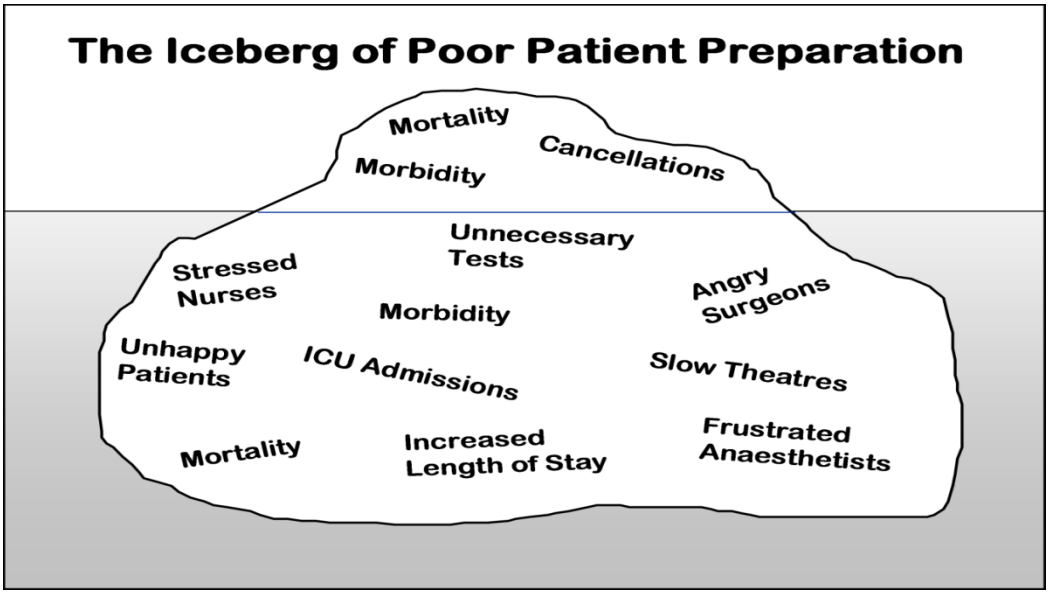
THE PREOPERATIVE PROCESS – RATIONALE FOR CHANGE

The importance of appropriate pre-operative and pre-anaesthetic patient assessment and preparation in order to assure patient safety has long been recognised, and has been confirmed by morbidity and mortality audits. In recent years, there has been an increased appreciation of the adverse effects of poor patient preparation on dimensions of quality other than safety, such as avoidable cancellations, process delays, inefficiency in the operating theatres, staff frustration, and patient dissatisfaction. Some of these effects may not be immediately apparent, but collectively produce a large negative impact on the quality of the health system. This is the inevitable result of a poorly designed and organised patient preparation system. Conceptually, it can be described as the "iceberg of poor patient preparation".



(Fig 1)

THE TRADITIONAL PREOPERATIVE PROCESS

The traditional model of patient care for patients having surgery is based on the organisational structures developed in the hospitals of the late 19th Century. In this model, it is presumed that the surgeon is in authoritative command of a small 'firm' that acts as a hierarchical team. This 'firm' was relatively autonomous with regard to the rest of the hospital – so that each surgeon or firm could have clinical practices that were unique to that firm. It was presumed unnecessary to involve other medical specialists in medical decision-making. The surgeon was regarded as omniscient, omni-competent, and omni-present – the traditional model assumes that the surgeon is always in control, and thus can and must be contacted (either directly or through a lower member of the hierarchy), whenever management decisions are to be made.

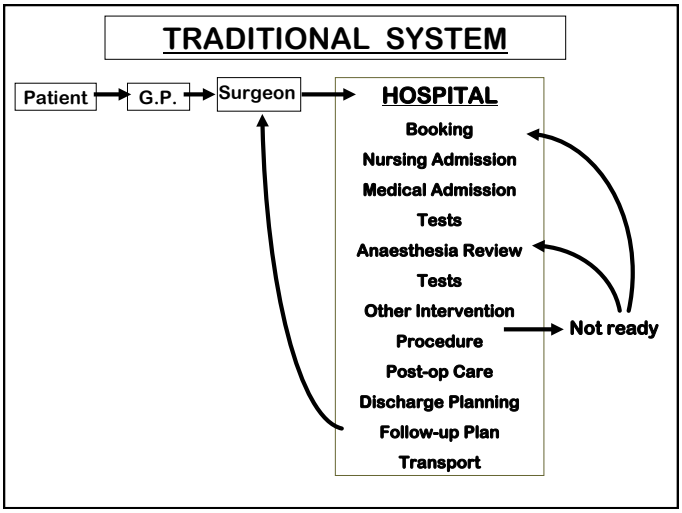
The traditional model required the members of the surgical team to have a broad understanding of all matters to do with perioperative patient care, as the surgeon (or delegate) was empowered and expected to make decisions regarding any patient care matter. It also required the members of the surgical team to have a comprehensive knowledge of everything regarding the patient's clinical care.

These aspects of the traditional care model were major strengths, but were built on assumptions regarding the hospital workforce. It assumed that the patient was treated in one ward with a small stable number of nurses providing all the care on the ward. With regard to 'junior' members of the medical hierarchy, the traditional model implied a working style based on living in the hospital, and an expectation of being available and contactable at all times.

This traditional model had both strengths and weaknesses. The major strengths of the traditional model included a clear line of command and control – it was clear to everyone in the system that one person was in charge of all decision making. There was also clarity of process – the steps involved in an episode of surgical care could be described linearly, and there were minimal points of 'greyness' where there was obviously conflicting requirements in planning patient care.

