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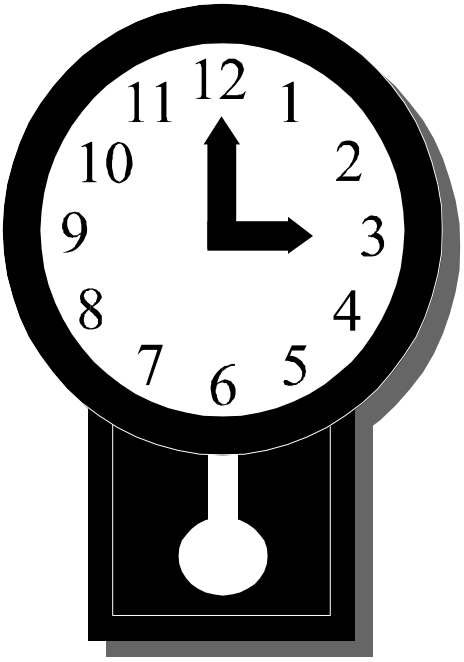

After Hours General Practice Services: A Guide for Divisions of General Practice

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C O N T E N T S

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Purpose

This guide is a resource designed to facilitate the development of quality programs to improve after hours activities in Divisions of General Practice.

Why 'guide' and not 'guidelines'?

In an attempt to avoid being prescriptive, the idea of a guide rather than a set of guidelines have been adopted. All the information contained in the guide is in the form of background information and suggestions, some of which are supported by evidence and literature, others of which come from current practice. The guide are not meant to be prescriptive or to exclude any activities, which fall outside the scope of the guide. It is important to note that they will change over time, through modifications and comment from the field, further research and evaluation, and in response to changes in general practice and the rest of the health care system. It is a guide and resource to help Divisions develop programs in this complex area.

Who might use them?

While it is expected that the primary users of the document will be Divisions and project staff (eg, project development officers, project officers, GP managers etc.) a number of other potential users might find them useful. Among these are:

- State Based Organisations
- the GP Branch of the Commonwealth Department of Health and Aged Care
- other peak community organisations (eg, Consumers Health Forum)
- State health departments

Using the guide

The usefulness of the document will be dependent upon the stage of development of not only the program but also the Division. However, it is anticipated that the guide might be used predominantly in the following ways:

- In the development of after hours service strategies and collaborative locally based services by Divisions of General Practice, linking Divisions activities with those in the wider health care system.

- In the development and assessment of divisional transitional plans. This should not exclude innovation, provided adequate and appropriate evaluation is a component of the plan.

- In the evaluation of projects, programs and activities at local, state and national levels.

"After Hours General Practice Services: A Guide for Divisions of General Practice" reflects developments and advances that Divisions have made since the inception of the Divisions and Program Grants Program in 1992. It is meant as a guide to facilitate the continuation of such developments.

Introduction

After hours GP services have over the years been disorganised and largely dependent on the individual GP. Various arrangements were made including 24 hour on call for the GP's own patients (particularly in rural areas/solo practices), shared on call with practice partners, local rosters and co-operatives, use of deputising services, referral to extended hour practices and emergency departments (Hallam 1994). These were often ad hoc arrangements that were not co-ordinated or publicised and often existed in competition leading to poor communication between care providers. Patients and GPs alike expressed dissatisfaction with such arrangements (Del Mar & Lostroh 1995, Mira et al 1995, O'Dowd & Sinclair 1994). Issues such as safety of doctors, concerns about patient access to services, standards of care and training of doctors, workforce requirements, lifestyle issues for doctors and remuneration have been identified as problems with the current arrangements (Hallam 1994, Hobbs 1998).

The introduction of Divisions gave GPs organisational structures that could address the problems of after hours care at a structural level, assess local needs, negotiate with other stakeholders and co-ordinate services. Several Divisions undertook projects (some funded by the Divisions Project Grant Program and some funded by other sources eg, state or local area health services) to assess local patterns of service provision, local needs and to investigate and propose possible future models of service provision.

Internationally (Hallam 1994) the emerging models of service provision are telephone triage (either doctor or nurse) and co-operatives and primary care centres. These three models can co-exist or operate independent of each other. Co-operatives are as the name suggests, local groups of GPs that agree to work on a roster system to cover the after hours calls for the other participating GPs. This enables each individual GP to be on call fewer nights. It implies co-operation, non-competition and communication from on call doctor to usual doctor. Patients could be seen either on site (at a primary care facility or own general practice) or at home or could be managed with phone advice.

Primary care centres are facilities staffed by GPs to see patients after hours. The patient can attend "off the street" or by referral from phone triage, emergency department, own GP or 000 call. The GPs on staff could be either part of a co-operative on a roster system or paid employees on a sessional basis. Telephone triage systems aim to screen incoming calls and offer advice to the caller as to appropriate course of action. The aim is to facilitate the most efficient use of services. Some callers need only phone advice, others, a home visit, others could attend a centre and some should seek emergency department care. Phone triage protocols are established within the ambulance system, and are used overseas with success. Either a doctor or a trained nurse with appropriate medical support can effect triage.

These models all assume adequate workforce to maintain the service. Unlike the UK where GPs are contractually obligated to provide 24 hour care for their patient list, Australian GPs have no such obligation. Under vocational registration regulations GPs must ensure adequate arrangements are made but studies have demonstrated only a small proportion of GPs provide their own after hours services (Mira et al 1995, Campbell Research & Consulting 1997). Rural doctors provide more after hour services, either alone or in co-operative arrangements. The feminisation of the workforce with the increasing numbers of female graduates and general practitioners has been considered a problem as females are perceived as being

reluctant to do after hours work (Campbell 1997). Safety issues were highlighted by the murder of a doctor in South Australia. Legislation limiting access to provider numbers by Overseas Trained Doctors (OTDs) and hospital registrars has further decreased the pool of doctors traditionally willing to do after hours work. See discussion on barriers to services.

This guide is intended to provide some information for Divisions wishing to develop programs involving after hours services. It provides a review of the Australian and international literature and sets the scene in which we currently operate. Potential barriers and models of service provision are discussed and a framework for assessing needs, developing, implementing and evaluating a service is given. It is a generic guide and as such is a starting point for Divisions. The impact of the General Practice Strategy Review and the After Hours Primary Care Trials is yet to be determined and Divisions need to be aware of the changing environment in which they are functioning.

1. What is after hours?

After hours needs to be defined to ensure that after hours means the same thing to all parties involved. Some define it as after normal surgery consultation time. Given that each practice sets its own hours that can be anywhere between 5.00 to 9.00 pm (many practices stay open at least occasionally to provide services to working patients) till 8.00 am weekdays and Saturday afternoons, Sundays and public holidays. Saturday mornings is usually considered in hours. The Interpractice Comparison Survey data suggests that most GPs would regard 9.00 am to 6.00 pm from Monday to Friday and 9.00 am to 12.00 noon Saturday as "in hours". (Department of Health & Family Services, 1996). The Campbell survey found that no practice was routinely open after 8.00 pm (Campbell 1977).

The Health Insurance Commission (HIC) currently defines After Hours for the purposes of Medicare Benefits Payments as:

> *"an after hours consultation or visit is a reference to an attendance on a public holiday, on a Sunday, before 8am or after 1pm on a Saturday, or at any time other than between 8am and 8pm on a weekday not being a public holiday."*

There is a condition that if a practice routinely opens during these times then in order to attract after hours consultation rates, it needs to be an emergency service initiated outside the practices normal operating hours.

There have been suggestions that after hours be further divided into pre midnight and midnight to 8 am as there are significant differences in numbers of patients requesting services during these times. A study into the local needs and service use by the Hunter Division of GP found that between midnight and 8am only 6 patients/hour sought primary care services throughout their entire region. This included GPs on call, a GP co-operative, deputising services and hospital emergency departments. They therefore concluded that any proposed service would not operate in these hours because it was not cost effective (Hunter Division of GP, 1996). This type of information has implications for planning services and cost effectiveness of any service.

In 1997 changes to the Medicare Benefits Schedule reflected this acceptance of unsociable hours and further divided after hours consultations into two categories with higher rebates for consultations between 11.00 pm and 7.00 am.

