary or secondary care)

- Patient engagement can be implemented in:
  - The design and delivery of health services
  - Medical training

Potential solutions

Based on 39 reviews on patient engagement in safety:

- Educating patients and health care providers
  - Most widely researched area, particularly with the aim of reducing medication related problems
  - Encouraging people to ask questions or speak about their concerns is a fundamental issue
  - The evidence base is growing but is still not conclusive

- Patient feedback
  - But this needs activated committed health care teams which pro-actively use feedback for driving improvement

- Engaging for improvement
  - Limited evidence but great potential

Next steps

Strategies that WHO Member States could consider prioritizing in order to enhance patient engagement for safer primary care include:

1. Educating health care providers about patient engagement
2. Supporting patients to become actively involved
3. Broadening the ways in which patients are involved
4. Recognizing the importance of communities
5. Providing an enabling and supportive environment

Education and Training:
Technical Series on Safer Primary Care

Jeff Markuns, MD, EdM, FAAFP

The Problems

- Insufficient access to competent primary care
- Not enough education on safety
- Too many disease-specific programs
- Existing tools often ineffective for primary care
- Lack of proven training programs to improve safety in delivery of comprehensive primary care

Potential Solutions

- Emphasize competency in primary care for all frontline providers <u>and</u> all who interface with them
- Promote safety as a priority
- Develop educational content targeted at comprehensive primary care
- Use practical educational approaches
- Build infrastructure to support education
- Evaluate and monitor the impact of educational initiatives

Practical Next Steps

- **Ensure access to a fully competent primary care provider for all**
- Promote quality through accreditation
- Incorporate education about safety in primary care into all pre-service and in-service programs
- Innovate new training programs in safety specifically for use in comprehensive primary care
- Support development of the technical tools needed
- Develop trainers and educational resources
- Widen the range of professionals trained

Human Factors

Tosha B. Wetterneck, MD
John W. Beasley, MD
Richard Holden, Ph.D.
Erkin Otles, M.S.
Debra de Silva, Ph.D.

Human Factors: Addressing the Problems

- Use Human Factors Engineering to:
  - Build systems to reduce safety hazards and prevent future errors
  - Build defenses so that errors are less likely to result in harm

- Accomplish this by considering:
  - Physical elements in the environment
  - Cognitive elements
    - Design and implementation of Electronic Health Records
    - Clinical Decision Support tools
  - Organizational Elements
    - Communication strategies for effective teams

Human Factors: Solutions

- Data Management and Records
  - Reduce "Information Chaos"
  - <u>Appropriate</u> use of EHRs
    - Improve care
    - Reduce workload

- Communication and Teamwork
  - Patient as member of team
  - Promote team cognition
  - eCommunication versus face-to-face communication

- Policy and Planning
  - Health care policy based on understanding of realities of care
    - Failure to do this may worsen care and have unintended consequences.

Human Factors Improving Care: Next Steps

- Analyze systems
    - Use macroergonomics approaches – whole system
    - Include Human Factors experts in QI and safety efforts

- Health care environments designed around physical needs
    - Review risks associated with implementing new technologies or care processes.

- Provide Tailored resources
    - Provide cognitive support
    - Help patients be team member

- Focus on user-centered design of information systems
    - Assessments of user needs to design and implement health IT
    - Involve end-users in evaluation of systems
    - Assure systems fit clinician workflow

- Train planners, clinicians and patients
    - Train leaders and planners in Human Factors concepts.
    - Provide patients and families with simulation training in self-care.

Summary: Involve Human Factors experts in the design, implementation and evaluation of technologies and processes intended to improve primary care.

Administrative Errors in Primary Care

Meredith Makeham

Chief Medical Advisor – Australian Digital Health Agency
Clinical Professor, Faculty of Medicine and Health Sciences, Macquarie University, Sydney, Australia

World Health Organisation – Safer Primary Care Webinar
16th December 2016

Australian Government
Australian Digital Health Agency

About Administration Errors

- An 'administrative error' can be defined as: failure to carry out a planned action, or undertaking an incorrect action, as **part of the systems and processes of delivering primary care.**

- Administrative errors are **amongst the most frequently reported type of error** occurring in primary care, estimates range from 5-50%. Variation in definitions and variability in the methods of measurement limit our ability to estimate this.

- Associated **harm** may be perceived as lower with this error category, however the underlying cause of patient safety incidents associated with 'diagnosis' and 'medication' may in fact be related to failures in systems and processes.

