

## **Information about the Safe Surgery NZ programme quality and safety marker**

The following information is to support district health board (DHB) surgical teams in measuring the impact of the teamwork and communication interventions and submit quality and safety marker (QSM) data to the Health Quality & Safety Commission. Submission is made manually or via the data collection tool (the audit tool), which has been created for this purpose.

### **Safe surgery process QSM**

All three parts (sign in, time out and sign out) of the surgical safety checklist are used in 100 percent of surgical procedures, with levels of team engagement with the checklist at five or above, as measured by the seven-point Likert scale, 95 percent of the time.

### ***Collection and reporting schedule***

The timing of the safe surgery process QSM data collection and public reporting will align with the Commission's other QSMs. Data for publication in December will be collected by DHBs from 1 July until 30 September.

The data collection/reporting quarters align with the financial year quarters (July– September, October–December, January–March and April–June). Publication is always at the end of the subsequent quarter to allow for data verification between the Commission and DHBs.

### ***QSM data needed for each quarter***

Each DHB will need to collect a minimum of 50 observation audits ('moments') for each of sign in, time out and sign out. The 150 'moments' are audited events where all checklist items are reviewed by the operating theatre team and an engagement rating is then applied.

In the audit tool, checklist completion is a prerequisite for the auditor to move on to rate the levels of team engagement on the seven-point scale.

### ***QSM data reporting method***

At the end of each quarter the data host (Quality Hub) will extract relevant data and provide this to the Commission's health quality intelligence team. The data extracted will be date, time, site, specialty and engagement scores only. The Commission will not have access to the other data that DHBs submit to the audit tool.

All of the DHBs' observational audit 'moments' from the quarter will be extracted (ie, more than 150 if this is possible), as the higher the number of moments used to find the average 'score' the greater the accuracy of the results.

### **Rationale for collecting 50 moments (for each of sign in, time out, sign out)**

The Commission needs to collect a large enough sample per DHB to give an accurate view of how well surgical teams are working together and communicating during sign in, time out and sign out. Too small a sample would result in very wide confidence intervals, making it hard to have certainty in the results (ie, a couple of low ratings could pull down an otherwise good performance).

We have calculated that a sample of 50 moments will give us narrow enough confidence intervals (+/-6 percent of the average rating) to be certain of the calculation of the average 'score', which is what will be published per DHB. This means we can be reasonably confident that the average rating is an accurate reflection of a DHB's performance.

### **Rationale for needing 50 moments from both smaller and larger DHBs**

For smaller DHBs we have looked at whether taking into account the smaller population size/lower theatre throughput would allow us to reduce the sample size (using a finite population adjustment). We have done this in the past, but for these examples the number of moments collected was much larger.

We found that the adjustment had little effect on the required number of moments for the teamwork and communication QSM. In order to keep the confidence intervals narrow enough (+/-6 percent of the average rating), we would need the sample to be between 47 and 49 moments for even the smallest DHBs. For consistency, we have therefore decided to keep the sample size at 50 moments for all DHBs.

### **Spread of data collection within one DHB**

We expect all sites – operating theatres, specialties, acute and elective surgery – to use the teamwork and communication interventions.

We do not focus on where the safe surgery audit data is from within a DHB. Average scores will be calculated per DHB, not per hospital site. Therefore, a DHB that has multiple sites should aim for equal performance at each site.

### **Private surgical hospital participation in programme data collection**

Private surgical hospital (PSH) participation in our improving theatre teamwork and communication initiative to date has been voluntary. PSHs are welcome to attend learning sessions, intervention training and auditor training alongside their neighbouring DHBs, and many have taken advantage of this. PSHs can purchase the app from Quality Hub and use the data to measure local improvement, but the Commission will not access this data.

### **Observational auditor training and development**

We contracted the University of Auckland to deliver 'train the trainer' sessions for DHBs as part of the programme implementation. Those who attended the training are known as trained auditors and can train further auditors within their teams.

Each DHB needs to train sufficient auditors (determining the appropriate number is up to each DHB) to undertake their own auditing.

Resources to support training are below.

### ***Auditor training***

[Safe surgery observational auditor training resource](#)

[Safe surgery observational auditor training resource videos](#)

These pages take you to a list of video resources, including some from the safe surgery auditor training. There are other videos to help you run education sessions for the whole surgical team and refresher auditor training sessions throughout the year.

### ***Recalibration auditing training***

The purpose of this training is to recalibrate auditors as individuals, as a group and against expert raters. It takes approximately 60 minutes and is [available on the University of Auckland website](#).

### ***Communication training***

The four sessions listed below can be delivered to staff during workshops or education sessions – either in multidisciplinary groups or to individual disciplines:

- structured handovers
- speaking up and active listening
- structured recaps
- closed loop communication.

Information, literature and session material on the four communication sessions are [available on the University of Auckland website](#).