2. Which services After Hours?

For the purposes of this guide after hours GP services refer to after hours general practice services that fall within the scope of general practice that can be managed by a suitably trained GP. Emergencies (such as major trauma, AMIs etc.) are not included as the general agreement would be that in most circumstances these should be managed in a hospital. There is also an implied condition that requests for after hours services should involve conditions for which there is a perceived sense of urgency. The use of after hours providers for routine care (eg, BP monitoring, screening, repeat medications and review) is not generally considered appropriate. Some would argue that all general practice services should be available upon request 24 hours a day. Experiences of the 24-hour clinics and economic realities make this level of service impractical regardless on opinions of desirability. Thus a distinction between routine, urgent and emergency services is drawn. In this guide, unless otherwise stated, after hours services implies urgent services.

Service availability is dependent on site. Many practices stay open into the evening and GPs consult variable hours. The use of deputising services to cover after hours arrangements has led to a culture of after hours services provided as home visits. This has been shown to be unsatisfactory to doctors with concerns about their safety, time and expense of travel, and inability to adequately treat in the home due to lack of facilities (Hallam 1994, Hobbs 1991). Although there is a general acknowledgement of the need for home visits for genuinely housebound or ill patients it is felt that this mode of service provision is overused and there has been a world wide trend to more on site services after hours (Hallam 1994). Options include GPs seeing patients in their own practice, at purpose built after hours primary care centres, in GP staffed emergency departments in hospitals, or on the emergency department itself. In rural areas GPs often meet their patient at the hospital if an after hours consultation is needed (Department of Health & Family Services, 1996).

3. International Experience

Although the Australian Health system differs from those overseas it is important to consider how other western societies have addressed the problems of after hours care provision.

In the United Kingdom the NHS employs or contracts with doctors to provide all the primary medical care for patients registered with them. It is not a fee for service system with patients not out of pocket for seeing their doctor. Twenty-four hour cover is a contractual commitment. Home visits have traditionally been available with doctors contractually obligated to visit a patient at home if the patient's condition demands it. There was a fivefold increase in home visits in the 25 years to 1993, with a substantial number of these being night calls (Salsbury 1993). Over the years, a system of formal and informal rotas and the use of deputising agencies evolved to help lessen the burden on individual GPs (Hallam1994). Despite a significant reduction in the after hours work load of the individual, GPs still saw the provision of 24 hour cover as a major source of stress (Sutherland & Cooper 1993).

GP protests led to renegotiating of their contracts with added discretion given to doctors as to when and whom they should visit based on reasonable medical opinion (Beecham 1994). Innovations introduced included acceptance of telephone advice and management, primary care centres and co-operatives to reduce individual doctor on call hours. Evaluation of these newer models is still pending and will be discussed under individual models.

In the Netherlands, all patients are registered with a GP (2/3rds under a national system and 1/3 rd under private insurance arrangements). All GPs are required to display after hours arrangements at their practice, all patients should be able to speak to a doctor (via only one answering machine), and on call doctors must have access to patients' notes (Sheldon et al 1994). Home visits have halved in the past 25 years with most doctors preferring on site consultations for patient care and safety reasons.

In France, most people are not registered with a doctor but have their own family doctor and know his/her hours. After hours cover is provided by a system of rotas and deputising doctors. Fees are set with a surcharge for night and weekend calls. Private companies have established emergency care home visiting services and a public system of doctors in well equipped vehicles exists attached to hospitals. A central screening system has been established for out of hours care. Under this system a caller dials 15 and can speak to a GP who can give advice, send a doctor, call an ambulance or suggest attendance at the local hospital. Although 1200 GP are involved in the screening a survey showed that only 1 in 5 patients knew about the availability of the service (Sheldon et al 1994).

Denmark reformed its after hour services in the early 90s. Care between 4pm and 8 am is now provided at emergency centres. These are centrally located, usually, but not always adjacent to a hospital, and cover the patient lists of approximately 12 GPs. They are staffed by GPs on a roster, and give advice; suggest patients see their GP in the morning; suggest attendance at the centre; or direct them to the accident and emergency department of the hospital. The service is free to 95% of the population (5% opt out of the public system for a private system to see specialists directly). Transport to and from these centres can be via a private company, which provides all medical transport for an annual subscription fee. A public awareness campaign accompanied its introduction. Graded fees encourage doctors to

give telephone advice rather than to arrange clinic consultations or home visits. Evaluation to date has demonstrated a reduction in doctors' out of hours workload and number of home visits made. It has proved to be acceptable to patients, doctors and administrators although anticipated cost reductions have not ensued. This is thought to be due to infrastructure costs and to an increase in the overall number of services provided (Olesen & Jolleys 1994).

In Germany, doctors are not obliged to make house calls nor are patients registered with GPs. Options for after hours care include: the hospital emergency department, (who provide first aid and advise the patient to see their doctor the following day), calling an ambulance which carry a doctor trained in emergency medicine or phoning a regional service that provides a home visit by doctors in radio controlled taxis (Sheldon et al 1994).

In Israel, 80% of the population is covered by a public insurer who also owns more than one third of the hospitals. A system of emergency medical care centres has been established by the insurer to provide emergency medical services (including family medicine, nursing, paediatric and diagnostic pathology and imaging) from late afternoon till midnight. There is a patient fee for these services. Home visits are available at a higher fee and these are not common. After midnight patients are directed to the emergency department of the hospital. These centres are not profitable but reduce crowding in the hospital system. These centres only provide services to members except in real emergencies. Ambulance stations also provide first aid to patients that can attend them and have doctors available to do a night home visit if approved by the patient's own doctor or deemed an emergency. The government sets the fee (Sheldon et al 1994).

The United States has no uniform national system and affordable, accessible care is not guaranteed. Health Maintenance Organisations (HMOs) insure one in five people. They usually match their members with a doctor or medical centre they can call during weekends and at night. These are often ambulatory care centres established for this purpose. Emergency Departments see the vast majority of after hours patients and the costs involved has led to the establishment of ambulatory care centres. These usually operate in the evening and weekends and are used by those not wishing to wait in the ED or by HMOs wishing to cut their costs. These centres are usually off site but staffed by hospital doctors and nurses. They see patients with primary care problems that do not require the complex (and expensive) infrastructure of an emergency department. These have been shown to be cost effective, acceptable to patients and staff, and have reduced waiting times in EDs (Gill & Diamond 1996, Powers 1997). Telephone triage systems are also used widely in the US to reduce face to face consultations and costs to HMOs. Evaluation of these is variable but overall they seem to be acceptable and cost effective (Poole et al 1993, Rivara et al 1986).

Japan has no system of registration and no contractual obligation for doctors to provide 24 hour care. The Ministry of Health has established an emergency system to cover nights, weekends and public holidays. People with primary care problems are seen at one of over 500 centres established throughout Japan. A&E departments handle emergencies. Computerised information systems have been established to inform the public about the location of these centres. Consumers are however not satisfied with the arrangements. People have problems finding the centres and complain of the waiting time and short consultations (Sheldon et al).

4. Australian experience

In Australia after hours GP services are largely disorganised and the availability of services is dependent on locality. In larger cities, deputising agencies have become the accepted after hours providers of general practice services. 54% of urban GPs said that they use deputising services always or sometimes (Mira et al 1995). The 1997 GP Practices Profile Study suggests that a deputising service is used by 44% of all practices and 58% of urban practices (Campbell 1997). The number of after hours services provided (by Medicare data) increases with increasing rurality (Department of Health & Family Services, 1996). Deputising services often do not extend into rural or semi-rural areas because of distance.

4.1 Urban Practice

It is difficult to describe the exact situation that exists in urban Australia. Studies have attempted to measure workforce and work patterns in various areas but the degree of generalisability is questionable. (Mira et al 1995, Hays et al 1996, Division of GP reports.). Demand for after hours care is at 1-2% of surgery services (Department of Health & Family Services, 1996), and significant numbers of GPs do not provide after hours service for their patients. Mira et al found that 8% of GPs has no formal after hours provisions. The Campbell General Practice Profile Study (1997) concluded that 29% of practices did not see patients at night (35% saw patients at all hours and 20% for some of the night). Impacting on this are several administrative factors.

4.1.1 Standards for Vocational Registration of General Practitioners (RACGP)

Currently there is a requirement for GPs to "ensure patients have access to care by an appropriately qualified medical practitioner at all times". In order to maintain vocational registration GPs need to have formal arrangements for after hours services, but there is no obligation to personally provide this service.