Australian Government
Australian Digital Health Agency

Administrative Error Examples

- Patient record errors

- Investigation requests and results

- Follow up system errors

- Communication during transitions

- Patient identification errors

- Relationship to other errors

Australian Government
Australian Digital Health Agency

Practical Next Steps

- Improving record systems – access and accuracy

- Support interoperability of systems and information sharing

- Clinical Governance, accreditation and risk management

- Strengthening incident reporting and learning systems

- Patient access their own health information

Reducing the Global Burden of Diagnostic Errors in Primary Care

Hardeep Singh, MD, MPH
Houston VA Center for Innovations in Quality, Effectiveness & Safety
Michael E. DeBakey VA Medical Center
Baylor College of Medicine
hardeeps@bcm.edu
Twitter: @HardeepSinghMD

VA HEALTH CARE | Defining **EXCELLENCE** in the 21st Century

Baylor College of Medicine

Diagnostic Errors: Quick Facts

Relationships between diagnostic errors, missed opportunities and patient harm[1]

MISSED OPPORTUNITIES	HARM (from delayed or wrong treatment/test)		NO MISSED OPPORTUNITIES
A	B	C	D
Missed opportunities in diagnosis due to system and/or cognitive factors	Preventable diagnostic harm	Delayed/wrong diagnosis associated with patient harm but no clear evidence of missed opportunities	Delayed/wrong diagnosis but no clear evidence of missed opportunities

Breakdowns in the diagnostic process[2]

- Patient-practitioner clinical encounter 79%
- Referral problems 20%
- Patient-related factors 16%
- Follow-up & tracking of diagnostic information 15%
- Performance & interpretation of diagnostic tests 14%
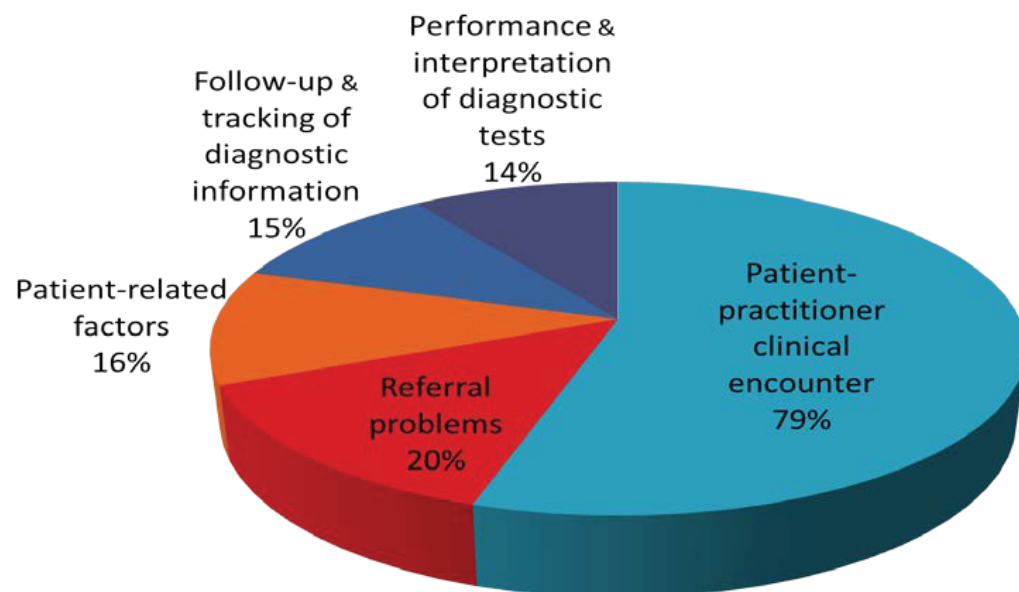
1 in 20 US adults in outpatient settings annually[3] (this is an underestimate)

High-risk situations include[1]:

- Cancer
- Infections
- Cardiovascular disease
- Diagnosis in children

1. Singh et al *BMJ Qual Saf* 2016
2. Singh et al *JAMA Intern Med* 2013
3. Singh et al *BMJ Qual Saf* 2014

- Promote reflective practice and knowledge acquisition
- Develop and implement differential diagnosis tools
- Provide explicit training on "basic science" of diagnostic error (e.g. cognition, human factors
- Blame-free and improvement-focused systems focusing on feedback and error analysis

- Implement specific strategies for LMICs (access, workforce competency, high quality diagnostic testing, safe/effective health IT and reference information)
- Effective use of non-physician health care workers
- Prioritize conditions that can be improved with relatively minor investments

- Develop improved feedback systems
- Implement systems that encourage learning from diagnostic errors

