

Special Report

Clean Care is Safer Care: The First Global Challenge of the WHO World Alliance for Patient Safety

Didier Pittet, MD, MS; Sir Liam Donaldson, MD, MSc

Patient safety is a critical component of improving the quality of health care worldwide. Confronted with this important issue, the 55th World Health Assembly in 2002 adopted a resolution urging countries to pay the closest possible attention to the problem of patient safety and strengthen safety and monitoring systems. The resolution urged the World Health Organization (WHO) to lead the process of establishing global norms and standards and supporting country efforts in developing patient safety policies and practices.

In May 2004, the 57th Assembly supported the creation of an international alliance to improve patient safety as a global initiative, and the World Alliance for Patient Safety was launched in October 2004. This is the first time that senior policy makers, heads of agencies, and clinical and patient groups have come together from all corners of the globe to advance the patient safety goal of "*Primum non nocere*" ("First, do no harm") and to reduce the adverse health and social consequences of unsafe health care. The Alliance's first Forward Programme is focusing its actions on the following areas: patients for patient safety, taxonomy, research, solutions for patient safety, reporting and learning, and a biennial global patient safety challenge (Table 1).

INTRODUCING THE GLOBAL PATIENT SAFETY CHALLENGE

Health care-associated infection is a major global issue in patient safety. It affects hundreds of millions of

people worldwide, complicates the delivery of patient care, contributes to patient deaths and disability, promotes resistance to antibiotics, and generates additional expenditure to that already incurred by the patients' underlying disease.

Indeed, health care-associated infection is a growing international problem. Patients are becoming more susceptible to infections because of more serious underlying illnesses. Poor compliance with hand hygiene by health care staff, increased recourse to invasive medical devices, and care of the critically ill as well as lack of access to safe water and unclean instruments and environmental surfaces all play a role. The environment of patient care is also important. Factors such as understaffing, high bed occupancy, and increased patient transfers all create new risks of infection.

It is fitting, therefore, that the topic chosen for the first Global Patient Safety Challenge covering 2005–2006 is health care-associated infection. These infections occur worldwide in developed, transitional, and developing countries. The first Global Challenge is creating a worldwide focus on reducing health care-associated infection as a vital element of the safety of patient care. In doing so, it brings together the expertise of leading specialists in different fields of infection prevention and patient safety, with a shared vision of "Clean Care is Safer Care."

The major objectives of the Global Patient Safety Challenge 2005–2006 "Clean Care is Safer Care" are as follows:

Dr. Pittet is from the Global Patient Safety Challenge, WHO World Alliance for Patient Safety; and Dr. Donaldson is from the WHO World Alliance for Patient Safety, WHO Headquarters, Geneva, Switzerland.

Address reprint requests to Didier Pittet, MD, MS, Director, Infection Control Programme, University of Geneva Hospitals, 24 rue Micheli-du-Crest, 1211 Geneva-14, Switzerland. didier.pittet@hcuge.ch

© World Health Organization [2005]. All rights reserved. The World Health Organization has granted SLACK Incorporated permission for the reproduction of this article.

The authors thank the group of international experts and WHO members who worked to the development of the Global Patient Safety Challenge, in particular for their participation to the two international WHO Consultations, review of the available scientific evidence, writing of the WHO draft Guidelines on Hand Hygiene in Health Care, and fostering discussion among authors and members of the different task forces and working groups. The complete list of participants in the development of the guidelines documents is available at www.who.int/patientsafety/events/05/27_AprilParticipantList.pdf (accessed August 8, 2005). They also thank the patient safety team and other WHO staff from all the departments involved at HQ and in the regional offices for their work, the members of the Infection Control Programme at the University of Geneva Hospitals, and Rosemary Sudan for providing editorial assistance and outstanding support.

For further information on the World Alliance or the Global Patient Safety Challenge, go to www.who.int/patientsafety/en (accessed August 8, 2005).

TABLE 1
SIX ACTION AREAS OF THE WHO WORLD ALLIANCE FOR PATIENT SAFETY

- Global Patient Safety Challenge: "Clean Care is Safer Care," focusing over 2005–2006 on the prevention of health care–associated infection
- Patients for Patient Safety: Mobilizing patients and patient organizations to become involved in patient safety efforts worldwide
- Taxonomy for Patient Safety: Developing internationally acceptable data standards for collecting, coding, and classifying adverse events and near misses
- Research for Patient Safety: Improving tools and methods to measure patient harm in developing countries and defining a global patient safety research agenda
- Solutions for Patient Safety: Spreading proven patient safety interventions worldwide and coordinating international efforts on future solutions
- Reporting and Learning: Generating tools and guidance for developing patient safety reporting systems and improving existing systems within countries

1. to raise awareness of the impact of health care–associated infections on patient safety and promote preventive strategies within countries;

2. to build commitment from countries to prioritize reducing health care–associated infections; and

3. to test the implementation of the new WHO Guidelines on Hand Hygiene in Health Care (advanced draft) in specific districts worldwide as part of an integrated package of actions derived from existing WHO strategies in the areas of clean products (blood safety), clean practices (safe clinical procedures), clean equipment (injection and immunization safety), and clean environment (safe water and sanitation in health care).

