

## Safe Surgery Saves Lives FAQ

Welcome! We are pleased to see that you are interested in our efforts to improve global surgical safety. The first part of this document is designed to answer some general overview questions you may have about the Checklist and the Safe Surgery Saves Lives initiative. Once you have read these – or if you’re already interested in using the Checklist at your institution – we invite you to read the second section of this document, which addresses a number of questions frequently asked by those individuals interested in implementing the Checklist where they are.

### Background FAQ

1. *Q: Why is the Checklist important?*

A: 234 million major operations are performed annually across the world. This translates to roughly one operation per every 25 people and indicates that the safety of care is of significant public health importance. (For more on this statistic and its implications, see our article in the Lancet:

[www.who.int/patientsafety/safesurgery/knowledge\\_base/publications/en/index.html](http://www.who.int/patientsafety/safesurgery/knowledge_base/publications/en/index.html))

Moreover, given previously estimated rates of major complications and death following inpatient surgery, we have postulated that – even using conservative estimates – 7 million patients suffer complications following surgery, half of which are likely to be preventable.

2. *Q: What is the Checklist and how was the Checklist developed?*

A: The WHO Safe Surgery Saves Lives Checklist was created by an international group of experts gathered by the WHO with the goal of improving the safety of patients undergoing surgical procedures around the globe. Input from anesthesiologists, operating theatre nurses, surgeons, patients and other professionals was used in the development of this tool. Both small and large scale clinical testing of the checklist has been performed culminating in a multi-site pilot study with results published in the New England Journal of Medicine in January 2009: <http://content.nejm.org/cgi/content/full/NEJMs0810119>.

In sites that ranged from small district hospitals to large medical centers in diverse geographical settings, the use of a 19-item checklist was demonstrated to reduce the complications and mortality associated with a variety of surgical procedures by greater than 30 percent. The checklist has been designed to be simple to use and applicable in many settings. It is currently in active use in operating rooms around the world.

3. *Q: What does the Checklist involve? How will it impact surgical practices?*

A: The Checklist involves the coordination of the operating team – the surgeons, anesthesia providers, and nurses – to discuss key safety checks prior to specific phases of perioperative care: a “Sign In” prior to induction of anesthesia, a “Time Out” prior to skin incision, and a “Sign Out” before the team leaves the operating room. Many of the checks are already routine in some institutions, but surprisingly, few operating teams accomplish them all consistently, even in the most advanced settings. In our pilot study, we were able to show that use of the checklist increases adherence to safety standards and reduces the rate of complications and mortality associated with surgical care.

4. *Q: Don't hospitals already use Checklists?*

A: Many hospitals do already have checks in place, but their consistent use is dismayingly variable. Many developed settings perform a "Time Out" where the team confirms the patient identity, procedure, and site of operation. Teams are using this time to perform and expand briefing, but this has never been elaborated to the extent that the Safe Surgery Saves Lives project has done.

5. *Q: How do you know the Checklist works?*

A: Between October 2007 and September 2008, we studied the effects of the checklist in eight hospitals in eight cities (Toronto, Canada; New Delhi, India; Amman, Jordan; Auckland, New Zealand; Manila, Philippines; Ifakara, Tanzania; London, England; and Seattle, WA) representing a variety of economic circumstances and diverse populations of patients. We prospectively collected data on clinical processes and outcomes from 3733 patients before and 3955 patients after the checklist was implemented. The results of the study were published in the New England Journal of Medicine on January 29, 2009 and demonstrated dramatic improvements in both processes and outcomes (full text available here: <http://content.nejm.org/cgi/content/full/NEJMsa0810119>). Indeed, use of the checklist reduced the rate of deaths and complications by more than one third across all 8 pilot hospitals. The rate of major inpatient complications dropped from 11% to 7%, and the inpatient death rate following major operations fell from 1.5% to 0.8% after implementation of the checklist. Moreover, the effect was of similar magnitude in both high and low/middle income country sites. Even our site in rural Tanzania was able to implement the checklist and see substantial improvements in outcomes, all at essentially no cost to the system.

6. *Q: What has been the response to the Checklist?*

A: To date, more than 300 professional societies, health organizations, ministries, and NGOs have endorsed the concept of the Safe Surgery Saves Lives Program. The task of the program now is to build on this momentum and the information we gathered during the pilot study to promote the widespread use, implementation, and dissemination of the Checklist as a safety practice in every operation. Participating hospitals are encouraged to register with the WHO ([http://www.who.int/patientsafety/safesurgery/hospital\\_form/en/index.html](http://www.who.int/patientsafety/safesurgery/hospital_form/en/index.html)), and dissemination progress can be tracked through our interactive online map: <http://cga-4.hmdc.harvard.edu:8080/Hospital/gmap1.htm>

7. *Q: Does the Checklist apply to all settings? How does it impact developed and developing regions differently?*

A: The most developed countries tend to have well established and codified guidelines for the process of care during the perioperative period, although these are often inconstantly applied. Other settings may lack clear guidelines and policies for directing the perioperative process. The guidelines and Checklist can help countries and facilities evaluate their own processes of care and improve surgical safety. Moreover, even in the developed world, there is variability in adhering to basic safety practices.

## Implementation FAQ

1. *Q: My hospital is quite large with many operating rooms. How can I implement a checklist in this environment?*

A: The key to successful implementation is to start small. Start with a single operating room on one day and see how it works. This will guide you to strategies for altering the checklist to fit your needs, as well as identify potential barriers to adaptation.

