World Health Organization

Safer Primary Care
A Global Challenge

SUMMARY OF INAUGURAL MEETING

The Safer Primary Care Expert Working Group

WORLD HEALTH ORGANIZATION, GENEVA
27TH - 28TH FEBRUARY 2012

WHO/IER/PSP/2012.16

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Executive Summary

Since unsafe care was recognized as a public health problem, numerous efforts have been made to understand its nature and magnitude and to devise appropriate solutions. Most of this activity has focused on what happens to patients in hospital settings. But understanding the magnitude and nature of harm to patients outside the hospital, especially in primary care, is of the utmost importance given that the majority of doctor-patient interactions take place in these settings. Furthermore, accessible and safe primary care is essential to ensure universal coverage, a priority goal of the World Health Organization (WHO) and Member States.

Very little is known about the possible risks to patients that are frequently present in the primary and ambulatory care, as well as on the possible impact of these risks on the health of patients. It has been identified however, that a significant proportion of safety incidents captured in hospitals had originated in the earlier levels of care. Therefore, advancing the understanding and knowledge about the risks to patients in primary care, the magnitude and nature of the preventable harm due to unsafe practices in these settings, and on the safe mechanisms to protect patients, is essential in order to secure access to safe and quality care. Particularly, this is very relevant for developing countries, where a high proportion of health care takes place in primary care settings, often with important limitations in infrastructure, as well as in procedures and standards for safe practices.

The WHO Patient Safety Programme (PSP) intends to reflect and prioritise the key knowledge gaps and challenges that surround the safety of primary care. In collaboration with internationally renowned experts in the fields of primary care, research, and patient safety, WHO PSP organized a programme of work aimed at producing a global agenda for research and action in promoting safer primary care with a special focus on low- and middle-income countries. This is a key first step on the road towards developing solutions aiming to improve the safety and quality of primary care. The inaugural meeting of the Safer Primary Care Expert Working Group took place at WHO Headquarters in Geneva, Switzerland from 27-28 February 2012. Participants included representatives from Australia, Austria, Bahrain, Canada, Denmark, France, Ghana, Kuwait, the Netherlands, New Zealand, Oman, Saudi Arabia, South Africa, Spain, Switzerland, Tunisia, the United Kingdom (England and Scotland, UK), and the United States of America (USA). The meeting was opened by senior representatives of WHO, namely Dr Marie-Paule Kieny, Assistant-Director General and Dr Najeeb Al-Shorbaji, Associate Interim Director (PSP). Sir Liam Donaldson, WHO Director General's Envoy for Patient Safety also gave a welcome address.

The Safer Primary Care Expert Working Group considered, discussed and debated the available evidence on the burden of harm resulting from errors – most of which originated from high-income settings – and the global limited understanding of how to intervene to improve the safety of care in primary care settings. The importance of focusing on this hitherto largely neglected aspect of health systems was underscored, particularly in the light of recent pronouncements from WHO and others on the crucial and increasing importance of high quality primary care.

Also emphasized, particularly, but not exclusively in the context of low- and middle-income settings, was the considerable burden of preventable harm through poor access to care and the need therefore to consider the impact of such poor access on errors of omission and in avoidable harm and loss of health gain. Given the pressing need for improving the safety of all types of care,

the Group was of the opinion that greater understanding of the effectiveness of quality improvement initiatives should be as well considered in order to attempt to bridging the gap between describing the current state of safety in primary care and taking active steps to make care safer.

It was however recognized that more parsimonious step-wise approaches to developing evidence, beginning with epidemiological investigations and then moving to randomized controlled trials are also important in order to generate potentially transferable lessons. This realization, together with the recognition of the need to obtain a rich, multi-faceted understanding of the frequency of errors and associated harm, led the Expert Working Group to emphasize the need for underpinning conceptual and methodological work in order to help improve the quality of research and quality improvement initiatives.

This foundation will facilitate the opportunity for comparing and contrasting findings from different parts of the world in the near future.

During the course of the meeting, the Safer Primary Care Expert Working Group participated in a three-round Delphi exercise to achieve consensus on the primary care contexts and aspects of care provision that need priority attention both globally and by income setting. Breakout groups discussed how to translate the findings from this prioritization exercise into a limited number of focused initiatives that can be taken forward with the support of funding partners.

Overall, considerable progress was achieved in sharing experiences and insights from different parts of the world and developing a shared frame of reference to work collectively to improve the quality and safety of primary care provision.

