Southern Health Care Network

Development of a Monash-Gippsland Hospital In The Home (HITH) Collaborative Network.

Final Report – 22nd May, 2000.

Collaborating Institutions:

Monash Medical Centre
West Gippsland Hospital
Bairnsdale Regional Hospital
South Gippsland (Leongatha) Hospital
and
Wonthaggi Hospital.

Background

As many of the patients treated at Monash Medical Centre originate in the Gippsland area they are frequently kept in hospital longer as there are no appropriately trained staff available in the region to continue the acute care.
An example of this problem is the Cardiac Unit 'Early discharge following coronary by-pass surgery' program. Patients that reside in the Gippsland area have to remain in hospital even though they may be suitable for early discharge. Similarly, some Gippsland patients with serious infections such as infective endocarditis and osteomyelitis cannot be currently treated at home with intravenous antibiotics due to a lack of local Hospital in the Home (HITH) services.

Aims and Objectives

- Establish a collaborative HITH Network model involving the Southern Health Care Network (SHCN) and the above Hospitals.
- Facilitate educational support between the SHCN and rural hospitals in all aspects related to HITH care.
- Give professionals and ancillary support to all health professionals involved in the rural HITH programs.
- Achieve greater continuity of care for patients treated in the SHCN and Gippsland Hospitals.
- Develop links with the medical practitioners interested in HITH care at each site including key General Practitioners.

Methodology Report

a. Meetings and Seminars

1. All sites were contacted and meetings held with the Chief Executive Officers, Directors of Nursing and HITH Coordinators. Meetings were then arranged with the local General Practitioners for each health service so that they could be fully engaged in the process and their needs understood and addressed.

2. Meetings were then conducted with the General practitioners at all the rural hospitals except for two sites who declined the invitation. The level of interest varied from site to site.

3. Identification of the HITH Program needs for each site following an analysis of their current HITH Programs. This depended upon the level of General Practitioner support for the Program which varied in each area.

a. Education

An education plan was developed commencing with an initial phase of meetings at each site to provide an overview of the Urban/Rural project and identify areas where collaboration could be maximised. The education plan included feed back to the rural sites following the initial analysis of information, addressing specific issues identified and consolidation of the network.

1. Initial seminars were held at Warragul and Bairnsdale with an attendance of 40 and 30 medical and nursing staff respectively. A further seminar was held later at Warragul when all Gippsland sites were invited to discuss key issues that had been previously identified. This was a much more focussed meeting and staff from other interested Gippsland hospitals were invited to participate. A total of 35 staff attended.

2. Seminar presentations covered the following HITH program areas:

    - New modalities and technology relating to the treatment of Cellulitis, the most common condition cared for by the rural General Practitioners requiring intravenous antibiotics.
    - Information on more complex medical conditions requiring intravenous antibiotic treatment such as Endocarditis and Osteomyelitis. These patients are cared for by the Physicians but the General Practitioner may carry out the follow-up care.
    - Medical presentation on the more adventurous intravenous antibiotic treatments such as the use of continuous Flucloxacillin.
    - Demonstration and instruction on the use of the latest ambulatory pumps now being widely used by HITH Programs such as the Side-Kick and Abbott pumps.
    - Information on care planning and critical pathways for patients being cared for by the HITH program. All sites received copies of care plans used by Monash Medical Centre. This assists HITH in delivering a standard, high quality medical and nursing service and ensures the service is effective and efficient. It also assists in the auditing process.
    - Presentation on the early discharge of patients following cardiac surgery when patients are discharged on Day Five and followed up at home for two more days. Exploration of the possibility of these patients being transferred to the rural hospital on Day Five and managed by the local Physician. This is a possibility at Warragul and is being currently examined by the Cardiac Surgeons at Monash Medical Centre. A trial could be implemented at Warragul and if successful offered to the Latrobe Hospital as a majority of the country patients come from these two geographical areas.
    - Information on drug stability and how long they can be kept in the home. All drugs have different lengths of time in regards to their stability in a home refrigerator.
    - Protocols and policies relating to the treatment of Deep Venous Thrombosis in the home. This is a common condition that is treated by General Practitioners and very suitable for home care as long as there

is access to a Pathology Service who can do the daily INR test required for care of these patients.

- Possibility of transferring patients to the rural centres for woundcare post cardiac surgery.
- Current treatments for patients with Pneumonia and Pyelonephritis. These medical conditions can be successfully cared for by the General Practitioner at home.
- Policies and issues regarding the contracting out the HITH nursing service. Safeguards and key performance indicators used by the Southern Health Care Network (SHCN) to ensure continuity of nursing standards and quality of care.
- Process policies for communicating information to the General Practitioner when one of his/her patients enters the program under Physician care.

c. Organisational Support

- The main area of organisation support has been in the area of information sharing such as ensuring all sites have copies of the policies and procedures used by the SHCN HITH Program. These are enclosed separately. This includes the criteria used for patient selection, treatment modalities, equipment used to deliver the drug and procedures for care of various venous access lines.
  - Telephone medical consultations assisting rural medical officers in the care of certain patients with complex medical problems.
  - Support to the rural HITH nursing teams through telephone consultation.
  - Rural HITH nurses spending time at Monash Medical Centre to observe how the program is run at the Southern Health Care Network.

