

ResearchOne Data Service, 2015/16 – YHAHSN-Funded Projects

Lay abstract

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**Pre-Hospital surgical risk stratification
Or
Using Primary Care data to tailor surgical care**

Despite advances in the care of patients undergoing surgery, having major surgery carries a real risk of serious complications or death. There is evidence that those patients who have many medical problems, and/or those who are frail, have a higher risk of serious problems around the time of surgery. This so-called “higher risk group” make up around one in six of patients undergoing major surgery, but five of every six major complications occur in this group.

It should be possible to give enhanced care to these higher risk patients to prevent them having complications or dying. However, this is dependent on them being reliably identified well before their operation, so that hospitals have time to plan their care and make the necessary resources available, e.g. intensive care beds. The primary care (GP) record already contains detailed information when a patient is referred for surgery. If we could make some of this information available to surgeons, anaesthetists and nurses, they may plan patient care so that the eventual admission for surgery is as safe as possible.

Our team plans to examine the ResearchOne database to identify which information in the primary care record predicts how patients recover after surgery. We hope to then use this information to create a surgical risk score that identifies patients at risk of complications before they even get to hospital. Further work will focus on how best to plan the care of these higher-risk patients.