The major outcomes of the meeting were:

1. *Recognition of the importance of unsafe primary care.*
2. *Willingness to work as a network around a common agenda, and share instruments, tools, data and learning.*
3. *Support aimed at integrating baseline measurement with quality improvement in low- and middle-income settings.*
4. *Identification of priority areas and key knowledge gaps.*
5. *Recognition of the need for increased knowledge together with practical proposals to bridge major knowledge gaps.*
6. *Suggestions for a roadmap for action*

This document provides a summary of the evidence considered and generated, a synopsis of the discussions and provides details of essential next steps in ensuring that the considerable time, effort and intellectual commitment invested by members of the WHO Safer Primary Care Expert Working Group is now built upon as we try to realize the truth in that timeless maxim, first do no harm.

Background

The 1978 Declaration of Alma-Ata heralded a paradigm shift in healthcare.[1] This argued that the key tenants of a modern healthcare system should include a greater focus on equitable healthcare, a patient-centered approach, management of disease in the community and preventive medicine. The move towards primary care-based models of healthcare has however until recently been patchy with considerable progress in some parts of the world, but a persistence of specialist-based provision, particularly in low- and middle-income country settings. There is however now growing international realization that because of the increasing demands on health systems, more cost-efficient models of care need to be developed and invariably there is now an active move globally towards developing community-based patient-centered health systems.[2] Furthermore, several challenges of social mobility have put a strain on the provision of primary care services – globalization and ageing populations posing unique challenges.

Over the last two decades, there has been a growing realization that healthcare provision may inadvertently result in harm to patients. Whilst this was considered in the classical polemics by the likes of Ivan Illich[3] and Peter Skrabanek,[4] this field of enquiry really took a step forward with the studies by Leape,[5] Berwick,[6] and the US Institute of Medicine's To Err is Human[7] and the UK's Organisation with a Memory[8] reports. These landmark investigations were however centered on hospital-based specialist care provision. Secondary care practitioners have, building on this evidence, travelled further than their primary care colleagues in the patient safety journey; they have been able to estimate the prevalence of harm due to all episodes of secondary care ranging from 3.2 to 16.6%.[9 10 11 12 13 14] They have also attempted to adopt practices from other high-risk industries such as aviation, oil and nuclear power, which have made great progress in managing the challenges of improving safety and reducing harmful events. These industries have all accepted that errors are inevitable and provide opportunities to learn and improve from them, have built systems that reliably deliver what is required, proactively seek to identify errors and take steps to mitigate the risk of harm resulting from errors that still occur. They are increasingly drawing on an understanding of human factors to make the "right thing the easiest thing to do", created teams of employees trained in technical and non-technical skills and developed formal models of communication. Indeed, hospitals that have adopted such approaches have seen significant improvements in clinical outcomes. There is however a paucity of such initiatives being taken up in primary care, in part due to the heterogeneity of the settings which range from the traditional healer to the multi-partner family practice. But also, another cause is the lack of a robust underpinning evidence base on the frequency of errors, on the particular high risk contexts, and an appreciation of the causal pathways through which these errors arise and translate into harm. As a consequence little is known about where and how to effectively intervene to improve the safety of primary care provision.

The recognition of patient safety as a public health concern was noted in resolution 55.18 of the World Health Assembly (WHA).[15] This led to the creation of the World Alliance for Patient Safety almost a decade ago, which is now known as the Patient Safety Programme (PSP) of WHO. Several key pieces of work have been undertaken under the auspices of WHO,[16] which focus on understanding the risks from healthcare and engineering appropriate solutions to reduce the burden of harm due to unsafe care. Particularly noteworthy and successful initiatives include the global campaigns: Clean Care is Safer Care[17] and Safe Surgery Saves Lives.[18]

Building on the success of these and other related initiatives, the Patient Safety Programme of WHO has turned its attention as well on primary care, where the majority of patient-clinician interactions now take place and where most healthcare is now delivered. Primary care poses unique challenges. It is, for example, very heterogeneous in its manifestations, involves management of patients with a wide variety of undifferentiated complaints and is in many parts of the world still poorly regulated and regarded. The relationships that patients have with their primary care practitioner is furthermore different from other care settings in that it is, particularly in developed country contexts, often more personal and longer-term than that provided through secondary or tertiary care.

Simplistic attempts at transferring lessons from specialist care settings to primary care is therefore not without problems. The underpinning evidence-base, whether in terms of conceptual frameworks, typologies/taxonomies, epidemiology, risk factors or interventions all therefore potentially need to be developed in their own right in relation to primary care; it is furthermore important, as noted above, that this evidence base reflects the variations in primary care provision in different parts of the world.