The education sessions were rewarding for both the rural HITH staff and the presenting Monash Medical Centre staff. This gave both groups the opportunity to get to know each other and assisted in the development of a collaborative service.

Project Outcomes

This has been an interesting and informative exercise that has demonstrated the major differences between urban and rural HITH programs. The issues for the rural health sector are very different to those of the large urban tertiary hospitals.

The rural hospitals have different economic and clinical drivers to that of the urban centres. The urban hospitals have major pressure on beds with a need to move patients home as soon as possible. This pressure comes from the impact of a busy Emergency Department as well as the long waiting lists for elective surgery. There is constant pressure on medical units to transfer patients out

from the Emergency Department due to the high demand for their services. Therefore appropriate patients are admitted directly to HITH from the Emergency Department for conditions such as Deep Venous Thrombosis and Cellulitis. Patients attending the urban tertiary hospitals also have complex medical conditions often complicated with co-morbidities.

The rural hospitals have a very different clinical mix to the city tertiary hospitals. Patients tend to present with more simple medical conditions, such as Cellulitis, Pneumonia or Pyelonephritis. Patients presenting with complex conditions are transferred out to the more major hospitals where the medical expertise is available.

The economic drivers are also very different. There appears to be less immediate pressure on beds as the HITH patient is not necessarily replaced by another patient and the bed may remain empty. The cost benefit to the rural hospital appears to be different to that noted for urban hospitals as the economic drivers differ. The inpatient nursing staff infrastructure has to be maintained and cannot fluctuate because a patient goes home on HITH. It is also clear that there is real fear among medical and nursing staff that their community hospitals will be closed if the inpatient numbers drop. They feel very much under threat in the current economic environment.

Rural HITH patient numbers are quite stable and low in comparison with the large urban hospitals. They do not have the fluctuation in patient numbers as is experienced in the larger centres. The small rural hospitals average two to three patients per day who have simple conditions such as Cellulitis . Monash Medical Centre averages approximately 18-25 patients per day with the majority of these patients having treatment for complex medical conditions that require quite complex treatment modalities. These patients mostly require twice-daily nursing visits. Sometimes three times daily visits are needed when a combination of different antibiotic drugs has to be delivered.

There is also the issue of clinical safety. A large number of rural patients are elderly and often present with illnesses that are initially undifferentiated such that all their co-morbidities are not always obvious. An example is the person presenting with a chest infection who may have an underlying medical condition such as Chronic Obstructive Airways Disease that would require admission to a ward bed. It would not be clinically safe to send these patients home for treatment and often there are no clear clinical indicators of the more chronic conditions.

General Practitioners also commented that it was easier for them to do their daily medical rounds at the hospital. They do not have time to drive out to a rural property to review a single patient on HITH.

The General Practitioners at two of the institutions were not interested in becoming part of the Urban/Rural Network although the Chief Executive Officers and Directors of Nursing were keen to be part of this collaborative service. The nursing staff attended the Seminars and there has been communication between nurses involved in HITH at the rural centres and Monash Medical Centre. Policies and protocols have been forwarded to both these institutions and

support given to any nursing staff requiring information on the urban HITH models. Both of these institutions have very professional district nursing services and are already delivering HITH services. These include the delivery of intravenous antibiotics for similar conditions as the other rural centres and treatment of Deep Venous Thrombosis.

As a result of this project Monash and the rural HITH programs have established a number of HITH treatment programs. In particular country patients having intravenous antibiotic care for long term infections are jointly managed by Monash and the rural hospitals. This has been successful with patients residing in the Wonthaggi and Warragul area. Medical consultations and support have been given by Monash Medical Centre medical and nursing staff to the rural hospitals. This has led to the provision of a seamless service in the management of specific patients.

Conclusion

The project's objectives that have been achieved are as follows:

- A collaborative Urban/Rural HITH Network has been established, with each rural hospital having a different focus depending upon the needs of that particular community.
- A collaborative rapport has been established between nursing staff and to a limited extent medical staff at all sites.
- Educational programs have been held with the numbers varying at each of the meetings/seminars.
- Educational support consolidated by the supply of standard patient care protocols for the conditions most commonly treated in the rural centres. Protocols also supplied for the hospitals interested in being involved in the post-cardiac surgery HITH care. (see enclosed booklet)
- Links have been established with the General Practitioners at the sites interested in being part of this Network.
- Achieved a greater continuity of care for patients attending Monash Medical Centre that live in these geographical areas, through medical consultation and the provision of standard nursing care by the rural HITH teams.

This project has been successful in enhancing communication between all the sites and will benefit patients referred to Monash Medical Centre who reside in the Gippsland region covered by these hospitals. There has also been a real benefit in the communication that has evolved between the nursing staff HITH at all of the institutions that will continue into the future as the Network expands in the future.

Future Directions

Concepts established under the Urban/Rural project could be further expanded. Further advances in technology and new treatment modalities will enable the development of optimal HITH treatments that can be adopted by rural centres. Monash Medical Centre will continue to update rural physicians in the latest HITH treatments which will facilitate the continual improvement in the HITH services provided by the rural centres.

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