

Liu, D., Sanderson, P. M., Jenkins, S., Watson, M., & Russell, W. J. (in press). Patient monitoring in anesthesia with head-mounted displays. *Proceedings of the 53rd Annual Meeting of the Human Factors and Ergonomics Society*. San Antonio, TX: 19-23 October, 2009.

## **Patient monitoring in anesthesia with head-mounted displays**

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Anesthesiologists in the operating room vigilantly monitor their patient's vital signs during surgical procedures. The vital signs are displayed on a monitor that may be located in an awkward position and out of view of the anesthesiologist (who may be busy performing procedures on the patient). A head-mounted display (HMD) can help anesthesiologists monitor the patient's vital signs no matter where they are, or where they are looking, in the operating room. Prior studies report that HMDs help anesthesiologists redirect their attention away from the monitors to focus on the patient, detect critical patient events faster, and make monitoring the patient easier, compared to standard monitoring. However, no study has investigated whether the worsened inattention blindness phenomenon found with head-up displays in aviation would also affect HMDs in anesthesia. We report the results of three experiments conducted in a full-scale simulator, a part-task trainer, and the clinical environment, and assess the prospects for HMDs in clinical contexts.