In attempting to begin deliberations on the issues raised above, WHO commissioned a systematic review of the international literature and convened the Safer Primary Care Expert Working Group, comprising of leading world specialists with an interest in improving patient safety in primary care, in order to identify major knowledge gaps about patient safety and avoidable patient harm in primary care. The aim was to collectively make progress on achieving a step-change in improving the safety of primary care internationally.

Aims of the inaugural meeting

Members of the Safer Primary Care Expert Working Group met for two days on the 27th and 28th February 2012 at WHO Headquarters in Geneva to share their experiences and discuss ways of enhancing understanding of and improving the safety of primary care internationally. Experts came from a variety of backgrounds including patient safety, primary care, health policy and academia (Appendix 1).

The key aims for this inaugural meeting were to:

- Create an unrivalled opportunity for sharing of experiences and networking with colleagues from across the world.
- Develop a working appreciation of primary care contexts internationally.
- Assess and prioritize the key knowledge gaps about patient safety and avoidable patient harm in primary care.
- Understand the frequency, nature, burden and preventability of patient safety incidents in primary care settings.
- Appreciate the challenges related to understanding patient safety issues in primary care in low-, middle-, and high-income settings.
- Suggest directions for further action leading to bridging existing knowledge gaps and delivering safer primary care.

The agenda of the inaugural meeting can be found in Appendix 2.

Participants to the meeting

Following the invitation of WHO to a range of international experts in primary care, patient safety, research, or a combination of these skills, 39 specialists were able to attend the consultation. Participants included representatives from Australia, Austria, Bahrain, Canada, Denmark, France, Ghana, Kuwait, the Netherlands, New Zealand, Oman, Saudi Arabia, South Africa, Spain, Switzerland, Tunisia, the United Kingdom, and the United States of America.

Though participants represented national and international constituencies from almost all WHO regions in the world, not all invited specialists were able to respond to the WHO call due to limitations in resources. WHO is committed to involve a growing number of interested parties and experts in the next steps of the process in order to expand and maximize participation in this important area of work.

See Appendix 1 for list of participants.

Main areas for discussion

The five main areas for discussion were to: (i) reflect on preliminary findings from a systematic review of the literature; (ii) hear about ongoing conceptual, methodological and epidemiological work in different parts of the world; (iii) undertake a formal consensus building exercise to identify priorities for future work; (iv) discuss about options to translate the findings from the prioritization exercise into a limited number of detailed proposals across low-, middle- and high-income settings; and (v) have a final brainstorming session to help formulate next steps. Key points arising from each of these areas are discussed below.

Systematic review: the global burden of patient safety incidents in primary care

As part of work aiming to understand the scope and gaps for conducting research on patient safety, WHO commissioned in 2008 a review of the literature focusing on primary care. This review noted the scarce attention given to patient safety in this level of care and highlighted some of the many prevalent gaps, including the need for research in low and middle-income countries.[19] This follow-up work will update the earlier study seeking to:

- Estimate the frequency of patient safety incidents and disease burden associated with primary care globally.
- Describe approaches used to understand underlying causal factors and preventability of these patient safety incidents.
- Inform future work on developing methods to measure the global burden of harm in primary care and identify potential gaps and priority areas.

Preliminary findings

- Our search revealed a total of 47,223 references from which we screened 15,624 titles; from these, we selected 167 primary studies and 9 systematic reviews.
- Most studies (54.5%) have been carried out in general/family practice settings followed by community pharmacy and ambulatory care clinics.
- Low- and middle-income countries contribute a very small proportion to the literature on patient safety in primary care (9/167, 5.4%). High-income countries contribute almost 20 times as much to the understanding of harm caused by patient safety

incidents in primary care (158/167, 94.6%). The multi-country studies did not involve any low-and middle-income countries (2/167, 1.2%). A global representation of the research activity is shown in Figure 1.

- We broadly identified four common methodological design categories for measurement of harm in primary care; these included systematic reviews (n=9), the control arms of experimental studies (n=3), epidemiological study designs (n=108) and qualitative methods (n=56).
- The most commonly studied areas of iatrogenic harm in primary care were medication errors, followed by office-administration errors and then communication errors.
- There was a lack of standardized information on the frequency, burden of harm and preventability of patient safety incidents in primary care. As a result, estimates of frequency varied widely across studies. Furthermore, the definitions of errors and the typologies of harm varied widely as well across studies, highlighting the lack of a widely accepted taxonomy specific to primary care. A full description of the results of the literature review is covered in a separate publication.
- In addition, certain contexts where patient safety incidents were most prevalent became apparent; these include errors in the medication process, particularly in elderly patients with multiple morbidities.
- We estimated that, overall, mild to moderate harm associated with errors of commission was more common than serious harm. Severe harm seemed associated with prescribing and misdiagnosis/delayed diagnosis.
- Varying estimates of preventability of all types of patient safety incidents for patients seeing a primary care practitioner were also offered. Preventability seemed associated with process errors related to medications, administration and communication.

