



Second Global Patient Safety Challenge Safe Surgery Saves Lives

Draft Action Plan for 2007

Goals and Strategy

The First Consultation of the Second Global Patient Challenge, *Safe Surgery Saves Lives*, took place in January 2007 and concluded with a decision to create a tool in the form of a checklist — the Surgical Countdown — to implement basic interventions to improve the safety of surgery. The consultation validated the themes of "*Clean Surgery*" and "*Safe Anesthesia*". The discussion of "*Safe Operators*" revolved around improving teamwork amongst all providers and focusing on the multiple types of providers at the point of care – nurses, anesthetists, surgical operators, and patients and family members themselves. The second Challenge will clearly have its most dramatic impact in this area. A measurement system is indisputably essential, and will have the benefit of facilitating improvement by the very fact of its implementation.

With the first consultation in mind, the goal for 2007 will be to establish a core guidance group, create four technical working groups based on the themes of *clean surgery*, *safe anesthesia*, *safe surgical teams*, and *measurement*, and refine a final product for promotion and pilot testing. Following the First Consultation it has been proposed that the strategy for this programme will be based on four approaches:

1. Identifying national, regional, and international opinion leaders to validate the goals and strategy, as well as support the creation and implementation of the Surgical Countdown;
2. Identifying professional societies that will commit to the second Challenge and promote the tools created by the Challenge in an effort to improve the safety of surgery worldwide;
3. Involving ministers of health to bring together clinical leaders in the fields of surgery, anesthesia, nursing, and patient advocacy at a country level to commit to the Surgical Countdown at the point of care;
4. Obtaining buy-in from societies of surgery, anesthesia, and nursing.

The final result of the second Global Patient Safety Challenge will be a set of safety tasks aimed at saving lives that are simple to implement, widely applicable, and measurable in a systematic and quantifiable way.

Thematic Content and Direction of the Project

Four Working Groups will be established to evaluate the areas most amenable to intervention for the purpose of improving the safety of surgical care: *Clean Surgery*, *Safe Anesthesia*, *Safe Surgical Teams*, and *Measurement*.

The goals of the first three working groups will be to identify two or three 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. Each of the tasks will be a simple sentence or phrase that can be included on the Surgical Countdown. 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* will be to identify types of data that might be collected as a “vital statistic” for surgery. The purpose would be to establish 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, such surgical statistics would ideally follow this example. Political levers to attain such data will need to be assessed and evaluated, and the implications and cost of collecting and analyzing such data must be considered. This group will create a technical document describing what such measurements might be, 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 Countdown during the pilot testing phase.

At 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 Countdown tool.

The Final Product: Vision, Promotion, Use, and Measurement

The final product will be a simple Surgical Countdown card in checklist format that contains a set of basic tasks to be both completed and confirmed prior to commencing with the operation. In addition to the completion of the specific steps outlined on the Surgical Countdown, it is hoped that such a tool will improve communication between all members of the surgical team including anesthetists, nurses, surgical providers, and the patients and family members. Supporting each separate step will be a technical report outlining the evidence for the standard, its specific uses, a complete bibliography with respect to the references used and the data supporting its inclusion, implementation strategies, and implications (both positive and negative) for its inclusion.

In addition to a set number of component safety checks as part of the Surgical Countdown, there will be space allocated on the checklist 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). In addition, each country or WHO region will be encouraged to modify the Surgical Countdown 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.

The goal of the *Safe Surgery Saves Lives* programme will be broad use of the Surgical Countdown in all operating rooms and by all teams providing surgical care. A project of this magnitude has never been undertaken in surgery worldwide, and simplicity and general acceptability will be essential if this is to be adopted as a tool. Adoption of the Countdown will depend primarily on its acceptability by providers and its validation by professional organizations.

Involving opinion leaders in each of the target areas during the process will lend credibility to the project and the product, making adoption and support by the specialty organizations more palatable. In addition, involving ministers of health at national and regional levels will help lever political will, promote awareness of the issues of safety in surgical care, and involve policy makers at the government level.

Measurement of the use of the Surgical Countdown can take several forms, and the specific details are beyond the scope of this action plan. Measurement might involve evaluation of the presence of the tool in the operating rooms of a hospital, the number of rooms/surgeons/teams using the tool regularly, number of operating rooms posting the promotional material on the wall for general viewing, or even the number of hospitals creating monitoring boards to evaluate rates of infection, complications, or perioperative deaths (particularly in places where this did not exist prior to the introduction of the Countdown). These are process measures only, and the validity of the Countdown as a tool to improve safety will need to be confirmed through some form of pilot testing. The core group, in conjunction with the Measurement Working Group, will determine the best and most effective way of measuring the uptake, use, and results of implementation of this safety tool.

Pilot Testing

Pilot testing is required for this project to become a WHO recommended and supported guideline. Accurate data measurement and collection tools will need to be created in a methodical fashion. Multiple Operating Rooms may be used, possibly representing a variety of clinical procedures (such as general, orthopedic, cardiac, neurologic, and gynecologic surgeries). The purpose of the pilot testing initially will be to expose problems with implementation and acceptance of the tool in the six WHO regions. Additionally, repercussions of, or resistance to its use must be carefully examined to determine underlying characteristics that might impede its employment or approval by providers and administrators. During the pilot testing phase, a broad set of data will be collected, including process and, if possible, outcome measures. Outcome measures may be related to surgical performance with respect to complications and perioperative deaths. Measurement of the cultural aspects of the team and attitudes towards safety and quality performance is also possible though challenging. Measurement techniques and strategies may be refined during this period as well. Data gathered from tracking outcomes will not

yield statistical results at the outset, but over time may provide a compelling argument for adoption of the Surgical Countdown worldwide.

Proposed Timeline for 2007

The timeline below is a guide that can be used as a starting point and will be further refined:

18th-20th April: First Meeting of the Working Groups

Purpose of meeting – to establish the working relationships of the technical group; to determine the minimum standards that might be included in the Surgical Countdown (for the measurement group it will be to evaluate surgical “vital statistics” measurements); and to assign responsibility for the creation of the technical background documents to the various members for subsequent work.

9th-11th July (tentative): Second Meeting of the Working Groups

Purpose of meeting – to review and finalize the exact wording of the standards included in the Surgical Countdown; to review the technical documents and evidence supporting the inclusion of each item; to begin establishing a measurement system; and to define the implementation tools and strategy for the Challenge.

September: Safe Surgery Saves Lives Pilot Planning Meeting

Purpose of meeting – to gather together hospital directors, personnel responsible for implementation and data collection, and the core guidance group; to commit to final plans for introducing the Surgical Countdown at specific pilot sites; to task the group with deployment of the program as a pilot; to refine our measurement techniques; and to establish firm timetables for implementation, data collection and feedback, and evaluation and analysis.

January 2008: Safe Surgery Saves Lives – Second Consultation

Purpose of meeting – to introduce the Surgical Countdown to constituents, opinion leaders, professional organizations, and stakeholders; to review input by these invited members regarding last-minute feedback, critique, opinion, and analysis; to review preliminary result of the pilot testing; to gain advice about deployment and implementation of the Countdown as a means of promoting safe surgery; and to promote acceptance of the tool and the Challenge by practitioners through adoption by professional societies.

February 2008: Inauguration and launch of the Surgical Countdown Project