

The development and evaluation of satellite endoscopy services in Western Australia

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Abstract

A satellite endoscopy service was formally established in late January 1997 in one peripheral hospital, a second service commencing in April 1997, and a third in December 1997. More than 500 patients underwent gastrointestinal endoscopic procedures at these satellite services during 1997. The feedback received to date indicates that the establishment of this service is supported by patients and the peripheral hospitals. It is expected that this project will achieve all its stated objectives. In addition, the implementation of this service will assist in improved waiting list management at Royal Perth Hospital. The satellite endoscopy service is a unique development in Western Australia and has demonstrated definite benefits to patients in less than six months of operation.

Background

The gastrointestinal endoscopic workload at Royal Perth Hospital has increased at an annual average of 14% over the past four years. This increase is due to the effectiveness of endoscopic techniques in diagnosing patient conditions in a day procedure environment. Approximately 5700 endoscopic procedures were performed in 1994–1995, and more than 6000 procedures in 1996–1997. This makes the Royal Perth Hospital gastrointestinal endoscopic service one of the busiest in Australia.

The provision of good quality service has not gone unnoticed by the Perth medical community. This has undoubtedly contributed to the increasing number of referrals, and subsequently to the workload of the Department of Gastroenterology. Reasons for this increase in patient referrals is twofold. Firstly, an increase in the population in the catchment area explains part of the increase. Secondly, and perhaps the main cause of this increase in referrals, is referring practitioners' increasing awareness of the value of endoscopy versus contrast radiology in diagnosing and treating gastrointestinal disorders. For example, screening for colorectal cancer including polyp removal, accurate assessment of dyspepsia with particular reference to gastroesophageal reflux disease and helicobacter pylori gastritis are some of the conditions amenable to endoscopy.

Also contributing to the increasing workload is the rising number of inpatient referrals. Inpatient referrals receive priority over booked day patients. An audit conducted in 1995 to determine the response times from the request for inpatient endoscopy to provision of service revealed that these are close to ideal. The audit established that gastrointestinal endoscopy did not contribute to delayed patient discharge from hospital.

Conversely, the waiting time for direct access endoscopy patients referred to Royal Perth Hospital has reached unacceptable levels. A patient referred for endoscopy could expect to wait five months before undergoing the procedure. Some time ago the waiting time was three weeks. The five-month waiting time has considerably reduced the benefits of the service, and has potentially increased the risks to certain sub-categories of patients. Non-attendance of booked cases in the department has risen proportionate to the five-month waiting time. This is because patients having to wait for extended periods of time have either had the procedure performed elsewhere or decided not to undergo the procedure. These non-attendances cause disruptions in the department and are an ineffective use of staff and hospital resources. Non-attendances are often without notification and make the finding of a replacement difficult due to short or no notice.

The goodwill of the referring medical community was considered to be under significant threat due to the issues highlighted above. Therefore, the under-utilisation of peripheral, non-teaching public hospital physical facilities and the increasing workloads at teaching hospitals were the major reasons for establishing a gastrointestinal satellite endoscopy service. The primary goal of the service is to enhance patient service provision. The authors have not covered the issue of endoscopy versus other investigatory modalities as this is not the purpose of this article.

Objectives

The overall goal of developing and implementing satellite endoscopy services is to reduce patient waiting times for gastrointestinal endoscopy, thereby reducing turnaround time of replies to referring doctors, which allows them to act on the endoscopy findings to improve patient outcomes.

The specific objectives are as follows.

- Provide a unique, collaborative service involving greater cooperation with teaching and peripheral hospitals.
- Reduce the waiting time for patients referred to Royal Perth Hospital for gastroenterological endoscopic procedures.
- Enhance patient access to peripheral hospitals. Such access has previously been unavailable for public patients. These services have been centralised in the teaching hospitals.
- Provide a forum for greater collaboration between gastroenterologists by attendance at academic meetings and patient review meetings.
- Allow Royal Perth Hospital gastroenterologists to dedicate more time to complex cases presenting to its tertiary referral service.
- Increase the time assigned to conducting gastroenterological research, including increased levels of participation in collaborative studies with national and international organisations.

