Background

Western Australia has 112 operating theatres within 32 public hospitals, plus additional theatres in two privately operated public hospitals. Operating theatres are used for elective and emergency surgery. The procedures performed depend on the clinical services provided at each hospital.

This report provides an assessment of how efficiently five public hospitals used operating theatres to deliver elective surgery over a six year period from 2009 to 2014.

To assess efficiency, we analysed the proportion of time operating theatres were used for surgery, across each hospital and also by surgical speciality. Late starts and lengthy gaps between scheduled surgical cases are examples of inefficiencies. We took into consideration the need for turnaround time between cases and that some delays and cancellations are outside a hospital's control. The average theatre time for cases in elective sessions in our sample was 70 minutes. Therefore, we have reported on significant late starts and early finishes greater than one hour. We considered whether hospitals could do more procedures with the same resources. We engaged a subject expert to review the evidence and contribute to the findings. The audit did not assess clinical processes or outcomes.

Conclusion

Inefficiencies in the way hospitals use operating theatres mean that they have capacity to treat many more patients during elective sessions. Operating time is lost because many sessions start late or finish well before their scheduled end and a large number of cases are cancelled on the day of surgery. In addition, scheduling of operating sessions does not match predictable patterns of demand causing further lost time.

In 2014, nearly a quarter of available theatre time in elective surgery sessions was not used to treat patients. While 10 per cent of the overall time was used
to clean and prepare theatres between cases, we estimate that approximately 3 000 hours was feasibly available across the five hospitals to treat many more patients. This time is equivalent to staffing two theatres for almost a year without treating any patients.

Efforts by the hospitals to improve operating theatre efficiency tend to be ad hoc with limited use of existing data. Better scheduling of surgery, in particular to take account of the demand for each clinical specialty, would allow more of the available time to be used, and reduce the need for and cost of staff working overtime. Improved direction and guidance from the Department of Health (Health) to hospitals would also bring a more determined approach to improving operating theatre efficiency.

**Key Findings**

- In 2014, time was lost because more than a third of sessions did not start on time, many sessions did not finish on time and 1 244 elective cases were cancelled on the day of surgery.

- Poor scheduling is a key cause of inefficiency. We found hospitals did not use all of the planned elective sessions, the allocation of elective surgery time to the different specialities did not match need and that hospitals do not regularly monitor and review schedules.

- Additional operating theatre time could be made available by reviewing session times and adjusting rosters to suit.

- Health and the sample hospitals are not making the best use of available data and information to get a clear picture of operating theatre efficiency or the causes of inefficiencies.

- Health provides some opportunities for hospitals to discuss information about improvement strategies. However, further work is needed to ensure all relevant hospital staff can access information and opportunities.