THE CHECKLIST MANIFESTO

Atul Gawande is the son of Indian immigrants to the US (a Urologist and Pediatrician), a Rhodes scholar and Associate Professor of Surgery in Harvard School of Medicine. He temporarily left medical school to be Bill Clinton's health care lieutenant during the 1992 campaign. However, his first book "Complications" catapulted him to public limelight and he is now famous as a medical writer. His latest book, "The Checklist Manifesto" is based on the work of Peter Provonost, a critical care specialist in Johns Hopkins.

Provonost drew inspiration from the aviation industry's great tool – the checklist, the kind which pilots use before take off. He decided to tackle just one problem: infections in central venous catheters. His checklist was (1) wash hands before procedure (2) clean area with chlorhexidine (3) drape the entire body (4) wear cap, mask and gown before procedure (5) sterile dressing over insertion site. This checklist seemed absurdly simple, since this is taught in medical college *ad nauseum*. But the truth is that some or other step is missed almost a third of times. Nurses were given the authority to pull up negligent doctors. The results showed that central line infection rate dropped from 11 percent to zero. Two years later, it had prevented 43 infections, avoided 8 deaths and saved the hospital approximately $2 million.

Impressed by this remarkable idea, Gawande in his capacity as director of WHO's Global Patient Safety Challenge, conducted a study in 8 hospitals all over the world ranging from a rural hospital in Tanzania to a high-tech institution in Seattle. A 19 point checklist to reduce infections in surgery was created. The results were startling. Without adding a single piece of equipment or spending an extra dollar, all eight hospitals saw the rate of major postsurgical complications drop by 36 % in the six months after the checklist was introduced; deaths fell by 47 %.

His book reaffirms a powerful insight that as we are swept away in a technologically complex world, simple interventions which cost nothing like a to-do list may have powerful impact on outcomes. (*The New York Times, 23 December 2009*).

THE TRUTH ABOUT TELEMEDICINE

The cleverest defenders of a faith may be its greatest enemies. Though doctors will always speak positively and enthusiastically about telemedicine, they are often deeply reluctant to embrace it. For many doctors, telemedicine seems to depersonalize the relationship and sabotage trust.

A recent study by the University of Texas Medical School in Houston set out to study how telemedicine would reduce complications, mortality and hospital stay in ICU patients. Every ICU patient in the study received the usual on-site care throughout the study, as well as all the additional audiovisual and vital signs monitoring offered by a remote critical care specialist 24 hours a day. In addition, each patient's physician could choose the degree to which the remote specialists would be involved in delivering direct care — that is, giving orders and intervening from afar.

Physicians allowed total authority to Tele ICU in only 31% patients, and authority to make changes only in life threatening emergencies in the rest. After adjustment for severity of illness, there were no significant differences associated with the telemedicine intervention for hospital mortality (relative risk, 0.85; 95% CI, 0.71 to 1.03) or for ICU mortality (relative risk, 0.88; 95% CI, 0.71 to 1.08). However, majority of doctors in the study chose to have as little remote involvement for their patients as possible. Many were worried about telemedicine's effect on their relationships with patients and that it might adversely affect care. Both doctors and nurses resented the feeling of someone always looking over their shoulder. And this finally may play a greater role in slowing the acceptance of telemedicine than anything else. *(JAMA* 2009; 32: 2671-2678)

Gouri Rao Passi
gouripassi@hotmail.com