Discussion on the review

The complete review of the literature was shared to the Safer Primary Care Expert Working Group for comments subsequent to this inaugural meeting. This review is an attempt to offer a baseline on the key areas of iatrogenic harm due to errors in primary care and was presented as a background document to the expert consultation.

The discussion that followed the presentation of the review highlighted the scarcity of data, particularly from developing and transitional countries, as well as the lack of established consensus on the principles, and concepts underlying unsafe primary care. Also gaps were highlighted in valid and reliable measures and measurement methods. Hence, there was great difficulty in establishing global estimates of patient safety incidents and harm in primary care. These gaps were later identified as important areas to consider and meet in the path towards safer primary care.

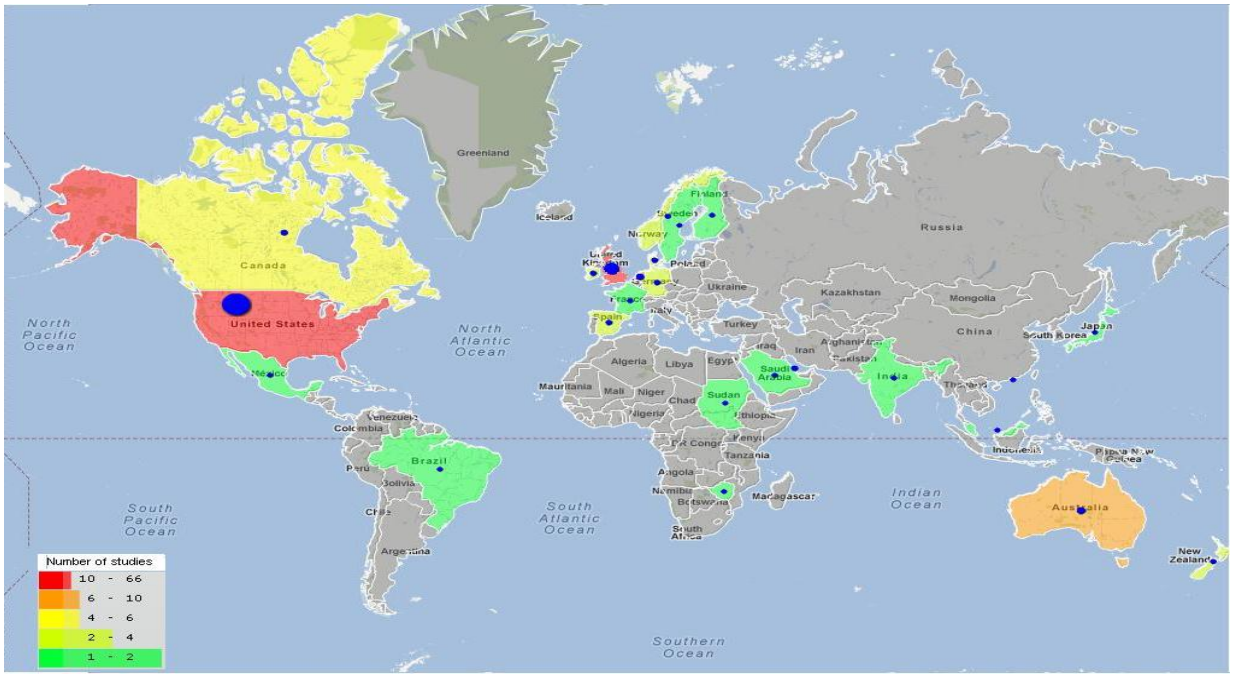
Despite recognizing the policy relevance of understanding the global burden of harm in primary care, the heterogeneity and broad scope of the field also called for more in-depth and specific analysis into particular areas of risk. For instance, patient harm may increase with the greater frequency and complexity of consultations and/or interventions. The same effect may be seen if a patient has increased physical, cognitive and emotional vulnerability. As such it was deemed essential to understand the harm occurring around specific interventions and high-risk patients and contexts.