4.1.2 Better Practice Program (BPP)/ Practice Incentives Program (PIP)

In order to qualify for payment under the BPP (which aimed to reward GPs for fulfilling certain criteria considered to be desirable in quality general practice) a practice needed to ensure that the patients have access to 24-hour care. There was the added condition that the GPs of that practice provide some of the care (12 hours per month). The BPP was reviewed as part of the General Practice Strategy Review and has evolved into the Practice Incentives Program (PIP). Under the PIP there is a three tiered payment system for providing after hours services. The first is a flagfall payment that all practices will receive for having formal arrangements for after hours services. This can include subscribing to a locum service or having formal arrangements in place with a hospital etc. The second tier is for providing some of the after hours services by the practice doctors themselves. To qualify for this payment a practice has to provide 15 hours per week of service after 6.00 pm weekdays and

after 12.00 noon Saturdays. To qualify for the third tier a practice needs to provide all after hours services through the practice.

.1.3 The 1996 Entry Standards for General Practice

The provision of "reasonable 24 hour medical care" is a condition of the Entry Standards for General Practice that has been adopted by the Australian General Practice Accreditation Limited (AGPAL) for the purposes of General Practice Accreditation. "Reasonable care" incorporates formal arrangements, documented evidence of continuity of care (filed reports of after hours visits) and patient awareness of after hours arrangements and how to access service (information sheet, notices at surgery and phone message).

4.2 Rural Practice

In rural areas GPs are often on call to provide 24-hour care for their community. Rural GPs often have visiting rights to the local hospital and patients are seen on site at the hospital or at a home visit at the discretion of the on call GP. This model provides for patient assessment in a suitable environment, continuity of care and short waiting times as consultation is arranged between patient and GP. Patients are not charged fee for service for hospital consultations but GPs are remunerated through the Rural Doctors Award on a fee for service basis which incorporates stepwise increases depending on the time of consultation. State health departments have entered into varying agreements with rural doctors with regards to hospital staffing and remuneration for on-call time etc. *(See Section 5.2 Barriers: Remuneration)*

5. Barriers to providing after hours services

Barriers to the provision of after hours primary care services have been identified both within the literature and by Divisional projects. The workshop co-sponsored by the Royal Australian College of General Practitioners and the Department of Health & Family Services in Canberra (September 1997) also acknowledged the problems currently faced and the barriers to improving services. These include:

5.1 Safety

Concerns about safety in providing after hours services were highlighted by the murder of a GP in SA while doing an after hours home visit. Doctors have described ongoing concerns re their safety (Harris 1989) and ongoing anxiety. Anecdotally this appears to be more of a concern for female GPs who are reluctant to do after hours home visits. Studies in the UK (Harris 1989, Hobbs 1994) have highlighted the problems and the ongoing anxiety the perceived threat provokes in doctors.

5.2 Remuneration

Financial constraints of the medical system have made it financially not rewarding for GPs to do after hours work. In 1987, the Commonwealth Department of Health & Community Services decreased the rebate for after hours services in an attempt to curb what was then seen as a dramatic increase in GP services provided after hours. This coincided with the establishment of extended hours general practice clinics that worked on the drop in/bulk bill all patients system and relied on seeing large numbers of patients in the after hours times to be financially viable. Decreasing the rebate led to the closure of these clinics late at night, with very few finding it financially viable to stay open after midnight. This effectively removed a service provider from the pool and increased pressure on GPs deputising agencies and hospital emergency departments. Recently (1997) the rebate for after hours services was increased in an attempt to make it more rewarding for GPs to provide these services. This increase is not seen as adequate remuneration for the true cost of providing the service including the disruption to personal/family life.

The Medicare system encourages essentially free access to general practice services and consumers have voiced concerns about out of pocket expenses for after hours services (Hunter Division of GP 1996). Deputising services that have attempted to introduce a consumer charge have had enormous debt problems and have reverted to bulk billing (RAMIS 1995). This demand for free service and the difficulty doctors (particularly urban) have in charging patients significant out of pocket amounts have impacted on doctors willingness to do after hours work. There is also the perception of abuse of the system. Doctors feel that many after hours calls are made for trivial reasons that could wait for in hours management, i.e. convenience rather than need. In the UK and Denmark public awareness campaigns have been run to educate patients about appropriate use of after hours services (Olesen & Jolleys 1994). There is also a drug-seeking element that relies on after hours services to maintain prescriptions. There is no publication of any evaluation of the impact of these campaigns.

Until recently the Medicare Rebate System provided no increase in payments dependent on the time of service. A consultation at 9pm was paid at the same rate as a consultation at 3am. There is a clear difference in the 'inconvenience' factor of these two consultations and the impact it has on the GP. The Rural Doctors Award provides for stepwise increase in payment dependant on time of call that attempts to compensate for this. Urban doctors feel that some increase in payment needs to be considered (Hunter Division of GP 1994). Changes to the Medicare Benefit Schedule in November 1997 now provides a small increase in fees for service provided after 11.00 pm which aims to recognise the difficulty and extra inconvenience of providing services at these times.

Fees for service payments that are currently in place also provide no payment for "on call" hours not spent directly seeing patients. GPs are not compensated for being available if they are not seeing patients. They are also not paid for work they do on the phone be it giving phone advice to patients, triaging to another more appropriate service or organising ambulance/ hospital admission. This provides the perverse incentive to see all patients that request a service, even if phone advice would suffice or it would be more appropriate for that patient to be seen in an emergency department. It is not financially viable or rewarding for a GP to be on call. In the Hunter Region only 6 patients per hour needed general practice type care in the entire region between midnight and 8.00 am (Hunter Division of GP 1996). Because of the small numbers fee for service payment makes any service not viable. Many GPs are on call without receiving any calls, and this too is unsatisfactory as being on call provides its own stresses and limitations on the GP's lifestyle. Alternative structures for funding after hours services with appropriate payment schedules need to be devised to encourage participation of GPs and appropriate and cost effective service utilisation. This may involve salaried after hours care, item numbers for telephone consultations or payments through PIP and other sources to reduce the reliance on fee for service and to make the after hours service financially viable.

5.3 Cost shifting

Further complicating the financial situation is the complex funding system whereby some services (hospital ED) are funded through the state, and GP services are funded from the Commonwealth. This causes potential problems with "cost shifting" if patients (services) that would have been treated in one system are now treated in another. For example if ED patients are seen by GPs and charged through Medicare this may be seen as cost shifting from the State Department of Health (ED) to the Commonwealth Department of Health & Aged Care (GP Branch). This sort of patient cost shift needs to be considered and funding arrangements between the State and Commonwealth Governments need to be addressed if after hours services are to be improved.

5.4 Lifestyle

Although the traditional image of the GP is one of providing 24-hour care, this is not the case. GPs now consider their lifestyle and do not wish to provide this level of commitment. In the 1950s and 1960s it was common for GPs to work from home and thus be available to the local community all hours. The Interpractice Comparison Survey data suggests that currently about 1% of GPs practice from home (Department of Health & Family Services, 1996). With this move to purpose built practices, GPs often live a considerable distance from their practice and are not able to provide extended hours cover from home. This is especially so in areas of lower socio-economic status where few GPs live and was highlighted in the

feasibility study undertaken by the Western Melbourne Division of GP (1994). Doctors have also expressed concerns that they are tired and unable to perform the next days work if they have been up the previous night. Overseas (UK and Denmark) groups have run campaigns to educate the public into the appropriate use of after hours services (Olesen & Jolleys 1994, O'Dowd & Sinclair 1994).

5.5 Provider number restriction

Over the years the deputising agencies and extended hours clinics have relied on overseas trained doctors and hospital residents and registrars to staff the service and especially to staff the unpopular overnight shifts. Overseas Trained Doctors had few other job opportunities and work as locums and deputies while trying to gain recognition of their qualifications and full registration. Similarly hospital residents and registrars did locum work overnight for extra income to supplement their salary. These doctors were usually young, enthusiastic and often do not have family commitments to make after hours work unsavoury. The Commonwealth Department of Health & Aged Care removed the access to provider numbers for these doctors and thus decreased the pool of doctors available and willing to work after hours. The RAMIS report (1995) concludes that the inability to recruit these doctors has led to increased pressure on locum agencies.

