



We hypothesised that a multimodal intervention program could result in a safe and effective reduction in the pathology tests ordered in our ICU” Dhanani et al (2018).

Abstract:

Unnecessary pathology tests performed in intensive care units (ICU) might lead to increased costs of care and potential patient harm due to unnecessary phlebotomy. We hypothesised that a multimodal intervention program could result in a safe and effective reduction in the pathology tests ordered in our ICU. We conducted a single-centre pre- and post-study using multimodal interventions to address commonly ordered routine tests. The study was performed during the same six month period (August to February) over three years: 2012 to 2013 (pre-intervention), 2013 to 2014 (intervention) and 2014 to 2015 (post-intervention). Interventions consisted of staff education, designing new pathology forms, consultant-led pathology test ordering and intensive monitoring for a six-month period. The results of the study showed that there was a net savings of over A\$213,000 in the intervention period and A\$175,000 in the post-intervention period compared to the pre-intervention period. There was a 28% reduction in the tests performed in the intervention period ($P < 0.0001$ compared to pre-intervention period) and 26% in the post-intervention period ($P < 0.0001$ compared to pre-intervention period). There were no ICU or hospital mortality differences between the groups. There were no significant haemoglobin differences between the groups. A multimodal intervention safely reduced pathology test ordering in the ICU, resulting in substantial cost savings.

Reference:

Dhanani, J.A., Barnett, A.G., Lipman, J. and Reade, M.C. (2018) Strategies to reduce inappropriate laboratory blood test orders in intensive care are effective and safe: a before-and-after quality improvement study. *Anaesthesia and Intensive Care*. 46(3), p.313-320.

