HealthManagement
Promoting Management and Leadership

How to reduce surgery times: stick to the same op

A new study of trained surgeons in the UK shows a strong relationship between the order of surgical procedures and duration of operation. Repeating the same procedure in a list resulted in shorter operating times, while switching between different procedures resulted in increased operating times, according to the findings published in the British Journal of Surgery (BJS).

The relationship between case list order and surgical performance (i.e., duration of operation) was similar for open and minimally invasive procedures, and procedures of differing complexity.

"This study demonstrates the existence of a natural 'warm-up' effect as surgeons work their way through their operating lists. Reductions in operating time come from repeating the same procedure, but this saving is lost when surgeons are asked to perform a different type of procedure on the same list," explained co-author Dr. Faisal Mushtaq, of the University of Leeds, UK. "These data present an important development in our understanding of how to optimise surgical performance."

Recent reviews have suggested that the way in which surgeons prepare for an operation can affect performance, with some preparation techniques resulting in shorter operating times. The majority of these studies, however, involved simulated contexts and conclusions about best practice for preparation in the real world remain unclear.

For Dr. Mushtaq and co-authors, operating lists present a natural experiment to test the hypothesis that surgeons will warm up progressively through practice, and that such benefits will be ameliorated when surgeons switch procedures in a theatre list.

The BJS study involved the 35 most frequently performed procedures by senior surgeons across private hospitals in the UK over 26 months. Data were collated from Spire Healthcare's electronic patient record system (SAP SE, Walldorf, Germany) across all 38 UK hospitals.

"From the perspective of service delivery, the results indicate that lists involving a combination of procedures take longer to complete than those that include only one procedure type (the overall cost of switching was estimated as a 6.48 percent increase in duration)," the study authors explain. "Although increased time with task switching has long been established in experimental psychology, this is the first demonstration of its influence in surgical performance. Where possible, theatre lists should be confined to a single procedure type and method."

Source: Wiley
Image Credit: Pixabay

Published on : Tue, 27 Mar 2018