5.6 Feminisation of the workforce

With the increasing numbers of female GPs and the demands of multiple roles and child rearing, the lifestyle issues are even more important. Younger female GPs with young families often work part time and wish to work during school hours. Many male doctors are also realising the importance of family life. Added to the disruption to this time with the family there are other difficulties such as organising appropriate childcare should the doctor need to be called out and the cost associated with this (both emotional and financial).

From Medicare data, in all area categories female GPs provide less after hours services than their male colleagues do (Department of Health & Family Services, 1996). However a study by Hooper (1989) suggests that equal numbers of full time women did out of hours work as their male partners and the number of nights and weekends on call as well as use of deputies was similar. The Campbell survey found that 80% of GPs who did on call work were male and that 37% of female GPs do after hours work compared with 73% of males. It also found that partners or principals in a practice were more likely to do after hour's work and females were less likely to be partners.

5.7 Lack of co-operation between GPs

General practice in Australia has traditionally operated as a small business in competition with other general practices in the area. There has been a sense of mistrust and isolation that has to some degree been addressed with the establishment of Divisions of General Practice. There still is some reluctance for GPs to work co-operatively, share patients and workload although there is evidence that urban GPs are willing to consider co-operative arrangements (Del Mar & Lostroh 1995). Difficulties in standardising billing procedures and policies of various practices, agreeing on treatment protocols, communication strategies etc. all add to the difficulties in establishing a service to suit the practitioners and the consumer.

6. Consumer perspectives

Patients and their advocates have been surveyed both in Australia and overseas. Recurring themes are concerns of unavailability of doctors after hours and difficulty with getting a doctor to do a home visit (National Health Strategy 1992, Gribben 1993). It appears that parents with young children are particularly high users of after hours services and often express dissatisfaction with waiting times, advice received and costs (Dixon & Williams 1998, Morrison et al 1991, Gragg et al 1994, Salisbury 1997). Overseas initiatives have included a phone advice and triage system staffed by a nurse in the US which patients have received well (Poole et al 1993). Studies of after hours services have demonstrated that children's problems are often dealt with by providing phone advice and are often due to concerns of the care giver and lack of knowledge re appropriate care (Marsh et al 1997, Rivara et al 1986). Education initiatives have been trailed with significant reductions in after hour calls both for children and other patient groups (Greineder et al 1995, Grossman et al 1998).

The use of the emergency department as an after hours primary care facility is a long standing and complex one. Many studies have tried, over the years, to describe why patients choose EDs for primary care. Factors, such as, culture, language, lack of knowledge of alternatives and cost considerations seem to be important (Liaw & Young 1997). The Hunter Division project in after hours care attempted to document the patients' perspective by consulting with consumer groups. The concerns voiced included:

- access and availability
- lack of knowledge of appropriate services
- inability to travel to obtain care
- own GP not providing after hours care
- unaware of how GP provides after hours care
- no telephone at home
- long waiting times
- cannot get a home visit
- doctor's attitudes
- cost of home visit
- attending doctor unaware of history

Clearly in designing a service to provide care for a community these factors need to be addressed.

7. Models of after hours service provision

Various models of after hours service provision have developed over time both in Australia and overseas. These attempt to provide the community with adequate after hours services in a way that is sustainable both financially and in terms of workforce. These include:

- Emergency departments
- General practitioners in emergency departments
- Primary care centres
- General practice casualty
- GPs on call
- Deputising services
- Co-operatives
- Rural hospital model
- Telephone triage and advice services

7.1 Emergency Departments

Emergency departments by their very nature are open all hours and are accessible to patients both by self referral and by recommendation from another provider. They are staffed by hospital employees on a salary and manage patients after triage in order of priority. They have the full range of facilities of a hospital on site and have the facilities to manage emergencies. They are funded by the state as part of the hospital budget and do not depend on fee for service to function. There is no cost to the patient as services are provided under the Medicare agreement.

There are significant infrastructure costs in maintaining and staffing an emergency department that is borne by the state. Although their priority and expertise is in the assessment and management of emergencies they do see all patients who request treatment. From a patient perspective EDs are accessible, free, open all hours and have an aura of authority due to their attachment to a public hospital and the facilities it can provide. Complaints about ED care usually involve long waiting times, lack of expertise of junior staff and lack of continuity (Bollam et al 1998, Mira et al 1995).

The infrastructure costs involved in running a fully staffed and equipped emergency department is significant and the use of these resources by primary care type patients is a financial strain on the system. Many patients do not need to be seen in such an expensive facility. In the US where uninsured patients have little option but to be seen in the emergency

departments the hospitals and HMOs have established off site clinics staffed by hospital staff to see primary care patients (in hours) thus freeing up the emergency department to treat emergencies. This is seen as providing a more cost effective service model and one which provides better community based care (Gill & Diamond 1996).

7.2 General practitioners in emergency departments

In this model, GPs are employed on a sessional basis in the emergency department. They can either manage patients triaged in categories 4 and 5 (non urgent) or manage all patients including emergencies. It offers GPs a safe environment in which to work and the numerous facilities of a hospital (diagnostic imaging, pathology, allied staff). Usually patients are triaged (usually by a nurse) to be seen either by emergency staff or by a GP. One study (Dale et al 1996) has shown that an experienced GP used fewer resources and cost less to manage similar patients than junior staff (residents and registrars). This is because their experience in diagnosis and management in the community meant they ordered fewer investigations and prescribed more appropriately. There was no increase in adverse outcomes. This evidence makes it an attractive option for hospitals but few hospitals employ GPs in the ED. This could reflect the culture that has evolved separating the GP from the hospital (i.e. separating primary from secondary and tertiary care). It could also be partly due to the lack of a career structure or industrial award for GPs in hospitals making it an unattractive position for GPs to fill. These barriers may be overcome as more work is done towards integrating GPs into the wider health care system.

7.3 Primary Care Centres

Primary care centres have been developed both in Australia and overseas in various forms. They provide a centralised site for general practice service provision by experienced GPs after hours and address the issues of safety, inadequate facilities and to some extent waiting times. This has been a popular model in the UK with many centres being opened over the past few years. They are usually managed and staffed by the GPs as part of a co-operative basis. In the UK doctors have a contractual obligation to provide 24-hour care for their patient list and co-operatives (discussed below) and primary care centres have been seen as a way to provide this care in a manner that is acceptable to both patients and doctors. Evaluation of such centres is still underway but published reports seem to indicate that they are functioning well in the UK (Jessop et al 1997, Salisbury 1997, Gragg et al 1994, and Hallam & Cragg 1994) with a study by Heany et al (1996) demonstrating less doctor stress after the establishment of such a centre.

There are some concerns regarding patient acceptance of such centres in a society which had previously had GP home visits available on request 24 hours, and public education campaigns about the appropriate use of facilities were used to overcome some of the initial problems (Gragg et al 1994). Concerns were also raised about patients' unwillingness or inability to attend a central facility due to lack of transport and it has been suggested that transport be provided for patients who cannot attend (Gragg et al 1994). This has cost implications that need to be addressed.

Denmark has developed a system of primary care centres to see GP patients after hours. From the literature it appears that the model was successfully implemented in Denmark with fewer problems of patient acceptance surfacing (Olesen & Jolleys 1994, Hallam 1994).

In Australia primary care centres have been established in various forms. They are usually but not always co-located at a hospital which reduces infrastructure costs. The Australian Health Minister's Advisory Council report (1993) on GPs in hospitals estimates that 13% of hospitals report a primary care unit within the emergency department and 6% have a free standing primary care unit. They vary in their staffing arrangements, some employing doctors on a sessional basis, some relying on a roster of local GPs who work on a fee for service basis. There is also variation on hours of operation with few open 24-hours. Although there may be some negotiation of infrastructure costs with the hospital for shared facilities and staff these centres have significant costs they need to meet and rely on fee for service payments by the patient (and/or Medicare rebates) for their financial survival. Because of the drop in demand for services late at night, many such centres find it difficult to staff and not financially viable to maintain the service overnight.

There is concern that primary care centres established within public hospitals are a form of cost shifting between state and federal health departments. Patients presenting to emergency departments triaged as non emergency (categories 4 and 5) are sent to the primary care centre where they are seen by the federally funded system (Medicare) rather than the state funded public hospital system. At present although concerns are voiced it seems to be accepted practice.