Implementation

The Department of Gastroenterology at Royal Perth Hospital recognised the need to improve patient waiting times and considered a number of strategies to overcome the five-month waiting time. It was recognised that the most effective means of overcoming the problem was to request additional funding to allow more gastroenterologists to be employed to undertake gastrointestinal endoscopic procedures. The employment of more gastroenterologists at Royal Perth Hospital had the potential to overburden already over-utilised facilities. An innovative, alternative concept was therefore formulated.

This involved employing gastroenterologists on a sessional basis to perform the procedures at peripheral hospitals, utilising existing day surgery facilities and expertise. A business case was prepared by the Department of Gastroenterology and the divisional business manager, and was then submitted to the hospital's Business Unit. The business case was submitted to the Health Department of Western Australia, requesting funding to develop and implement satellite

endoscopy services. The proposal contained two main cost components. These were the payment for sessional gastroenterologists and the leasing of facilities in the non-teaching public hospitals. The leasing price of the purchase agreement included nursing services, cleaning services, use of other goods and services (including all patient requirements for the procedure) and depreciation of equipment. These costs were negotiated over a period of time with staff at the relevant hospitals, and final agreement was included in a Memorandum of Understanding.

The proposal was accepted by the Health Department of Western Australia, and waiting list initiative funding of \$381 500 was allocated. Prior to the submission of the proposal, discussions were held with staff at peripheral hospitals to determine the proposal's feasibility. The process of liaison and operational aspects of service delivery were then initiated, with services commencing in one peripheral hospital in late January 1997.

Patients selected from the Royal Perth Hospital waiting list were those who were classified as low risk. The process of gastroenterologists screening referrals for patient suitability at satellite services was initiated, with patients also selected based on their close geographical proximity to the service.

To enable successful implementation of services, a planning meeting was held between Royal Perth Hospital and peripheral hospital staff. From this a Memorandum of Understanding was developed, which included clear guidelines establishing who was responsible for various aspects of the service. A working group of staff was formed, with mechanisms for problem resolution established. Minutes of each meeting were generated and circulated to staff at both sites. Performance indicators were agreed upon by both parties and responsibility for all aspects of the service clearly documented. These regular meetings allowed formal working relationships to be established between staff who were responsible for providing the clinical services to patients, and the management and administrative aspects, including financial monitoring of the service.

Prior to the commencement of a satellite endoscopy service, support for the establishment of the service was gained from the peripheral hospitals in a number of ways. Initially, the Medical Advisory Committees were approached by a gastroenterologist from Royal Perth Hospital to determine support and establish the requirements for the success of such a service. The preliminary proposal was presented to peripheral hospital staff for their feedback and assessment of service feasibility. An underlying concern of doctors practising in the peripheral hospital was that the satellite service was a threat to their income.

Fee-for-service exists in the peripheral hospitals and with the introduction of a sessional payment for satellite services this was perceived to be a disincentive for the service to be established.

Within Royal Perth Hospital, service providers (pathology services and administrative support staff) were approached to gain support and establish requirements for the operational aspects of the service. Meetings were held with relevant stakeholders and anticipated participants of service delivery. All areas of service provision were documented and clearly outlined, which included correspondence and continuous contact with staff. As the service was to be managed by Royal Perth Hospital staff, and all patient activity data recorded as Royal Perth Hospital's activity, there were considerable administrative functions that needed to be created and monitored. Royal Perth Hospital assuming responsibility for the majority of administrative services is considered to be a positive feature of this service.

Evaluation

The evaluation of a satellite endoscopy service includes a patient satisfaction survey for the first two months of service operation, staff satisfaction surveys and the monitoring of key performance indicators. The performance indicators included:

- availability and usage of sessions
- patient cancellations
- intra- and post-operative incidents
- patient throughput
- patient satisfaction
- staff satisfaction
- percentage of patients from the defined catchment area.

The benefits of the service are continually monitored, with formal evaluation meetings between Royal Perth Hospital and peripheral hospital staff. These meetings have resulted in minor modifications to original set-up plans, and operational costs have been revised with full cooperation between all parties involved.