Limitations of human and institutional capacity to advance quality and patient safety practices as well as research, including the limited opportunities for expanding appropriate training, the need for fostering the patient safety and improvement culture across organizations, health care institutions and clinicians, and the increasing difficulties

in obtaining additional resources to secure improvements, were highlighted as well.

New research, including an international study to measure harm in low-and middle-income countries using robust epidemiological techniques; and a parallel piece of work on the burden of harm resulting from errors of omission will be especially useful, as will the better understanding on the effectiveness of interventions in patient safety and primary care and/or quality improvement initiatives in the same area.

Figure 1: Global participation in patient safety research associated with primary care



The size of the dot ● represents the number of primary studies undertaken in these geographical locations

There are two multi-center studies not listed on the map: the first study included Australia, Canada, Netherlands, New Zealand, the United Kingdom and the United States of America[20]; the second study included Australia, Canada, England, the Netherlands, New Zealand, and the United States of America.[21]

Presentations during sessions

The consultation hosted a series of presentations, including the results and summary of the methodological gaps in patient safety and primary care identified earlier (Meredith Makeham) and an overview of key findings from the systematic review (Sukhmeet S. Panesar and Andrew Carson-Stevens). But moreover, it focused on the global challenges faced by teams studying and trying to improve the safety of primary care in various contexts and socioeconomic settings. These were discussed by the LINNAEUS group (Aneez Esmail), the Gulf countries (Tawfik Khoja), SafeCare Africa (Nicole Spieker), the Institute for Healthcare Improvement (IHI) in Ghana (Nana Twum-Danso), the PAHO-AMRO Adverse Events in Primary Care Latin American group (Ludovic Reveiz) and Scotland (Neil Houston).

Consensus building exercise: identifying priorities for safer primary care: insights from an international working group

During the meeting, a priority setting exercise was conducted following a modified Delphi methodology. The aim was to develop consensus about the most relevant patient safety issues and the areas and contexts for improvement in primary care. The exercise involved 3 rounds of consultations.

Preliminary findings

- Family practice and pharmacy were considered as particular priority areas for advancing patient safety across all income categories (with 92-100% and 88-96% agreement respectively).
- Additional key primary care contexts that were identified as warranting particular attention included community midwifery (92% agreement) and community nursing (91% agreement) in low-income countries and care homes in high-income countries (84% agreement).
- Communication between healthcare professionals and with patients (86-100%), teamwork within the healthcare team (87-100%), laboratory and diagnostic imaging investigations (85-96%), issues relating to data management (87-96%), transitions between different levels of care (87-96%), and chart/patient record completeness (82-84%) were identified as the most important sources of patient safety incidents across all economic settings.
- Additional areas to focus on in low- and middle-income settings included counterfeit drugs (100% and 82% respectively) and errors in the execution of clinical tasks (100% and 96% respectively), whilst country-specific issues in high-income settings included higher-level systems management (e.g. human resources, 88%) and technology-related factors (89%).

Discussion

- This work is an attempt to inform efforts to measure and address the extent of inadvertent harm in primary care settings with different levels of income, and reflect the opinions of the meeting participants.
- The exercises suggest that, in terms of contexts, efforts should focus on family practice and pharmacy settings across income categories; community midwifery and community nursing in low- and middle-income countries; and care homes in high-income countries.
- Areas to be investigated across income settings should include communication between healthcare professionals and with patients, teamwork within the healthcare

team, laboratory and diagnostic imaging investigations, issues relating to data management, transitions between different levels of care, and chart/patient record completeness.

- Counterfeit drugs and errors in the execution of clinical tasks are important additional areas primarily in low- and middle-income settings, whilst high-income settings may wished to focus on higher-level systems management as well as in technology-related factors.
- Other important issues were not identified in this exercise, but may be relevant in many contexts. These include injection safety and maternal care which are recognised patient safety problems of particular importance in developing countries, though these were not highlighted here. It will be important to expand this exercise, including broader assessments of the literature and expert opinion, in order to arrive at a global set of priority area

A draft paper was circulated to the Safer Primary Care for All Expert Working Group following the meeting with an aim to submit it for publication.

Prioritizing issues and challenges to bridge knowledge gaps on unsafe primary care: discussion groups based on economic setting

Three lively discussions focusing on specific challenges to overcome the existing gaps across different settings (high-, middle- and low-income countries) also took place during the meeting.