Primary care centres should not maintain a patient base and should have policies in place for communication with the patient's regular GP. This distinguishes them from extended hours general practices that provide continuous care and compete with other local GPs. This distinction is sometimes blurred and there is concern that patients may use them not for urgent after hours care but as a usual general practice.

7.4 General Practice Casualty

In this model GPs manage and staff a casualty service. This is for urgent conditions and manages problems, such as, trauma and acute illness. The name implies the urgent nature of conditions treated and some effort needs to be made to ensure appropriate use of the facility. There is usually access to ancillary staff and diagnostic facilities of a hospital. The best known example in Australia is the Balmain GP Casualty. This has been a successful model for the area with reports that it is both well utilised and cost effective (Bolton et al 1997). Agreements are in place with local emergency departments and the ambulance service (GP casualty on bypass) regarding the transfer of critically ill patients. This model can be seen as a form of a primary care centre with well equipped and trained GPs filling a gap in services in primary care for urgent conditions not requiring tertiary care.

7.5 GP on call

This model is one that has few attractions but has evolved over time. Each GP is on call for his/her own patients and covers the after hours workload. This has led to much dissatisfaction and lifestyle disruption and is not favoured by GPs. In rural areas it is more common and in one doctor rural communities it is often the only option.

7.6 Deputising services

Deputising services have been discussed earlier and although they are a significant provider of after hours services there are significant problems with the services. The RAMIS report

looked into the state of the deputising services in Australia and found that staffing, funding, and geographic areas of cover were problematic. Maintaining an adequate workforce to provide services has proven difficult and the inability to use overseas trained doctors and hospital registrars due to provider number restrictions has meant that it is even more difficult to provide a comprehensive service. Although consumers report long waiting times and perceived inexperience of the locum as problems, GPs tend to be satisfied with the locum services (RAMIS 1995, Dixon & Williams 1998). Studies in the UK (McKinley et al 1997, Bollam 1998) have demonstrated that although patients are more satisfied with their own GP providing after hours care there are no adverse outcomes when a deputising service is used. In comparing deputising doctors to practice doctors, Cragg et al (1997) found that they were less likely to give telephone advice, took longer to visit and had less discriminating patterns of prescribing.

7.7 Co-operatives

As the name suggests this is a way of providing after hours care by a group of GPs for their combined patient load by co-operating and forming on call rosters. It has the advantage of reducing the number of nights on call but increases the number of patients on call for. Again most work in co-operative development and evaluation has occurred in the UK. Co-operatives vary in size from 10 –200 GPs (Jessopp et al 1997) and cover a variable geographic area. They can provide various services including phone advice and triage, home visits and on site services in a primary care centre. Patients express greater satisfaction with the co-operative than with deputising service doctor visits (McKinley et al 1997, Dixon et al 1998).

In Australia informal co-operative arrangements have been in place in rural areas with one study finding that almost half the rural doctors provide after hours services in some form of co-operative manner with other practices (Mira et al 1995). In urban areas however this is not a common practice with any of the metropolitan GPs surveyed participating in such co-operatives. This may reflect the availability of alternatives in the urban environment (deputising agencies, extended hours clinics and emergency departments) and the competition and mistrust between general practitioners that the current fees structure encourages. The General Practice Profile Study found that the use of co-operative rosters varied according to rurality. Rosters were participated in by 52% of major rural, 39% of other rural, 17% of remote and 11% of metropolitan practices (Campbell 1997).

7.8 Rural model

In rural areas the general practitioners are often the only medical staff available and provide 24 hour services for their community either alone or on a roster basis. Doctors often have hospital rights and see after hours patients in the emergency department. The patient may phone the hospital and speak to the nurse or speak directly to the doctor on call that may give advice, arrange to see the patient in the hospital emergency department, or arrange to visit at home. When patients are seen in the emergency department it provides a safe, well equipped environment for the doctor and patient and remuneration is provided under the Rural Doctors Award (fee for service with step-wise increase for hour of service). Patient concerns re waiting times, inexperience of doctor or lack of continuity is not a feature of this model.

7.9 Telephone triage systems

Telephone advice has been identified as a valid form of primary care service provision. A US study estimated that 12 –28 % of primary care occurs over the phone in the US (Yanovski et al 1992). US HMOs provide telephone advice lines for patients insured with them. Patients phone a central number and the adviser (usually nurse) can access the patient's medical history on computer. By following symptom based protocols, the adviser can offer phone advice re self care, advice to attend a primary care doctor within an appropriate timeframe, or advice to attend and ED. EDs answer calls and give advice to patients. They vary in their policy regarding phone advice and although some are well organised with a designated person to take calls, protocols and documentation requirements, some provide ad hoc advice depending on whoever answers the phone at the time (Robinson et al 1996, Edmonds 1997, Williams et al 1995). Given the number of calls possible, the implications both on work practices and the medico-legal issues it is probably prudent for EDs to have a policy in place. One US hospital (Robinson et al 1996) found that they were receiving up to 30 calls per hour, which significantly increased their staffing needs at certain times. In the US where paediatrics (by paediatricians) is considered primary care telephone services for children have been developed and evaluated from both a clinical and patient satisfaction perspectives. Although it is generally well accepted by patients and no adverse clinical outcomes are apparent (Poole et al 1993) studies using simulated cases/callers demonstrate that these are sometimes mishandled and inappropriate advice given (Yanovski et al 1992, Evans et al 1993). Junior staff and EDs where less formal systems are in place tend to be more likely to mishandle calls (Yanovski et al 1992) and suggestions have been made regarding the need to formalise phone advice services and enhance staff training in the area (Evans et al 1993).

Sweden has also developed a system of telephone advice to handle increasing demands on limited resources. Staffed by health centre nurses patients are encouraged to phone for advice about the appropriate management of problems (not only after hours). Marklund et al (1989) found that 50% of calls resulted in an appointment, and 10% in a phone consultation with the doctor. Evaluation has been positive with the nurses handling cases appropriately.

In the UK phone advice has only recently been described as a means of offering after hours care. As already discussed, doctors in the UK are under contractual obligation to provide for after hours care. A study comparing 13 general practices (77 doctors) showed the percentage of calls managed over the phone varied from 5 – 57% (Jessopp et al 1997).

This compares with other studies showing similar numbers (Pitts & Whitby 1990, Heany & Gorman 1996, Livingstone et al 1989, Marsh et al 1997) and studies from emergency departments where 35% of calls were given self care advice only and 39% told to contact their GP (Dale et al 1997). It has been shown that deputising services make more visits than GPs (Cragg et al 1997) and one audit of a deputising service found that 1% of calls were handled by phone advice only (Soler et al 1991). Providing telephone advice to patients is seen as a normal part of general practice and although difficult to quantify, most GPs in Australia would offer advice on the phone to their patients. Under current funding there is no fee for such services and doctors are reluctant to encourage phone consultations as they are time consuming, often difficult and there is no structure for remuneration.

There are two levels of phone advice to consider and a distinction needs to be drawn between offering a triage service alone and offering medical advice re symptom management on the phone. A triage only service would ask the symptom and ascertain severity. The caller would

then be directed to the most appropriate service provider. No self care advice is given. If the appropriate action is for a GP consultation the caller is directed to the on call GP, the deputising service, primary care centre etc. It may be possible to build in a doctor phone service as a level of care needed. Alternatively the triage service can offer advice about the management of symptoms as well as advice about which is the appropriate provider.

This model of triage service needs to be staffed with skilled personnel with clinical experience whereas people with no clinical skills or knowledge could staff the former. After taking a brief history the person can give advice as to the urgency of the symptom, possible self care measures and possible avenues for help if symptoms worsen etc. This advice can be according to symptom protocols as used in some centres or can rely on the advisors clinical knowledge and skill.

The advisors are usually nurses in overseas models (US, Sweden) but some UK co-operatives use doctors to answer calls. In nurse triage and advice models the availability of medical support is considered vital (Robinson et al 1996). A clear line of communication to a designated medical practitioner provides medical input where necessary. Evaluations from the UK (SWOOP 1997) and the US (Robinson et al 1996, Poole et al 1993) suggest that this is a viable and safe model of primary care service provision.