Improving Diagnostic Reasoning

Providing Systematic Feedback to Clinicians About their Diagnoses

Encouraging Government Policies that Support Primary Care

- Encourage patients to act as a safety net
- Dispel misconceptions such as "no news is good news"
- Promote opportunities for patients to raise their diagnostic concerns or fears

Potential Interventions to Reduce Global Burden of Diagnostic Errors

Optimizing Diagnostic Strategies in Primary Care

Involving Patients

- Develop "uncertainty" management strategies
- Develop evidence for validation, best uses, and impact of clinical prediction rules
- Optimize knowledge access in front-line care

Improving Access to Diagnostic Tests

Improving Information Technology

- Remote consultation and diagnosis
- IT support of diagnostic processes (e.g. data gathering, diagnostic reasoning, and patient follow-up and tracking)
- Build systems to detect errors (e.g. triggers)
- Use IT to facilitate diagnostic feedback to clinicians

Developing Methods to Identify and Learn from Diagnostic Errors

- Improve access to diagnostic tools for common conditions
- Use of high-quality POC testing techniques

- Design triggers to identify patient records that may contain diagnostic errors
- Assign 'clinical champions' to encourage physician reporting and learning from errors
- Identify and fix process breakdowns in follow-up
- Use non-punitive and non-defensive discussions to find and analyse cases of diagnostic error

Practical Next Steps

Strategies	Examples
Supporting the workforce	• Providers have adequate time to assess patients • Train providers on reflecting; managing uncertainty • Facilitating a culture of open discussion & feedback
Including patients as part of the care team	• Encouraging patients to be proactive about asking for information and follow-up • "No news is NOT necessarily good news"
Using supportive tools	• Redesigning processes to ensure closed loop systems • Effective use of health information technologies
Improving diagnostic facilities	• Improving access to testing • Point of care testing
Prioritizing areas for improvement	• Targeting conditions such as cancer, cardiovascular, conditions, and infections • Investing in research into causes and solutions for diagnostic error to develop local interventions

Medication Errors

Rupert Payne

Consultant Senior Lecturer in Primary Health Care

"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"

- Several different classifications of error

- Varied causes: clinician, patient, tasks, etc.

- Incidence unclear but probably growing

- Consequences: adverse reactions, interactions, efficacy, non-adherence, QoL, service use, death

Potential solutions

- Medication review/reconciliation
- Automated information systems
- Education

  Multifaceted approaches

- Special consideration: injection use, paediatrics, care homes

- Implementation of reviews in practice
- Improve computer systems
- Provision of education supported by appropriate tools
- Address knowledge gaps
  - e.g. interventions that impact adverse outcomes

Webinar on Safer Primary Care : Caring for People with Multiple Conditions

Professor Stewart Mercer

Multiple conditions – key issues

Multimorbidity is a growing global problem, including in LMIC, and is associated with age and socioeconomic deprivation. Primary care is essential but there is a higher risk of safety issues relating to:

- polypharmacy, resulting in poor medication adherence, and adverse drug reactions
- complex clinical management regimens
- complex and demanding self management regimens
- greater need for good communication and patient centred
- more frequent and complex interactions with health care services leading to greater susceptibility to failures of care delivery and co-ordination
- more vulnerability to safety issues due to poor health, advanced age, cognitive impairment, limited health literacy, and comorbidity of mental health problems

Potential solutions

- Systems-based approach
  - policy makers and healthcare providers need to understand that mutimorbidity is the norm in NCDs and contributes to health inequalities.
- Primary care coverage
  - Strengthening primary care by providing universal health care coverage is an important step, but countries must also be mindful of the inverse care law and the complex needs of people with multimorbidity.
- Guidelines
- Research that focuses on multimorbidity, including safety in primary care is urgently needed. There is a need for guidelines to consider multimorbidity rather than taking a single-disease focus.

Practical next steps

- Policy join-up – social determinants and universal coverage
- Systems approach to integration of health and social care
- Identifying people with multimorbidity in need of extra support
- Prioritising continuity of care and self-management support
- Tailoring treatment regimens to safely meet needs in multimorbidity

Electronic Tools for

Safer Primary Care

Ashwin Vasan, MD, PhD
December 16, 2016

Key Challenges

- Health systems universally challenged by:
  - ➢ Fragmentation of care
  - ➢ Poor communication and coordination
  - ➢ Limited teamwork.

- Missed and delayed diagnoses biggest safety risk in primary care.

- Electronic tools can help address these challenges, but are not a panacea, and their implementation, if not well-designed, can have unintended adverse consequences.