TACKLING HEALTH CARE–ASSOCIATED INFECTION REQUIRES MULTIFACETED STRATEGIES

The Global Patient Safety Challenge aims to integrate a number of actions to reduce health care–associated infection. There are infection risks that have particular importance or significance in some parts of the world. Well-established WHO programs already address some of these risks in areas such as

- blood products and their use;
- injection practices and immunization;
- safe water, basic sanitation, and waste management; and
- clinical procedures, particularly in first-level, emergency care.

The Global Patient Safety Challenge therefore embraces existing WHO strategies in these areas. It promotes specific actions and interventions that directly bear on

TABLE 2
MAJOR ACTIONS TO IMPROVE PATIENT SAFETY WITHIN THE GLOBAL PATIENT SAFETY CHALLENGE "CLEAN CARE IS SAFER CARE"

- Hand hygiene
 1. Strengthen high-level commitment within countries to implement national strategies to promote hand hygiene
 2. Test implementation of the WHO Guidelines on Hand Hygiene in Health Care (advanced draft) in several districts worldwide
- Blood safety
 1. Promotion of optimal hand hygiene associated with procedures for collection, processing, and use of blood products
 2. Promotion of donor skin antisepsis to prevent blood contamination
 3. In-service education and training on safe transfusion practices at the bedside
- Injection practices and immunization
 1. Promotion of optimal hand hygiene at time of intravenous injection and immunization
 2. Strengthen high-level commitment within countries to use auto-disable syringes for immunization services
 3. Actions around ensuring safe disposal of sharps as part of an integrated management of waste within health care facilities
- Water, basic sanitation, and waste management
 1. Actions to ensure access and quality of water to support hygiene and hand hygiene in particular, at a health care facility level
 2. Actions to ensure safe disposal of sharps
- Clinical procedures
 1. Specific education programs promoting safety in surgical procedures, tailored to the major needs of the countries
 2. Surgical hand preparation using either antimicrobial soap and water or alcohol-based handrub to reduce infections associated with surgical procedures
 3. Access to safe emergency surgical care: availability and actual usage of procedures and equipment for a specific set of clinical procedures

health care–associated infection and patient safety. These actions are combined with the new WHO Guideline on Hand Hygiene in Health Care (advanced draft) (Table 2).

Hand Hygiene

Hand hygiene reduces infections and enhances patient safety across all settings—from advanced health care systems to local dispensaries in developing countries. However, the lack of compliance with hand hygiene among health care providers is problematic worldwide. As a result of new insights into the epidemiology of hand hygiene compliance, new approaches have proven effective. A key action within the Global Challenge is to promote hand hygiene in health care globally as well as at country level. To provide health care workers, hospital administrators, and health authorities with the best scientific evidence and recommendations to improve practices and reduce health care–associated infections, WHO has developed new guidelines on hand hygiene in health care.

Pilot tests in each of the 6 WHO regions are being conducted to help provide local data on the resources required to carry out the recommendations and generate information on feasibility, validity, reliability, and cost-effectiveness of the interventions concerned. This piloting is an essential part of the Global Patient Safety Challenge. This work in progress is accompanied by specific task forces, which are addressing critical implementation topics such as patient involvement; global implementation of a WHO hand hygiene formulation; glove use and reuse; water quality for handwashing; education; communication; campaigning; national guidelines on hand hygiene; and religious, cultural, and behavioral aspects of hand hygiene.

Blood Safety

Blood transfusion carries a potential risk of acute or delayed complications and transfusion-transmitted infections. The HIV/AIDS pandemic has focused particular attention on the importance of preventing transfusion-transmitted infections. In 2000–2001, over 70 countries did not test all donated blood for HIV, HBV, HCV, and syphilis.

The WHO Blood Transfusion Strategy supports the establishment of sustainable national blood programs in all countries that can ensure the provision of safe, high-quality blood and blood products accessible to all patients and their safe and appropriate use. Key areas of focus include policies for recruitment, selection, and retention of voluntary blood donors; blood screening; and appropriate clinical use of blood in patient care.

Injection Practices and Immunization

Approximately 16 billion injections are administered each year in developing and transitional countries. One needlestick injury from a needle used on an infected source patient carries risks of 30%, 1.8%, and 0.3%, respectively, of transmitting hepatitis B virus, hepatitis C virus, and HIV. In 2000, contaminated syringes caused 21.7 million hepatitis B virus infections (33% of all new infections), 2 million hepatitis C infections (40% of all new infections), and 260,000 HIV infections (5% of all new infections).