Following a procedure, patients receiving endoscopic services for the first two months of each service's operation were contacted via telephone and asked to participate in a structured questionnaire. Patients were asked questions relating to their understanding of the procedure, and their travel arrangements, and were asked to rate all staff they had contact with at the hospital. Various other aspects

of service delivery were also rated by patients. It was believed to be important that all aspects of service delivery were surveyed to determine if any changes needed to be made to improve the satellite service. The most significant evidence regarding the effectiveness of the program is the reduction in waiting time for patients referred to Royal Perth Hospital. This has been reduced significantly from five months to one month.

The results from the patient satisfaction surveys revealed that patients were satisfied or very satisfied with service provision. The majority of patients stated that, if necessary, they would have the procedure again at a satellite service. Data were analysed and the most significant findings are outlined below:

Swan District Hospital (n = 49)

- All (100%) patients stated that they understood the nature of the procedure.
- One patient stated that they were unaware of the risks associated with the procedure.
- All (100%) patients stated that they understood the instructions posted to them regarding the preparation required for the procedure.
- Most patients found the map provided for the Swan campus to be satisfactory.
- The preparation required for the procedure caused discomfort to three patients.
- Only one patient experienced difficulties with travel arrangements.
- All (100%) patients stated that they were well received by Swan District Hospital staff.
- The rating of information given to the patients was extremely positive, with numerous positive comments provided.
- Side-effects from the procedure were experienced by 13 (26.5%) patients. The majority of these side-effects may be said to be minor.
- No difficulties were experienced with patient care at the hospital after the procedure.
- The procedure report had been delivered to the referring doctor at the time of contacting the patient by 30 (61%) patients.
- All (100%) patients stated that they understood the information sheet given to them relating to problems arising after the procedure.
- Forty-eight (98%) patients would choose to have the procedure again at Swan District Hospital.
- Only one suggestion was given to improve the service at Swan District Hospital.

Osborne Park Hospital (n = 43)

- All (100%) patients stated that they understood the nature of the procedure.
- Ninety-one per cent of patients stated that they understood the risks associated with the procedure.
- All (100%) patients stated that they understood the instructions posted to them regarding the preparation required for the procedure.
- One patient did not understand the travel requirements to and from the hospital.
- Risks associated with the procedure caused concern for 28 (65%) patients.
- Two patients experienced difficulties with travel arrangements.
- All (100%) patients stated that they were well received by Osborne Park Hospital staff.
- The rating of information given to patients by staff was rated as helpful for all staff categories.
- Side-effects from the procedure were experienced by 8 (19%) patients. The majority of these side-effects may be said to be minor.
- One patient experienced difficulties with patient care at the hospital after the procedure.
- The procedure report was delivered to the referring doctor at the time of contacting the patient by 11 (26%) patients. All other patients either had appointments with their doctor and intended to deliver the report, or would soon deliver the report, or the report was forwarded in the mail due to printer problems on the day of the procedure.
- All (100%) patients would choose to have the procedure again at Osborne Park Hospital.
- Five suggestions were given to improve the service at Osborne Park Hospital.

Since the commencement of the service, referring medical practitioners are now aware of satellite services and are perhaps more willing to refer patients to Royal Perth Hospital. It is recognised that in the past the lengthy waiting time may have discouraged medical practitioners from referring patients, and from reducing the increasing number of telephone calls to Royal Perth Hospital to put pressure on staff to bring appointment times forward.

It is anticipated that funding for this service will continue beyond the initial funding allocation subject to ongoing demand and continued evaluation of the service. These requirements should be readily met, considering the projected population growth, continuing decline in patient private health insurance rates, and the lower costs of the service provided.

Conclusion

The development of satellite endoscopy services in Western Australia has demonstrated that the provision of services closer to the patient's home and payment of services on a sessional basis are both factors in the success of this project. In many instances referring doctors prefer referral to a teaching hospital unit, even when alternative options are available. The satellite service enables referring doctors to gain access to peripheral hospital services, with teaching hospital staff undertaking procedures.

To our knowledge, the satellite endoscopy service is the first in Western Australia to transfer patients from a teaching hospital to peripheral hospitals where payment for medical staff is sessional payment. The success of this project now paves the way for other specialties and services to develop satellite services using the same payment structure. The underlying objectives of the establishment and continuation of satellite services to reduce teaching hospital waiting lists and to make available peripheral hospital facilities not otherwise being used should be the motivation for governments to support such initiatives.

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