Potential Solutions

- Electronic Health Records (EHRs)
  - ➢ Standardize information sharing
  - ➢ Structure test ordering and follow-up
  - ➢ Provide decision support
- Population Health Management tools
  - ➢ Support adherence to care plans and evidence-based care
  - ➢ Surveil for missed diagnoses (such as common cancers)
- Mobile technologies and telemedicine
  - ➢ Connect health workers, patients across distance
- Patient-facing applications
  - ➢ Support self-management and engagement in care

Practical Next Steps

1. Include an investment in ehealth infrastructure in long-term planning with an emphasis on:
   - How electronic tools can support team-building, workforce redesign, and continuous quality improvement
   - Identifying tools that support high-functioning primary care systems and can be adapted to local context.

2. Work to ensure interoperability of systems within your geographic area to ensure data portability.

3. Anticipate the need for continuous adaptation of electronic tools and workforce design; foster capacity for internal research and evaluation and external sharing to enable continuous systems improvement.

Safer Primary Care Transitions of Care

Dr. Paresh Dawda

MB BS DRCOG DFRSH FRCGP FRACGP PGCert

Honorary Associate Professor
Department of Health Services Research & Policy
Australian National University

Transitions of Care

Definition:
broader concept than handover of care encompasses clinical aspects + views/experiences/needs of patients

Problem
Ineffective transitions lead to increases in mortality, morbidity, increase costs (emotional and financial) for all, negative experiences

Key issues
- Patients/cares are only constant
- Culture is an important aspect (needs to be integral to care)
- Communication as a critical element
- Medication related issues are a significant contributor
- tools and technology can be enablers (reliability science principles)

Potential Solutions

Useful interventions

- a wider systems approach
- Planning
  - Proactive
  - Stratification
- Information transfer (timely, appropriate, accurate, standardised)
- Medicines management
- Patient involvement based on level of risk
- Case management/care co-ordination
- Tracking systems

NB early follow up

Practical Next Steps

- ❖ Sharing tools and developing governance arrangements
- ❖ Using a bundle approach
- ❖ Identifying those most at risk of safety incidents
- ❖ Focusing on enhancing relationships and communication

![Safer Primary Care — Technical Series — World Health Organization]

Dr Neelam Dhingra

Coordinator

Patient Safety and Quality Improvement

World Health Organization Geneva

Administrative Errors

Technical Series on Safer Primary Care

World Health Organization

Education and Training

Technical Series on Safer Primary Care

World Health Organization
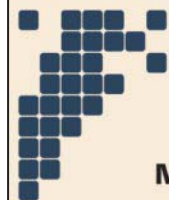
Safer Primary Care

Technical Series

Medication Errors

Technical Series on Safer Primary Care
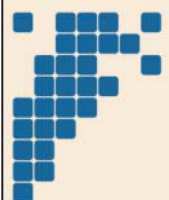
World Health Organization

Multimorbidity

Technical Series on Safer Primary Care

World Health Organization

Diagnostic Errors

Technical Series on Safer Primary Care

World Health Organization

Electronic Tools

Technical Series on Safer Primary Care

World Health Organization
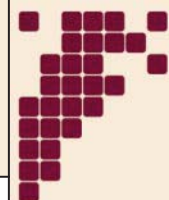
Human Factors

Technical Series on Safer Primary Care

World Health Organization
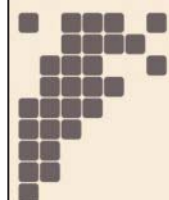
Patient Engagement

Technical Series on Safer Primary Care

World Health Organization

Transitions of Care

Technical Series on Safer Primary Care

World Health Organization

Immediate Next steps

- Wider dissemination - readily available online for free access and download

- Availability and dissemination of print version through WHO regional and country offices and partners, as required

- Translation in different WHO languages

- Sharing of information and the materials in major international conferences and meetings

- Recordings of this webinar available online

Implementing Safe Primary Care

- Aims to build capacity in designing and delivering safer primary care at national, sub-national and local levels

- Intended for use by policy-makers, health care professionals, health care administrators and managers, health system planners, researchers and other stakeholders interested in improving patient safety in primary care

- Advocating MS/policy makers for delivery of safer primary care services and formulating policies

- Fostering technical cooperation to implement key action points

- Working at different levels to understand local context and adapt strategies

- Measuring and monitoring patient safety improvements over time

Working with Partners

- WHO looks forward to working with Member States, experts and partners, including
    - World Organization of Family Doctors (WONCA) and Wonca Europe Network EQuiP
    - WHO Global Patient Safety Network
    - Health Harmonization in Africa Service Delivery Group
    - Health Information For All
    - Asia eHealth Information Network
    - International developmental agencies
- Linkages with other global initiatives
    - Primary Health Care Performance Initiative (PHCPI)
    - Health data collaborative

Thank you