The second Global Patient Safety Challenge

SAFE SURGERY SAVES LIVES

Introduction

The WHO World Alliance for Patient Safety began work on its second Global Patient Safety Challenge in January 2007. The programme, Safe Surgery Saves Lives, aims to improve the safety of surgical care around the world. By focusing attention on this as a public health issue, the WHO is recognizing the importance of improving the safety of surgery as part of the overall patient safety agenda in all Member States.

The incidence of traumatic injuries and other surgical conditions is rising as a proportion of the total global burden of disease. Surgical care and its safe delivery can potentially affect the lives of millions of people worldwide. By defining a core set of minimum standards that can be applied universally across borders and settings, the Safe Surgery Saves Lives programme hopes to create an environment for improving both access to and safety of surgical care.

The second Challenge has assembled experts and clinicians with experience in a broad range of health care settings and reviewed the evidence for improving safety in surgery. A set of basic practice standards for the delivery of surgical services is being developed. The goal of the challenge is to improve surgical outcomes for patients regardless of circumstance or environment. By improving processes already in place in many operating theatres, safety will be enhanced and quality increased without demanding substantial financial investments in health infrastructure. The recommendations that are made must be simple, widely applicable, and measurable regardless of the operative setting.
The project is focusing on four thematic areas for evaluation and improvement:
1. Prevention of Surgical Site Infections
2. Safe Anaesthesia
3. Safe Surgical Teams
4. Measurement and Quality Assurance Mechanisms
Each of these themes has been examined closely and specific recommendations have been made to improve the safety of surgery.

Final Product

The final product will be a Surgical Safety Checklist of basic tasks to be either completed or confirmed prior to commencing with the operation, during the operation or after completion of the operation. Interventions like delivering antibiotics prior to skin incision, confirming the appropriate procedure is performed on the appropriate patient, and improving communication between the surgeon, anaesthetist, and nurse will all improve the safety of surgery. Examples of elements on the Checklist are:

Preoperative period:
- communication between the operative team and the patient confirming the procedure and the consent for treatment;
- confirmation of patient allergies;
- comprehensive examination of the anaesthetic machinery and medications;
- routine examination of the patient’s airway;
- communication between the surgeon and anaesthesia provider.

Peri-operative period:
- appropriate and timely administration of antibiotics;
- confirmation of sterility of the instruments and equipment;
- confirmation of imaging and laboratory results;
- communication of critical events that will occur during the procedure.

Immediate postoperative period:
- reconciliation of instrument and sponge counts;
- communication between the surgeon, nurse, and anaesthesia provider regarding the intra-operative events and the postoperative care plan.

Completing the specific steps outlined in the Surgical Safety Checklist promotes communication between all members of the surgical team including anaesthesia professionals, nurses, surgical providers, and the patients and family members. In addition to the safety checks as part of the Checklist, there will be space allocated for including one or more customized tasks. These may be surgical team-specific (based on input from the various team members, for example), specialty-specific (such as safety steps specific to orthopaedic or cardiac procedures, for example), or situation-specific (such as specific resource availability in a resource-poor hospital, for example). Finally each country or WHO region will be encouraged to modify the Surgical Safety Checklist by translating it into different languages and adapting it to their own cultures, situations, and environments. Such flexibility and adaptability should allow wide-spread use in diverse settings.
Thematic Content and Direction of the Project

Four Working Groups reflecting the four thematic areas for improvement have been established to evaluate those most amenable to intervention: Surgical Site Infection Prevention, Safe Anaesthesia, Safe Surgical Teams, and Measurement.

The goals of the first three working groups were to identify a number of essential components of safe surgery for which standards can be translated into safety tasks and defended based on published evidence. Support may come from data-driven studies or expert consensus. These tasks are included as elements of the surgical checklist. Behind each task will be a technical document providing evidence-based or consensus driven support for its inclusion.

The goal of the Measurement Working Group was to identify types of data that might be collected as a “vital statistic” for surgery. The purpose of creating the “vital statistic” is to allow the establishment of a database to assess the amount and safety of surgery. Using maternal mortality as a model, where rates of death are used to evaluate the safety of childbirth and to mobilize political support for improvement, the group crafted surgical statistics that would follow this example. The implications and cost of collecting and analysing such data must be considered prior to implementation. This group created a technical document describing the type of measurements, how they might be collected, and how they might be used. In addition, the group will help determine measures for assessing the uptake and effect of the Surgical Checklist during a testing phase.

By the end of the second Challenge, each of the technical documents will be compiled into a compendium, creating a WHO Guideline for Safe Surgery that stands as the detailed scientific work behind the simplified Surgical Safety Checklist tool.

Testing the Checklist

The purpose of the testing will be twofold: to expose problems with implementation and acceptance of the checklist and to confirm that using such a checklist will actually improve surgical safety. The testing will be undertaken in a selection of operating rooms in facilities representing the six WHO regions. The proposed test sites have volunteered to participate; all of the sites are involved in this work and most have a member who is part of the international working group.

The surgical checklist will be available for implementation in operating rooms for all surgical cases during the test period as deemed clinically safe and appropriate by the operating teams. Data will be collected on these operations and transmitted to the Challenge team on a weekly basis. Multiple ORs may be used representing a variety of clinical procedures.

During the test period a broad set of data will be collected, including process and outcome measures such as complications and perioperative deaths. The utility and effect
of this safety tool will thus be evaluated. In addition, resistance to the use of the checklist will be examined to identify impediments to its employment or approval by providers and administrators. Measurement of the cultural aspects of the team and attitudes towards safety and quality performance is being considered. The testing hopes to provide a compelling argument for adoption of the Surgical Safety Checklist worldwide.

Roadmap

*From October 2007*

**Technical evaluation of the Surgical Checklist in test sites**

During the test period weekly tele-conferences between the challenge team and the test sites are planned. In addition travel to the test sites are planned to ensure full compliance with the testing protocol and timely data collection and transmission.

*January 2008*

**Safe Surgery Saves Lives – Second consultation meeting in Geneva**

The purpose of the meeting is to introduce the Draft WHO Surgical Safety Checklist to a wide audience. During the meeting the group will obtain feedback regarding its use as a quality improvement device for surgical safety, review the original goals of the challenge and the process of creating the checklist, and review a set of surgical vital statistics as a measure of the public health impact of surgery.

*June 2008:*

**Inauguration and launch of the second Global Patient Safety Challenge**

This event will promote the Safe Surgery Challenge approach world wide. It is planned to video-link with test sites. Representatives of professional societies, key opinion leaders and influential stakeholders in the area of surgery, anaesthesia, nursing and patient advocacy will be present.