

### **Introduce and Honor the Humble Checklist**

We find further help in an unexpected place: the lowly checklist. For instance, the checklist, along with training in team-based communication in the cockpit, has transformed safety in the airline industry. In the past 10 years fatal crashes of airplanes have declined 65% in the United States (Hallinan, 2009, p. 193).

Progress is also being made in the medical field, despite stubborn pushback. The surgeon-writer Atul Gawande (2010) gives us a fascinating, troubling, and ultimately encouraging account of the role of checklists in the medical field. At a high level, the advice amounts to getting into a “use your brain” habit, aided by the checklist. For example, in 2001, Peter Pronovost, a critical care specialist at Johns Hopkins Hospital, created a simple checklist for preventing central line infections. (A *central line* is a catheter that is passed through a vein into the vena cava, or the right atrium, of the heart.) The checklist included five steps: (1) wash your hands with soap, (2) clean the patient’s skin with chlorhexidine antiseptic, (3) put sterile drapes over the entire patient, (4) wear a mask, hat, sterile gown, and gloves, and (5) put a sterile dressing over the insertion site once the line is in. It’s hard to believe, but before the advent of the checklist, data showed that at least one of these steps was omitted in about one-third of cases. When the checklist procedure was installed—and monitored—within one year at the study sites the infection rate dropped from 11% to zero. Basically, this checklist aids recall in much the same way as a cockpit checklist helps pilots make sure everything is good to go before takeoff. The checklist also empowers observers who notice a misstep to call a stop in the line insertion process.

Pronovost later initiated a larger project in nine Michigan hospitals. With careful monitoring and troubleshooting (people

forget to use checklists, even those with only five steps), during the first 18 months these hospitals saved 1,500 lives (and \$175 million) as infections dramatically dropped, “all because of a stupid little checklist,” says Gawande (p. 44). Gawande does not specify how the money was saved but presumably through a combination of not having to redo procedures and reduced lawsuits. Checklists reduce mistakes by ensuring that key elements are covered.

Gawande and his team decided to try the checklist idea on a larger scale. They developed a three-part set of checklists for surgeries. Part one addressed steps to be taken before anesthesia (seven checks). Part two applied to actions after anesthesia but before incision (seven more checks). And part three came at the end of the operation (five checks).

Eight hospitals were recruited for the trial, four in high-income countries (Canada, the United States, England, and New Zealand), the other four in poorer countries (Jordan, India, the Philippines, and Tanzania). All Gawande’s team did, so to speak, was to introduce a three-step, 19-item checklist and show people how to use it, including how to monitor the implementation of the steps—while stressing that it was just a simple tool to improve results. The results were amazing. Surgical complications fell by 36% across the eight hospitals, infections were cut in half, and deaths fell by 47%.

Can checklists help change leaders in other businesses? First, let’s review Gawande’s criteria for good checklists. He says that basically checklists must be “simple, measurable and transmissible” (p. 70). Bad checklists, he notes, are vague, imprecise, too long, hard to use, and impractical. Good checklists are “precise, efficient, to the point, and easy to use in even the most difficult situations” (p. 120). They have to be tested in the real world. They are, he says, “quick and simple tools aimed to buttress the skills of expert professionals” (p. 128).

Gawande also has an answer for more complex tasks that he found in the building industry. If the detailed steps cannot be specified in advance, then what is required is communication checkpoints to make sure that people speak to one another “on X date about Y process” (p. 65). The mere act of requiring team members to stop and talk to one another before proceeding could be valuable.