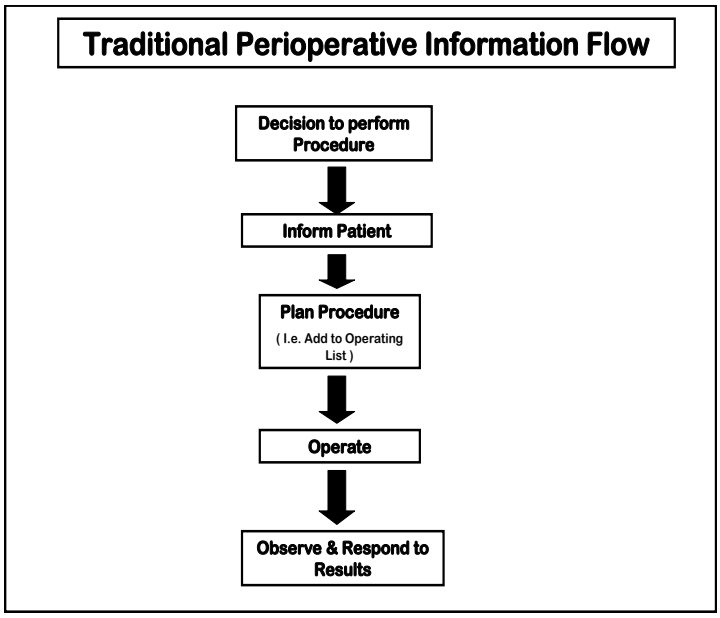
The traditional model also existed in an environment that was different to that of today. Clinical information was less complex, as patients had less co-morbidities, inter-current therapies, and less results of investigations. The average length of stay was longer, and patients stayed on one ward for their entire hospital stay. Organisational process control (management information) was substantially less. Information management was simpler due to the smaller number of clinicians and others involved in the care process. Finally, financial constraints and expectations of efficient process management were less. The results of poor patient preparation could be accommodated, by practices such as early admission, which are no longer accepted.

Conceptually, the traditional surgical process was hospital-based:- most steps in the process occurred in hospital. (Fig 2) After the initial decision that the patient needed an operation, the patient was admitted to hospital, and the care process commenced with nursing and medical admission, investigations, preparation, and the procedure itself. Postoperative care tended to be reactive, so that discharge planning started when the decision was made that the patient could be discharged. Reflecting this system, the portrayal of hospitalisation in popular culture has commonly featured the senior Doctor announcing to the patient (and staff) "you can go home today" as unexpected and welcome news.



(Fig 2)

The traditional process can also be viewed from an information management perspective. (Fig 3) The surgeon made the decision to operate at a particular time and informed the patient and the hospital. It was presumed that the patient's health issues, personal preferences, the equipment and other requirements, and the organisational constraints of the hospital could all be managed as secondary to the original decision to operate. It can be seen that the traditional process was conceptually simple and linear, with few points of interactive or conflicting requirements. Information flowed in one direction, as planning was reactive.



(Fig 3)

One possible exception arose with regard to anaesthetic management. In some countries (particularly in the British tradition) the anaesthetist was seen as professionally autonomous from the surgeon, so that differing requirements or interpretations of information could become a possible point of disagreement about clinical management. However, assessment for anaesthesia was the role of the procedural anaesthetist, who tended to become involved in care only shortly before surgery, and acted as a 'journeyman' or individualist practitioner. Decision-making options were thus often reduced to postponement or even cancellation - a tool of last resort used only when there were major patient safety issues identified at the time of preoperative assessment by the anaesthetist.

THE TRADITIONAL PROCESS IS FAILING

The traditional system is increasingly unable to deal with the complexities of modern patient care and the demands of the modern hospital workforce. These problems are becoming increasingly obvious, and despite its strengths, the traditional model is no longer sustainable. It is no longer possible for any single person to be omniscient and omni-competent with regard to all aspects of patient care. Multiple medical and non-medical specialists are involved in decision-making regarding patient care. Specialised knowledge is held by multiple semi-autonomous professions. The power hierarchy implied in the traditional model is neither appropriate nor acceptable in today's multi-disciplinary healthcare teams.

The individuals in the healthcare workforce are also changing. Nursing staff are better paid, have higher education levels, and have markedly different career and social expectations. The full-time (168 hours/week) commitment by medical staff that the traditional care model required is not compatible with current work- and life-style preferences. Allied health and ancillary staff are more commonly involved in patient care. The workforce is more specialised and fragmented, and more commonly working part-time. As a result, patient care is now delivered by multidisciplinary teams including a much larger number of staff, many of whom will have only transient contact with the patient.

Apart from the changing health workforce, the organisational environment has also changed. Requirements for clinical information management are more critical as patients have more co-morbidities, and operations and surgical procedures are becoming more complex. This complexity is multiplied by patient care being geographically fragmented into specialised ward areas, particularly as length of stay is reduced.

The rise of hospital management has made clinical process control is more detailed, increasing organisation information requirements. There is less tolerance of process inefficiencies and other indicators of poor quality. Finally, the patient is no longer a passive 'recipient' of the outcomes of surgical or other health care processes, but is an active 'partner in care' whose preferences and choices must be included in planning and preparation for procedures.

In order to deliver high-quality patient care for modern surgical and other procedures, with the modern health workforce, and in a changing hospital environment, there must be a fundamental redesign of the peri-operative care process, and development of new roles for all health professionals in this process.