In Australia although this model of service seems attractive there is no co-ordinated general practice telephone triage model in use (The After Hours Primary Medical Care Trials will trial such models of service). Current telephone advice lines include the New Children's Hospital (NSW) which has a dedicated phone advice line for parents who require medical advice regarding children. This service is well established and receives many calls from parents about the need to seek medical consultation. Fatovitch et al (1998) evaluated the telephone advice given from an emergency department in a Western Australian semi-rural/outer urban setting and concluded that there was a strong demand for this type of service (33 calls per 100 ED attendances) and that the advice given was highly regarded and complied with. Paediatric problems featured highly and the service was most used after hours. A 24 hour call centre to provide consumers with information about health care is currently being established in Western Australia. It is funded by state and federal health departments and general practitioner input into the development of locally acceptable protocols for health advice has been sought through the local Divisions of general practice.

Concerns have been raised about the medico-legal liability associated with providing advice to patients on the phone. Anecdotally, it seems that doctors are prepared to and do provide phone advice to their own patients both in and out of hours, yet are reluctant to provide advice to unknown patients on the phone. Fear of liability claims is cited as a reason for this reluctance. Advice from the medical indemnity insurers during the negotiations and preparation of proposals for the After Hours trials suggest that doctors are covered for providing telephone advice by their existing indemnity insurance. Nurses giving advice would need to be insured appropriately and doctors involved in multi-disciplinary models would be wise to check with their insurer as to their indemnity.

8. Australian Divisional activity to date

It is difficult to document all divisional activity in this area as much of the work has involved local Divisions working collaboratively with local hospitals or area health services, networks etc. Through the Divisions Projects Program very few (6) after hours projects were funded and these were mainly feasibility studies into the development of such services.

The most comprehensive project was that of the Hunter Urban Division which sought GP, consumer and other stakeholder participation. As well as mapping existing providers, utilisation rates and needs of the area, it sought opinions on current barriers and desirable factors of a future service. It concluded that a model of phone triage and regional primary care centres to handle the needs till 11.00 pm was desirable. After that time it was not feasible to maintain a service (due to a low level of demand) and the emergency department of the hospital was probably best able to manage all medical problems arising in the hours 11.00pm till the morning.

The Western Melbourne Division project to assess feasibility of an after hours co-operative concluded that although there was a perceived need among the GPs for improvements in after hours services and a dissatisfaction with the deputising services, GPs were not interested in participating in such a co-operative. It was felt that staffing and maintaining rosters in the area was not possible. Factors such as low remuneration rates for after hours work, need for home visits and the fact that few doctors lived in the area influenced the decision not to proceed with a co-operative.

The Sherbrooke and Pakenham Divisions also undertook a feasibility study to address the needs of the area. It proposed a two tier system of a doctor on call for phone advice and triage across the whole region with a doctor on call to do visits in each of three localities. It was felt that due to the distance one doctor would not be able to service the whole area. This is an urban fringe/semi-rural area on the outskirts of Melbourne. This was rejected by the Division's board of management due to lack of payment for the triage doctor and concerns re the disruption caused by a two tier model. The model essentially meant that at least 3 doctors were on call for the area each night. Financial constraints and staffing were also issues.

The Adelaide Central and Eastern Division found that many GPs did their own after hours work because the area was poorly served by deputising services. They formulated a model of after hours service including a primary care facility (probably co-located in a private hospital), and a mobile doctor for home visits. Staffing and funding issues were not investigated in depth within the project but they were seen as barriers to the implementation of the model. Currently patients in some areas covered by this Division have difficulty obtaining after hours visits due to distance for the deputising service to travel. The model proposed did not address this issue with the Divisional doctor in a similar position of having to cover a large geographic area. The project initiated some discussions with a local private hospital and begun negotiations for a primary care centre within the hospital. Implementation of the centre was beyond the scope of the project.

The Mid North Coast Division ran a project to develop a roster for after hours emergency work in the region. Diamond Valley Division undertook a needs analysis for after hours services.

Other Divisions have worked with local hospitals or health services to develop services for their area. Because funding for these is from other sources reports are not available from the NIS database. Examples of these include the Whitehorse Division primary care centre, Central Highlands Division "Doctor Now" service and the Balmain General practice casualty. Evaluation of these services is variable and formal reports are not available except from Balmain that received funding for a comprehensive evaluation. Most function as private enterprises and as such financial sustainability appears to be the main concern.

The Balmain General Practice Casualty (GPC) was established in 1993 as a joint initiative of the Balmain Hospital, Central Sydney Area Health Service (CSAHS) and the Central Sydney Division of General Practice. Funding for the General Practice Branch of the Commonwealth Department of Health & Aged Care provides the service provision component, which also funded an extensive evaluation of the service. The CSAHS meets the costs of nursing staff, infrastructure and consumables. GPs are in attendance from 9.00 am to 10.00 pm 7 days a week and on call over night. Hospital residents who also cover inpatients provide over night cover. The evaluation includes comparisons of costs, clinical outcomes and satisfaction and concludes that the service is cost effective, safe and acceptable to the community (Bolton et al 1997).

The Central Highlands Division established a service as a pilot, in November 97, consisting of an after hours primary care centre located at the Sunbury Private Hospital. It was funded jointly by the Division and by Medical Benefits Fund of Australia (MBF) who provided 6 months of infrastructure funding. The service is staffed by a co-operative roster of Divisional GPs (paid sessional rates) and a nurse who provide a telephone triage service via an 1800 number and face to face consultations. The service functions on a fee for service basis with patients contributing depending on cardholder status and time of service. Early evaluation of the service has largely focused on numbers of services and satisfaction of participants and consumers. Although the service is well rated by consumers, GPs and stakeholders, the long term financial viability is still to be demonstrated in the absence of further infrastructure funding. Fee for service income does not cover costs of the service based on present utilisation rates and staffing arrangements.

Other Divisions have also negotiated with local private hospitals to establish after hours clinics in association with these. The Division acts as a negotiator and recruiter of GPs to staff the service and the private hospital provides varying degrees of infrastructure support. Examples of this collaboration are the Whitehorse Division (Victoria), Bayside Division (Queensland), South Eastern Division (Perth) and the St George Division (NSW). This work was undertaken outside the project program and most are operating as private enterprises with no formal evaluation available.

After Hours Primary Medical Care Trials (AHPMCTs)

Some Divisions have been successful in the selection process for the After Hours Primary Medical Care Trials (AHPMCTs). Proposals for these trials were called for in October 1997 and over 50 proposals were put forward. Of these 4 or 5 are likely to proceed and they are due to commence in August/September 1999.

The West Victorian Division of General Practice will trial nurse triage utilising nurses based in the local rural hospital. Calls from participating practices will be diverted to the triage

nurse who will then either offer advice, refer to an on call GP for advice or arrange for urgent review by the doctor on call at the hospital.

The Central Sydney Area Health Service trial is also based on a nurse triage system and patients calling a central 1800 number will be triaged depending on the level of urgency to their usual GP next day, a home visit if necessary, the emergency department of Canterbury Hospital or to a newly established GP casualty (to be established at Canterbury Hospital). The triage system will be available to patients from Broken Hill which will trial remote triage.

The Hunter Urban Division of General Practice will run a trial in Maitland that will also be based on a nurse triage model. The nurse will be available 24 hours and a doctor will be available at the primary care facility to see patients and provide telephone advice till 11.00pm. After that time patients needing to be seen by a doctor will be referred to the emergency department. Patients requiring transport will be provided with a taxi to bring them to the primary care centre or emergency department. Patients genuinely requiring home visits will be seen by a second doctor on call. This trial will test a funds pooling system that combines state and federal funding to pay for these services.

In Tasmania After Hours Doctor Pty Ltd is proposing a trial of doctor triage and advice utilising the existing locum service for the area. The doctors by providing phone advice will be able to cover a wider area than currently possible under the existing home visiting model.

Negotiations are still under way with the Osbourne Division of General Practice in Perth as some elements of their original proposal have been established outside the parameters of the trial process. The original proposal was to include triage by the established call centre and a system of GP staffed primary care centres established at hospitals around Perth. The call centre and primary care clinics have been largely established and the exact nature of the “trial“ is yet to be determined.

The trials will be evaluated at both a local and national level. The findings of the evaluations will help guide future policy and provide Divisions with information on the way forward.

9. Developing and evaluating a service

Before a Division undertakes work in this area it is important to assess the level of need both from a patient and a GP perspective. Work in this area is time consuming and requires negotiation and collaboration of many stakeholders. As discussed earlier Divisions of General Practice that undertook feasibility studies under project funding found that although they could demonstrate needs and/or dissatisfaction with the current situation, developing and maintaining an alternative model was difficult.