The high-income group led by David W Bates and Anthony Avery highlighted some of the prevalent issues such as lost laboratory and radiology tests, medication errors, issues and adverse events occurring at the transitions of care, diagnostic errors, communication (physician and patient; between physicians); handovers of care; non-compliance and adherence problems; and computer systems. Various measurement tools were proposed which included fieldwork and database analyses. Among the suggestions proposed were to design and promote the use of clinical and safety practices in bundles, to develop tools for increased communication across professionals, as well as change management and improvement packages associated to clinical safety practices. Team training and increased use of information technology (IT) in clinical care were also seen as essential enablers.

The middle-income group led by Aziz Sheikh reiterated that primary care was an emerging specialty and unless initiatives of safer primary care were intertwined with quality improvement, there would be limited support from governments who would be cautious about funding studies of errors in primary care as these might gain negative publicity. Nevertheless, innovative studies were proposed to study our understanding of safer primary care in these settings; these included a prospective study looking at a number of high-risk patients (e.g. the elderly and/or poly-morbid patients) and using a mixed-methods approach to determine the frequency, burden of harm and preventability of errors; a study involving simulated patients sent to primary care centers and community pharmacies to assess the inappropriate use of antibiotics and medication errors and a multi-center study to assess patient safety incidents that occur during transitions of care from secondary to primary care settings and vice-versa, as well as the effectiveness of a quality and safety improvement tool. Thus safety should be considered an extension of quality of primary care.

The low-income group led by Amardeep Thind noted that primary care needed to be viewed as continuum and should include any aspect of care outside the inpatient setting. Furthermore, they suggested that common priorities for safer primary care be identified and consequently, a suitable multi-center study be designed to quantify the frequency of errors and burden of harm in primary care for these settings.

The suggestions relied on building upon existing experiences and resources already deployed in these countries leading to new research proposals and patient safety or quality improvement tools. As such, the group made suggestions to build synergies across quality improvement projects, such as in the area of quality standards, data collection systems, and trigger tools for example.

General discussion points

- Many participants had varying definitions of primary care and this is indeed an important consideration going forward. We have opted for the definition suggested by WHO at the Declaration of Alma-Ata.

''Primary health care is essential health care based on practical, scientifically sound and socially acceptable methods and technology made universally accessible to individuals and families in the community through their full participation and at a cost that the community and country can afford to maintain at every stage of their development in the spirit of self- reliance and self-determination. It forms an integral part both of the country's health system, of which it is the central function and main focus, and of the overall social and economic development of the community. It is the first level of contact of individuals, the family and community with the national health system bringing health care as close as possible to where people live and work, and constitutes the first element of a continuing health care process.'

Definition of Primary Care Alma Ata, WHO (1978)

- The scope of primary care as discussed in this meeting includes the care that is provided by the first point of contact care, and also the provision of single- or multi-disciplinary diagnostic, therapeutic, and adjunct secondary prevention and educational services for non-admitted patients that are community-based.
- Participants at the meeting considered that there is a need to undertake further underpinning of conceptual and methodological work to include the creation and/or refinement of appropriate taxonomies for adverse events, hazards and risks in primary care. The systematic review noted significant progress from the LINNAEUS group on this front. The conceptual discussion about the boundaries of safety and quality may need to be looked at, although it was realized that both concepts are part of the same continuum.
- It was also debated whether the focus should be on events of commission or omission. Different schools of thought exist on this: errors of commission have traditionally been studied, as they were the first group to be highlighted in the landmark report, To Err is Human. Consequently, medication errors have been studied extensively and interventions to reduce these errors have been tested in several settings. Errors of omission are those

errors that occur as a result of a step not being taken or when an appropriate step is left out from a process. Both aspects need to be understood in order to facilitate a comprehensive approach to safe primary care.

- Among the gaps that were recognized were the need for measuring harm and establishing a baseline on the epidemiology, burden of harm and costs of unsafe primary care to the health system and to patients. The realization of this gap was the basis of the proposals for high quality studies on these through a wide spectrum of sites, including and prioritizing low-income countries and transitional countries.
- Importantly, the group felt the need to increase the understanding of the relationship between safety culture and safety; as well as the relationships between lack of infrastructure, including equipment, education, and staff skill-mix and patient harm.
- Data infrastructure, data collection and systems and mechanisms for review, and reporting are other areas where there are persistent and important gaps, together with more methodological developments in terms of measurements, and appropriate metrics.
- The group recognized the need and advantages of mechanisms for sharing experiences, tools and lessons of those involved in delivering safer primary care. This could be a first step to facilitate collaborative group working.
- Increased advocacy through engaging policy makers and research commissioners is important, as is the production of a document outlining the gaps and roadmap to safer primary care.