The WHO Injection Safety strategy works with countries to support the formulation of national policies for the safe and appropriate use of injections and facilitates access to safe, high-quality injection equipment. WHO also promotes the implementation of safe and effective systems for vaccine delivery (ie, accessibility of autodisable syringes, a special device that inactivates itself after a single use) and management of immunization-related waste and the establishment and improvement of mechanisms to monitor and respond to adverse events following immunization.

Water, Basic Sanitation, and Waste Management

One million eight hundred thousand people die every year from diarrheal diseases, 88% of which are attributed to unsafe water supply, inadequate sanitation, and hygiene. Water, basic sanitation, and waste management combine to form the safe environment needed for delivering health care. Health care facilities require access to

safe water to prevent fecal–oral transmitted infections and some respiratory infections. Water quality and cleanliness are also required to ensure effective handwashing during patient care.

Safe disposal of waste in health care, in particular needle syringes or infectious body fluids, protects health care workers and the community from infections, toxic effects, and injuries. These apply across a range of facilities from the reference hospital to the village health posts, residential care accommodation, dental facilities, and home-based care. Education and handwashing promotion can lead to more than 50% reduction of disease burden and save lives of children less than 5 years of age in low-income populations.

Clinical Procedures

Each year, approximately 1 million people lose their lives because of road traffic accidents. More than half a million women die because of pregnancy-related complications. In situations such as these, the capacity to implement correct and timely emergency clinical procedures at the first referral hospital is vital. However, in practice, the quality of surgical care is often constrained by lack of trained staff; poor facilities; inadequate low-technology apparatus; and limited supplies of drugs, materials, and other essentials. Without essential surgical care, up to 10% of the population dies from injury, and 5% of pregnancies result in maternal death. In developed countries, approximately 25% of health care–associated infections are surgical-site infections; infection rates are 2- to several-fold higher in developing countries.

The WHO Clinical Procedures strategy is working to support countries to build capacity to reduce death and disability through strengthening the basic skills of health care providers to manage essential emergency and surgical procedures at resource-limited, health care facilities. Major components of the strategy include supporting the development of national policies within countries to provide basic requirements for emergency surgical services, education, and training of health care providers in essential procedures for obstetrics, surgery, and anesthesia and development of needs assessment and planning tools.

THE LAUNCH

The launch of the Global Patient Safety Challenge took place at WHO headquarters in Geneva, Switzerland, on October 13, 2005. The launch aims to strengthen commitment of interested member states in the Global Patient Safety Challenge.

The launch brought together many participants representing interested parties at the highest level and including senior government officials, representatives from international and government agencies, professional associations, civil society organizations, and academic and medical institutions. The central launch site was connected via video links to approximately 10 sites in Africa, the Americas, The Eastern Mediterranean, Europe, South East Asia, and the West Pacific region.

IMPLEMENTATION

The implementation of the Global Patient Safety Challenge involves 3 major strategies:

1. global and national "Clean Care is Safer Care" campaigns;
2. building commitment from countries—*Country Pledges*—to prioritize the reduction of health care-associated infection; and
3. implementing in several districts worldwide the new draft WHO Guidelines on Hand Hygiene in Health Care as part of an integrated package of actions derived from existing WHO strategies in the areas of blood safety, injection and immunization safety, water quality, waste management, and clinical procedure safety.

Of particular note, ministers of health and major associations of health care professionals have been invited to pledge formally to tackle health care-associated infection, to give priority to hand hygiene in health care, and to share results and learning internationally. National campaigns to achieve improved hand hygiene among health care providers will be part of the pledges and harmonized with the global awareness-raising campaign "Clean Care is Safer Care" spearheaded by the World Alliance for Patient Safety.

As part of the implementation strategies, WHO member states are invited to pledge formally to implement actions to reduce health care-associated infection within their

country and to share results and learning internationally. The pledge includes (1) a signed public statement by the country's minister of health giving priority to reducing health care-associated infections; (2) a commitment to share with the WHO World Alliance for Patient Safety existing surveillance data that are available from their country; (3) a signed public statement by all the major health professional bodies within the country stating that they are commending to all their members the highest standards of practice and behavior to reduce risks of health care-associated infection; (4) a commitment to launch a campaign (at national or subnational level) to achieve a higher level of hand hygiene compliance among health care providers; and (5) a commitment to foster and sustain collaboration among research, education, and health care facilities members to ensure full utilization of knowledge and experience in the field of health care-associated infection.

CONCLUSION

"Clean Care is Safer Care," focusing on the prevention of health care-associated infection, is the first challenge launched by the World Alliance for Patient Safety. The challenge promotes hand hygiene, blood safety, injection and immunization safety, safer clinical practices and safer water, and sanitation and waste management. The vision is simple: to catalyze commitment by all players—policy makers, frontline staff, patients, and managers—to make "Clean Care is Safer Care" an everyday reality in all countries and everywhere that health care is provided.