For example, the Western Melbourne Division found that although the GPs perceived a need for more timely services and were dissatisfied with the current arrangements (mainly locums), however insufficient GPs were willing to participate in a new system and the Division felt it could not maintain a co-operative. Thus the first step in working in this area is to assess the local needs and the willingness to participate in alternative models of service provision. It is a good idea to form a steering committee of local stakeholders to address the issue from various perspectives. Potential committee members can include representatives from:

- Division of General Practice
- Local Hospital
- Local Area Health service or Network
- State Health Department
- Commonwealth Department of Health & Aged Care
- Consumer representative
- Locum or Deputising Service
- Ambulance service
- Extended hours clinic operators
- Other stakeholders

The role of the committee is to oversee the needs assessment and to formulate a model that is applicable to the needs and takes into consideration the perspectives of all stakeholders.

9.1 Assessing the need

In order to develop a service it is important to know what is happening in your area now. Although this may seem simple it takes considerable time and effort to gather and collate the necessary information.

What you need to know:

1) What services are currently available in the area?
   a) How many GPs are available after hours and what times?
   b) Is the area well served by extended hours clinics?
   c) Is the area well served by deputising services?
   d) Is there an emergency department (public or private) accessible to patients in the area?

2) What is the utilisation pattern of these services?
   a) How many calls do GPs get and at what times?
   b) How many patients are seen at extended hours clinic and at what times?
   c) How many home visits are done in the area by the deputising service and at what times?
   d) How many patients seen at the emergency department are non emergencies (triage levels 4-5) and at what times do they present?

3) Are these services adequate?
   a) Are GPs satisfied with current arrangements?
   b) Are patients satisfied with current arrangements?
   c) What is the waiting time for various services?
   d) How far do people have to travel?

4) What are the barriers to adequate service provision now?
   a) Are there sufficient GPs interested in this area?
   b) Are they willing to look at solutions and participate in them?
   c) Are consumers willing to participate/use alternative service?
   d) Are consumers willing to pay for service?

By answering the above questions a picture of what is happening now can be formulated and service gaps or needs can be identified. This information can be obtained from various sources and requires consultation and co-operation with numerous service providers. Methods of information gathering are summarised in the table Outcomes and Indicators.

9.2 Developing a local model.

Once this information has been gathered and considered it is then the task of the Division/Committee to develop a model that suits the local needs. As discussed in the previous section, many models have been developed and implemented with varying degrees of success. Although each model can stand alone there is also scope for combinations to fill needs. Potential barriers to the successful implementation of such models appear to be related to the costs and the recruitment and maintenance of a workforce to staff the service. These factors need to be considered early in the development stage and strategies for assessing participation rates, costs etc. need to be developed.

Regardless of the model chosen patient care is of primary importance. Adherence to best practice guidelines, monitoring of clinical incidents and clinical audits are ways of ensuring that any service is providing quality care for patients. The service should also be accessible to as much of the community as possible. Special consideration may need to be given to those with special needs and these may vary from Division to Division. For example, the local demographics may demonstrate a high culturally diverse NESB population. Developing a telephone triage system without consideration of language difficulties would deny access to a significant proportion of the population. Similarly providing a service with no home visiting capability denies the elderly and frail who are unable to travel to a facility.

The medico-legal implications of the proposed service are also important. Anecdotally there have been concerns re the liability associated with providing telephone advice. Advice from the medical indemnity insurers suggests that provided each individual doctor participating in the service is insured there are no medico-legal implications. If a nurse is to be providing medical information to patients, indemnity issues need to be clarified. It is suggested that before proceeding with any model it is presented to representatives of medical defence organisations for informed opinion on the implications of the particular service intended.

9.3 Funding a service

Potential sources of funding need to be identified and approached. Innovative funding arrangements are needed if a service is to be successful. Examples include:

- Public hospitals (either alone or as part of Networks or Area Health Services) providing sites and allied staff costs from state health budgets;
- private hospitals and private insurers providing similar infrastructure support;
- Commonwealth Department of Health & Aged Care funding as in the Balmain model.

The relative contribution of other funds is dependent on the scope of the model proposed. If the service proposed replaces GP services in the community then an argument can be made to the Commonwealth to fund GP services within the model. If the service replaces Emergency department presentations an argument for State (hospital) funding can be made. A thorough assessment of the current situation and the proposed impact of the new service needs to be presented to potential funders.

Models for cashing in services and payments under various schemes can be tried. For example doctors may agree to pool all their after hours MBS fees and BPP payments for after hours care and use this pool to pay doctors an hourly rate for after hours work. These calculations can be complex and the early input of a health economist in the calculation phase is vital. These can usually be consulted through the University Department.

9.4 Implementing the service

When decisions have been made as to the type of service to be provided and funding arrangements negotiated (and contracted) the implementation begins. Staff need to be recruited for the administrative tasks and service provision aspects of the service. Duties may include:

- Recruitment of GPs
- Recruitment of other staff as needed (eg, nurses if nurse triage system to be implemented)
- Co-ordination of staff training/upskilling as needed
- Development of clinical protocols (if appropriate)
- Co-ordination of day to day administrative tasks (rosters, pays, administrative support)

- Liaison with and reporting to various stakeholders
- Data collection and monitoring of service (with or without evaluator input)
- Promotion of service (to GPs, stakeholders, consumers)
- Maintenance and co-ordination of ongoing committees (steering/advisory/management)

Implementation needs to be considered and phased in over time to allow all participants time to adjust to the new service. Implementing before negotiations are complete and staff and infrastructure are in place may adversely effect the service.

9.5 Evaluating a service

The Division needs to be clear about what it is trying to achieve. Clear objectives are important because the complexity of the issues and the large number of stakeholders make for clouding of the project. Clearly defining the problem in your area and the solution suggested will allow for smoother negotiations and implementation. It will also enable an adequate evaluation.

EXAMPLE 1

If a Division discovers that many doctors in the area are on call (phone advice and home visits) but seeing few patients it may be feasible to establish a co-operative to minimise the hours on call for each GP. The objective is to minimise the on call time of individual GPs while maintaining access to services for patients. If GPs are willing to participate, a roster system can be developed and a phone diversion system implemented so that the rostered GP on call receives the calls from all participating practices. No new services are being introduced and it is not necessary to enter into detailed collaborative arrangements with emergency departments, ambulance services etc. as the Division is merely co-ordinating its GPs. Evaluation would include measures of doctor/patient satisfaction with the service as well as documentation of numbers of patients seen, outcomes etc.

EXAMPLE 2

A Division may discover that very few local GPs are available after 6.00 pm and that the only emergency department is not readily accessible to patients because of its geographical position. Waiting times are long for both emergency department patients and the deputising service. The Division may feel that the establishment of an after hours facility is desirable. The objective is to improve accessibility for patients by providing an alternative primary care provider. In this case much more work needs to be done in finding and funding a site, developing relationships with existing providers including delineation of roles and protocols for information transfer, recruiting staff etc. The evaluation must take into account costs, satisfaction and accessibility measures and would involve data from other providers to show a reduction in waiting times across all providers as well as numbers of patients for cost analysis.

The clear definition of objectives and evaluation plan allows for data collection at appropriate times and from appropriate sources. Often evaluation is an after thought, which leads to inadequate information gathering and the inability to measure what you want to measure. Unless baseline data is collected before a service is introduced the opportunity is lost.

10. Outcomes and Indicators

Some divisions have already begun to work in the area of after hours service delivery and have documented the current situation, perceived needs and likely participation in future initiatives. Without this baseline data it is not possible to develop a model that fulfils the local needs, nor is it possible to measure the impact of any initiative.

Having established and documented the current situation, and initiated a service (whatever is deemed appropriate), evaluation of the effectiveness of the service needs to be undertaken. These functions form the basis of the first part of the generic outcomes and indicators listed in the following pages.

Table 1 lists the outcomes of Divisional after hours activities on Divisional infrastructure, General Practitioners, Patients and the population as a whole.

Table 2 lists minimum outcomes and indicators, which if collected would enable divisions to monitor their local situation. These minimum indicators if collected by all divisions active in this particular area would enable comparative studies across Australia.