2. *Q: We already do these things. Why should we use a checklist?*

A: While most or all of the items on the checklist may already be done at your hospital, we have found that in most hospitals there are opportunities for improvement in consistency. The checklist helps ensure that important safety steps are followed for each and every operation.

3. *Q: Our surgical teams don't want to use the WHO Surgical Safety Checklist unless they can change a few of the elements. Is it okay to make changes to the Checklist?*

A: Yes, the checklist was not intended to be comprehensive, and we encourage modifications for local use. We understand that the Checklist, while intended to be universally applicable, is not always a perfect fit for all institutions. Modifications can be made to include items that are deemed essential. However, please avoid making the checklist too comprehensive. The more items added to it, the more difficult it will be to successfully implement. Please refer to the [Starter Kit for Implementing the Surgical Safety Checklist](#) and the [Checklist Adaptation Guide](#) for recommendations on adapting the Checklist.

4. *Q: My team often stays together for the whole day. Must we introduce ourselves before every surgery?*

A: The most critical time for introductions is at the beginning of an operative day. There is no need to repeat introductions if they have already been made. However, if new members join a room, they should introduce themselves as should every member of the team present. Even if everyone knows each other, introductions are important as they serve to reinforce team communication (and can help avoid embarrassment at having to ask someone's name with whom one has been working for a prolonged period of time!).

5. *Q: Who should be in charge of running the checklist?*

A: Although every member of the operating team – surgeons, anesthesiologists, nurses, technicians, and other operating room personnel – is involved in its execution, a single person should be responsible for leading the discussion of all components of the checklist and is essential for its success. This will often be a circulating nurse, but it can be any clinician or healthcare professional participating in the operation. This individual can and should prevent the team from progressing to the next phase of the operation until each step is satisfactorily addressed.

6. *Q: Should we memorize the checklist?*

A: No. Checklists are created to avoid the pitfalls of memorization and omissions that occur when standardized processes are not clearly written and defined. The goal of the Checklist is to help ensure that teams consistently follow a few critical safety steps and thereby minimize the most common avoidable risks endangering the lives and well-being of surgical patients.

7. *Q: Do we need to actually check the boxes on the checklist?*

A: No. The checklist was not designed as an audit tool; however, an institution can use it as such if this is likely to improve the safety of surgical care. In addition to a piece of paper, the checklist can be converted into a poster, incorporated into electronic records, or laminated for reuse.

8. *Q: What's in it for me?*

A: By implementing the checklist, you can help to save patients' lives and decrease complications, be on the forefront of the surgical safety movement, and be a leader in your hospital.

9. *Q: Our budget is very tight. How can we implement the checklist?*

A: Using the checklist requires very minimal resource commitment. Reproduction and distribution of the checklist is the main financial cost. There is some need for personnel commitment at the beginning, but once the checklist has spread it should sustain itself.

10. *Q: How much does it cost to implement the checklist?*

A: The checklist is free to download, but will require input of human resources in order to implement it hospital-wide. Please read the starter kit, available on the website, to get a sense for the level of commitment this venture will require. Many of the elements of the checklist, such as a verification of patient's identification, require no money to implement and could save the hospital thousands of dollars by preventing surgical mishaps. Other items on the checklist, such as the use of antibiotics from 0 to 60 minutes prior to incision, make sure that resources that hospitals already have are used to their fullest potential.

11. *Q: We are already very busy in the operating room. Isn't this just one more task using up valuable time?*

A: Once the checklist has become familiar to the operating teams, it requires very little extra time to perform. Most of the steps are incorporated into existing workflow and the remainder will add only one or two minutes to the OR time. However, the checklist can also save time by ensuring better coordination between the teams, minimizing slowdowns for tasks like retrieval of additional equipment.

12. *Q: While there is enthusiasm amongst some clinicians for the checklist, there are others who do not see the value of this initiative. Can we still use the checklist?*

A: Yes. Implementation should always begin with the most enthusiastic. Go after the "low hanging fruit," those who are interested in improvement. The checklist can be implemented by an individual clinician in cases in which he or she participates, a selected

service or operating room suite at a hospital, or on a hospital-wide or even system-wide basis. Focus energy on those areas and individuals who are receptive to the idea at first and as they become accustomed to the checklist and its benefits, they will help it spread to their peers.

13. *Q: We are interested in improving our hospital's performance in some perioperative measures not included on the checklist. How can we do this?*

A: The checklist, while intended to be universally applicable, is not always a perfect fit for all institutions. Modifications can be made to include items that are deemed essential. However, we would caution against making the checklist too comprehensive. The more items added to it, the more difficult it will be to successfully implement.

14. *Q: How can I convince administrators/clinicians that this is worth doing?*

A: As part of our "Starter Kit," we've included a section called, "Questions for Hospitals to Answer Prior to Implementing the Checklist." Having the baseline data this form is designed to collect will enable you to demonstrate to the administration any weaknesses in the perioperative process and later see how far you have come with regard to outcome and process measures. We highly recommend not simply using the checklist, but measuring how that use changes the way surgery is practiced.

15. *Q: I have additional questions not covered by the FAQ. Can I speak to someone?*

A: We are currently setting up a network of mentors who have successfully implemented the checklist. Please contact us at [safesurgery@hsph.harvard.edu](mailto:safesurgery@hsph.harvard.edu) for more information