Conclusions

Despite improvements in patient safety globally, little is known about the contribution of primary care to avoidable patient harm. Overall, there was a clear consensus about need to progress the area of patient safety in primary care internationally. This will require a concerted effort, where WHO can steer through its roles as a leading international health organization and global convener. The initiatives proposed must also be sensitive to the different points that various countries find themselves on the patient safety journey, especially in developing and transitional countries. Both better understanding of the epidemiology of unsafe care, including the causality of adverse events and patient harm, and development of new solutions to improving safety will be required.

This 2-day meeting led to important outcomes that can be expressed as follows:

1. Recognition of the importance of unsafe primary care, and therefore the need for increased advocacy aiming to raise global policy attention and action.
2. Willingness to work as a network around a common agenda and of sharing instruments, tools, data, and learning.
3. Identification of priority areas and major knowledge gaps, and recognition of the need for bridging existing major knowledge gaps through concrete initiatives in countries across all socio-economic status.
4. Recognition of the need for integrating measurement with quality or patient safety improvement in low-income settings.
5. Agreement on drafting a roadmap for global action.
6. A series of publications covering the points above were also suggested.

The overall perception is that patient safety in primary care is an important issue that needs to be addressed in all parts of the world. Even with the limitations due to the

scarcity of data, there is evidence that a significant fraction of primary care visits result in patient safety incidents and in patient harm. There are serious gaps in data and knowledge from most parts of the world, particularly from developing and transitional countries. Efforts are needed to understand the magnitude and nature of unsafe care problems in primary care as well as its epidemiology. A number of important issues in patient safety in primary care were identified through the literature review. Patient safety issues in primary care should not be taken in isolation but in the context of the continuum of care. We need to drive measurement for improvement through implementation of robust research, especially in low-income countries. Specific suggestions to strengthen the field include reinforcing the structure of primary care include better clinical standards, improved training, inclusion of bundle of interventions, linking technical with structural incentives, adapting the interventions to the structure and context of primary care, promoting patient safety culture and leadership for patient safety, focusing on high-risk populations, and adopting mixed-method approaches for research purposes.

Suggestions for next steps

- Production of a "roadmap for action." This publication will highlight the current state of knowledge and identifies the main priority areas and gaps with suggestions for further advancing patient safety in primary care. This WHO publication will serve mainly for increased awareness and advocacy for action around unsafe primary care and lay out directions and paths for research and progress.
- Recognition of the benefits to work collaboratively. The Safer Primary Care Expert Working Group stressed the importance of facilitating platforms for interaction and sharing of tools and materials, and learning. Suggestions were made to explore opportunities in this area, taking into account existing resources by participating institutions and WHO. An online communication platform in support of a global network for safer primary care was created by WHO to facilitate collaboration.
- Mobilize additional funding /resources and facilitate a collaborative structure, including interested agencies and institutions and WHO by virtue of its convening role.
- Recognition of the need to set up focused, specific working groups. Experts further recognized the need for different working groups to be set up, with some focusing on conceptual and others on more practical considerations
- There was further a clearly expressed need for a follow-up international meeting in approximately a year's time to assess progress and keep up the considerable momentum generated by this inaugural meeting of the Safer Primary Care Expert Working Group.

Appendix 1 List of Participants at Inaugural Meeting

World Health Organization

Patient Safety in Primary Care: Expert Consultation Meeting

Monday, 27th and Tuesday, 28th February 2012

Venue: World Health Organization Headquarters
Library Meeting Room
20 Avenue Appia,
1211 Geneva 27, Switzerland

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Appendix 1 List of Participants at Inaugural Meeting (Cont.)

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Appendix 2: Agenda of meeting

World Health Organization

Safe Primary Care: Bridging the Knowledge Gaps
International Expert Consultation

Venue: Library Meeting Room WHO
Geneva, 27-28 February 2012

Rationale and aims of the meeting

Despite improvements in patient safety globally, little is known about the contribution of primary care to avoidable patient harm. WHO seeks to understand the risks to patients associated with unsafe primary care and then, in due course, to use these insights to enhance patient safety internationally, as part of the new strategy of PSP.

This 2-day event brings together an international group of experts in patient safety, primary care, health policy, patient safety research and clinical academia, with the purpose of initiating a consensus building exercise leading to identifying major knowledge gaps, including key research priority questions, and major challenges to understand the burden of unsafe primary care. A background document based on extensive literature review has been prepared and shared with participants to help the discussions.