A more detailed set of outcomes and indicators are provided in **Table 3** as a guide to divisions working in this area. They provide a basis for data collection for evaluation of programs and are designed to be flexible to suit particular situations. Specific outcomes and indicators for each possible service model need to be developed and the evaluation of the After Hours Primary Medical Care Trials will aid in the further development of outcomes, indicators and data collection methods. Despite the apparent complexity of data collection listed in the tables, much of the data would be available from other sources eg, hospital, ambulance and locum services. Collaborative links with these organisations are essential in not only data collection but service provision.

comes for After Hours Services

nework	Division Outcomes	GP Outcomes	Patient Outcomes	Populatio Outco
ce and needs	The Division has mapped current providers The Division has gathered and collated information on pattern of service utilisation	GPs aware of services currently available in the area	Consumer needs/attitudes considered	
l	The Division has identified a locally suitable service model The Division has considered the cost efficiency of the service	GPs satisfied with service The service is cost effective for the GP	Improved access to timely and appropriate services	Improved morbi

ential Minimum Indicators for After Hours GP access

inimum indicators proposed for assessing after hours services is brief and involves two primary data collection supplem available from major hospital casualty departments. It is proposed that this data could be collected by any division inter adequacy of after hours services in their region not only those who are conducting particular after hours activities. The ors found on the subsequent pages, will probably be of most use to divisions with defined after hours programs. Consid red to develop and validate instruments to assess the minimum indicators. This work will evolve from the After Hours P tion.

*ential **Minimum** Indicators for After Hours GP access*

ome	Indicators	Measure
r hours care	Relative number of after hours A&E attendance's classified as primary care	hosp. data
	Waiting time for service	after hours service survey
	Satisfaction of GPs working for service	GP participant survey

ıft Outcomes and Indicators for After Hours Services

work	Outcome (quadrant)	Indicator	M
e and Needs	The Division has mapped current providers (Div.)	The Division has surveyed the following: • Number of GPs offering own after hours • Number and position of extended hours practices • A&E in area • Deputising services	 GP survey GP survey Survey Survey
	The Division has gathered and collated information on pattern of service utilisation (Div.)	The Division has gathered the following: • Number and time of after hours calls to GPs, deputising services, others (A&E, ambulance) • Number and time of home visits by GPs, deputising services • Number and time of A&E attendance classified as primary care • waiting times for service • travel time/distance travelled	 Survey GP survey Hosp. data patient su patient su
	GPs aware of services currently available in the area (GP)	% GPs in Division who are aware of the services currently available	GP survey
	Consumer needs/attitudes considered (Pt)	The number of consumer/groups consulted	Audit of c
	The Division has identified a locally suitable service model (Div.)	Evidence of a rationale for choosing the model over others	Audit of c
	The Division has considered the cost efficiency of the service (Div.)	Evidence of cost efficiency considerations in the above rationale	Audit of c
	GPs satisfied with service (GP)	% GPs in the Division who are satisfied with the service	GP survey
	The service is cost effective for the GP (GP)	Cost to individual GP to participate in service to incl.: • $ contribution to deputising service • hours of participation	GP partici
	Improved access to timely and appropriate services (Pt)	• Primary care attendance's at A&E • utilisation of other providers' services (deputising agencies, ambulance) • waiting times	Hosp. data survey health pro survey
	Improved morbidity	Out of hours avoidable A&E admissions (query asthma)	hosp. data

10.2 An example of a proposal and its possible evaluation.

A Division proposes to develop a service whereby a doctor, located on site at an after hours clinic (established by the Division in collaboration with the local hospital using the hospital facility at a negotiated fee), answers after hours phone calls and triages the patient to either:

- seeing their own doctor in the morning,
- attending the on site facility,
- receiving a home visit from locum service or
- attending the emergency department.

The aims would be to reduce the proportion of after hours consultations performed as home visits, improve patient access to advice and services and improve doctor satisfaction with after hours service provision.

Stakeholders include:

- Division of General Practice
- General practitioners
- Local hospital/Area Health Service/ Network
- State & Commonwealth Health Departments (cost implications)
- Locum Service
- Consumers

In order to evaluate the implementation of such a proposal a rigorous economic evaluation needs to be included in order to define some of the costs and shifts in service provision that occur. This evidence would then be a basis for ongoing negotiations re funding for service continuation.

Issues of quality of service provision, consumer and provider satisfaction and continuity of care also need to be considered in the evaluation.

The evaluation would then take on a format that can be summarised within the following framework.

It includes proposed measures for the indicators although these would need to be refined in negotiation with the program managers stakeholders. The outcomes and indicators are not prescriptive but are an example of the possible evaluation strategies one may choose.

To fully assess the impact of the service pre and post implementation measures would be needed. This may however be unrealistic within the Divisional context and measures/estimates of activity may be the only pre implementation data available. Ideally the Division should have collected this information in the Development phase of the program.

Framework	Outcome	Indicator	Measure
Cost/ Workload	Estimate of current costs of service provision (direct)	Number of services provided by AH providers in area • GPs • Extended hours clinics • ED's (triage 4-5) • Deputising services • ambulance • other	Audit of GPs/deputising service HIC Data Hospital Data
	Estimate of costs to consumer	Payment to service Payment for travel (cost estimation for private vehicle) Other (loss of income, childcare etc) Flow on costs (pharmaceuticals, investigations)	Audit of service Consumer survey Consumer survey HIC tracking
Quality/ accessibility	Service is timely	Waiting time for service • phone waiting time • waiting time for home visit • waiting time in ED	Data collected by each provider
	Services are accessible	Proportion of consumers aware of services Proportion of patients able to • phone service • visit service • receive home visits • receive transport assistance	Population based survey Data of each patient encounter including those not attended to
	Services are appropriate	Number of services at each provider deemed appropriate	Clinical audit of cases (sample)
	Services have good clinical outcomes	• adherence to advice/treatment given • hospital admission rates after attendance • rates of re-attendance (non-scheduled) • rates of service utilisation post attendance • critical incident reporting	Patient survey Clinical audit Hospital data HIC data
	Providers satisfied with services	GP satisfaction with services GP satisfaction with clinical care Other stakeholder satisfaction	Survey of GPs Survey of stakeholders
	Consumer satisfaction	Patients satisfied with services Consumer satisfaction with access	Exit surveys Population survey
Continuity	Information was transferred in a timely manner	Number of encounters for which GP notified (all providers)	Provider audit/data
	Information was useful	Number of GPs satisfied with communication	GP survey

11. The Changing Environment

11.1 After Hours Primary Medical Care Trials (AHPMCTs)

The GP Branch of the Commonwealth Department of Health and Aged Care is currently funding several trials to evaluate localised models of service provision and co-ordination. These trials will form a basis from which Divisions can learn what works and what doesn't and will hopefully be translatable to other environments. The trials are due to start in August/September 1999 and the evaluation of the trials will provide important tools for Divisions to use in the future. Divisions interested in working in the area should proceed but keep abreast of the trials and the lessons learnt from them. Trial participants have valuable information and experience about needs assessment, negotiations, stakeholder involvement etc.

11.2 Practice Incentive Program (PIP)

With the release of the General Practice Strategy Review it was recognised that there were significant inadequacies in the Better Practice Program (BPP). It was decided that this would be replaced from July 1999 by the PIP. After hours service provision is a component of this program along with use of IT, teaching and research and rurality. After significant negotiations a three tiered scheme for payment has been developed. The first tier is a flagfall payment to all GPs for making after hours arrangements. This could involve subscribing to a locum service, having a formal agreement with a hospital etc. All accredited GPs will qualify for this tier of payment. The second tier is for GPs providing some after hours services themselves, through their practice. This is currently set at 15 hours per week. The third tier is for GPs who provide all the after hours cover from their own practice. Although the program is about to be implemented there is still debate about the tiers and the criteria by which practices qualify for the second and third tier. The effect of the PIP on the provision of after hours services is yet to be seen.

11.3 Other reforms

In the 1998 Budget it was announced that $20 million would be made available for GPs for microeconomic reform. This is essentially to support practice amalgamations and other such reforms that lead to more and more timely services available to the community. Larger practices are perceived as more financially viable able to provide more varied services due to a variety of practitioners with special interests, skills, languages etc. They are also able to stay open longer due to roster arrangements and are more likely to be embracing IT developments. It is impossible to predict what impact these programs will have on after hours service provision. They are important changes on the horizon to consider when planning a Divisional program.

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