

Mapping Information of Operating Theatre Waiting List Process

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INTRODUCTION

An operating theatre waiting list (OTWL) is a list that patients are enrolled in once they opt to pursue an elective procedure, assuming they cannot get this procedure performed immediately (Chua, 2005). Operating Theatre Waiting Lists are of great concern in society nowadays because of their societal and political priority, their link to the quality of individual patients' lives, relation to the economic management of operating theatres and management of patient flow through the hospital, and distribution of scarce medical resources (Al-Hakim & Fitzgerald, 2003; Foote, North & Houston, 2004; NSW Health, 2002). They are used by politicians as measures of success or otherwise measures of government action on the health services.

It is generally accepted that waiting lists are unacceptably long and create a number of problems (Foote et al., 2004). Long waiting times are a problem for patients, not only because of uncertainty but also because the state of the patient may deteriorate if he or she is not treated early enough (Council of Europe, 2005). Nothing is more important to patients than the length of time they have to wait for treatments. The impact of fast, effective treatment, diagnosis and treatment on a patient's health and well-being is incalculable (Scottish Executive, 2001). Disruptions and delay affect the quality of patient care and may cause stress, anxiety, and discomfort for patients as well as cause costs to escalate as sessions overrun and much more (Buchanan & Wilson, 1996). Also, if a patient does not arrive in the operating theatre on time, the surgeon may be left idle or left to perform routine duties, which is expensive for the hospital and frustrating for the staff (Buchanan, 1998). There also have been reports about the depressing effects on patients of cancelling surgeries and on the high level of emotional involvement before surgeries. Late cancellation of scheduled

operations is also a major cause of inefficient use of operating-room time and a waste of resources; it is potentially stressful and costly to patients in terms of working days lost and disruption to daily life as well (Schofield et al., 2005).

Sometimes waiting lists are so long that patients have to be turned away. In September 2005, it was found that more than 30 patients were turned away daily from the Royal Brisbane and Women's Hospital (Sommerfeld, 2005). Long waiting lists also have been found to distort the clinical judgement of doctors, thereby causing suffering for some of the most seriously ill patients. It has been found that half of the consultants in England admitted deferring surgery in high priority cases to treat less urgent patients because of the pressure to cut waiting lists in those areas (Carvel, 2001). The consultants who admitted to treating patients in the wrong order said that this had a negative impact on the patients' conditions.

OTWL Activities

OTWL comprises a large number of activities that can be grouped into five main categories:

1. **Pre-admission.** This includes activities related to the referral from the GP or specialist and the deciding of the level of categorization that the patient is given as well as the booking of appointment.
2. **Peri-operative.** This includes the activities of patient booking, operating scheduling, and patient preparation. It consists of:
 - Expanding the scope of peri-operative care to include all activities from the hospital receiving the recommendation for admission form to discharge from either the day-only or recovery unit

- An expanded scope of responsibility—bundling activities with responsibility delegated to an individual to enable new processes to occur
 - A collocation of related activities—booking and scheduling with the pre-admission clinic, day-only and day-of-surgery unit located adjacent to the operating theatres
3. **Intra-operative.** Involves managing operating theatre resources and procedures directly associated with the surgery to ensure safe and effective patient outcomes.
 4. **Bed management.** Concerned with making different types of beds available to patients. Relevant admission and discharge policies are required to manage bed availability on an hour-to-hour, day-to-day basis. Examples identified include elective day surgery admissions and patients cared for in the ambulatory unit following surgery.
 5. **Discharge planning.** Encompasses activities aimed at the smooth transition of the patient from hospital to their home or place of residence.
 6. **The information flow.** Involves the exchange and use of data to manage surgical services and operating theatres. These include:
 - Surgeon/specialty session allocation, including changes due to individual surgeon's availability throughout the year
 - Surgeon and hospital waiting list data
 - Seasonal/population demands
 - Patient data and clinical information
 - Operating theatre booking and scheduling, including resources, equipment, and prostheses
 - Patient bookings, including appointment dates and times for the pre-admission clinic, and admission dates and times for day-only and day-of-surgery admissions
 - Real time activity data to manage elective and nonelective/emergency cases
 - Availability of acute beds, including intensive care unit and high dependency unit beds and the number of patients being discharged
 - Hospital and operating theatre utilization and outcome data; for example, pre-admission clinic attendance rates, day-only and day-of-surgery rates, and cancellation rates

Potential Causes of the Problem

There is often a lack of consistency between planned theatre session lists and the manner in which these actually run. Theatre staff and users frequently fail to keep to regular session start and finish times; thus, late starts and overruns of sessions are commonplace. This is because once the list has been drawn up, it is still vulnerable to multiple alterations and modifications (Audit Commission, 2002; 2003; Buchanan & Wilson, 1996; Healthcare Commission, 2005; McAleer, Turner, Lismore & Naqvi, 1995; Schofield et al., 2005). Following is a list of the main causes of the problem of long OTWL:

- Accommodating emergency cases that are given priority
- No separate emergency theatre session, leading to interruptions in routine lists
- Over-ambitious, poor list planning
- Unanticipated variation in the patient's condition, only known during the surgery
- Unpredictability of procedure's length of time
- Unanticipated variations in the time of patient's stay in the recovery ward
- Cancellation of operations on the day of intended surgery
- Preoperation tests are not done properly or completed on time
- Unavailability of beds in recovery wards
- No agreed start and finish times for theatre sessions
- Lack of commitment by theatre staff and users to ensure they arrive on time
- Delays due to external factors such as patients, equipment, and supplies not being delivered to the theatre on time
- Patients delaying surgery due to personal reasons (e.g., fear)
- Unavailability of resources, such as specialists, porters, surgical equipment, and so forth

Sometimes a poorly maintained information system also contributes to the problem of the waiting list. Generally, decisions about theatre lists are entered in multiple patient records by a number of staff and officers who do not always communicate their independent actions. This is not helped by the fact that there is difficulty arranging meetings with all the specialists, who are very

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