The key aims for this consultation are to:

- Assess and prioritize the key knowledge gaps about patient safety and avoidable patient harm in primary care
- Understand the frequency, nature, burden and preventability of the main issues of safety in primary care settings globally
- Appreciate the challenges related to understanding patient safety issues in primary care in low, middle, and high-income settings
- Suggest directions for further action leading to bridging those knowledge gaps and facilitate access to safer primary care

Agenda 27th February 2012-Day 1

08:30 - 09:00	Registration
09:00 - 09:15	Welcome and introductions from WHO - Marie-Paule Kieny, Assistant Director General IER and Sir Liam Donaldson, WHO Envoy for Patient Safety (videolink)
09:15 - 09:30	The Patient Safety Programme at WHO- Najeeb Al-Shorbaji a.i. Director

Session 1: WHO work on patient safety in primary care (Chair: Itziar Larizgoitia)

09:30 - 09:35	The primary care project: Bridging the knowledge gaps- *Itziar Larizgoitia*
09:35 - 09:45	Patient safety in primary care: an international priority - *David Bates*
09:45 - 10:00	Key aims of the meeting - *Aziz Sheikh*
10:00 - 10:15	Discussion - *Itziar Larizgoitia*
10:15 - 10:30	Break

Session 2: Patient Safety in Primary Care: The Evidence (Chair: Aziz Sheikh)

10:30 - 10:50	Identifying gaps in knowledge on the subject - *Meredith Makeham*
10:50 - 11:20	Findings from the current systematic review: frequency, burden and preventability of unsafe primary care and methods of measuring iatrogenic harm - *Sukhmeet Panesar and Andrew Carson-Stevens*

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Appendix 2: Agenda of meeting (Cont)

World Health Organization

11:20 - 12:30	Discussion to agree on key questions that remain unanswered - *Chairs: Aziz Sheikh and David Bates*
12:30 - 13:30	**Lunch**

Session 3: Patient Safety issues, knowledge gaps and challenges to bridge these gaps

13:30 - 15:15	Patient safety issues, knowledge gaps and challenges to bridge these gaps: The issues - *Chairs: Aziz Sheikh and David Bates*
	13:30 - 13:40 Issues identified by LINNEAUS - *Aneez Esmail*
	13:40 - 13:50 Issues identified in the Gulf countries - *Tawfik Khoja*
	13:50 - 14:00 Issues identified by SafeCare Africa - *Nicole Spieker*
	14:00 - 15:15 Open floor discussion. Discussants: *Mondher Letaief, Philippe Michel, Pierre Baker, Benedetta Allegranzi,Stuart Whittaker*
15:15 – 15:45	**Break**
15:45 - 17:15	Patient safety issues, knowledge gaps and challenges to bridge these gaps: Challenges in measuring - *Chairs: Aziz Sheikh and David Bates*
	15:45 - 15:55 The IHI approach in Ghana - *Nana Twum-Danso*
	15:55 - 16:05 The Latin American protocol for measuring adverse events in primary care, *Ludovic Reveiz*
	16:05 - 16:15 Measuring patient safety in the UK - *Neil Houston*
	16:15 - 17:15 Open floor discussion. Discussants: *John Hickner, Gurdev Singh,Madhok Rajan, Maaike Langelaa, and Carlos Aibar*
17:15 -17:30	Prioritising exercise- 1st Round
17:30 - 17:45	Closing comments from first day - *Aziz Sheikh*
19:30	**Informal Dinner (optional)**

Agenda 28th February 2012 – Day 2

08:45 - 09:30	Consolidating the discussion from the previous day. Second Prioritising exercise - *Itziar Larizgoitia*

Session 4: Prioritizing issues and challenges to bridge knowledge gaps (Chair: Pierre Barker)

09:30 - 11:30	Working groups to prioritize issues and challenges to bridge knowledge gaps on unsafe primary care. Chairs: *Amardeep Thind, David Bates, Aziz Sheikh*
11:30 - 12:30	Feedback from working groups, questions and answers. Presentation from each working group followed by panel discussion - Chair: *Pierre Barker*
12:30-13:30	Lunch

Session 5: Roadmap to understanding patient safety in primary care: recommendations

13:30 - 14:30	Recommendations from the expert working group – *Aziz Sheikh*
14:30 -15:00	Next steps - *Aziz Sheikh, Itziar Larizgoitia*
15:00 -15:15	Closing remarks – *Marie-Paule Kieny, ADG IER*

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World Health Organization

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