PSYCHIATRIC SERVICES

The Greater Murray Accessline

Andrew Wilson and Matthew Cullen

Objective: *To provide an overview of the service delivery model and operational data for a technology-enabled rural mental health triage and case management programme. Implications for other mental health services will be discussed.*

Method: *Naturalistic descriptive data collection and analysis using the service provider's telephony and clinical information systems. Service utilisation, sociodemographic and illness variables are reported as well as consumer and provider satisfaction data obtained via survey.*

Results: *Over 25,000 telephone contacts occurred during the eighteen-month period reported. Approximately 40% were triage calls with the remainder related to telephone-based case management. A wide variety of user groups were identified with utilisation by the indigenous population significantly higher than expected (12% of total contacts). Ninety five per cent of consumers rated the service as being satisfactory or higher. A trend was observed for reduced use of inpatient resources.*

Conclusions: *This paper confirms international data supporting the value of technology driven, protocol-based triage and case management. Delivery of telephone-based contacts within a mental health service can be successfully achieved from a geographically remote site and may provide significant benefits for the delivery of rural mental health services.*

Key words: *information technology, rural psychiatry, telephone technology.*

INTRODUCTION

The telephone has a long and honourable history in the provision of health services.[1] Telepsychiatry has been used for over 40 years in the USA and Australia, often as a response to the remoteness of some communities and the difficulties in providing face-to-face services to these areas. The key requirements for and subsequent development of various intake models for rural mental health services have been previously described,[2,3] with a centralised intake service now being an accepted part of integrated mental health service delivery. Ball *et al.* have compared four models of communication in adult psychiatry (face-to-face, telephone, hands free telephone and video-conferencing).[4] Overall, patient satisfaction, level of reassurance received and service "understandability" were high in all modes. Importantly, it has also been shown that telephone assessments are reliable across a variety of Axis I and Axis II disorders[5] with telephone-based treatment models also having been found to be effective for depression in a general practice setting.[6] Further, Mohr *et al.* have reported positive outcomes for a controlled study of telephone administered cognitive–behavioural therapy for depression in subjects with chronic physical illness.[7]

The use of health call centres to provide a single point of access for health services is also a growing trend. In the United Kingdom a new blueprint for a modern and dependable National Health Service[8] has led to the development of "NHS Direct" (a 24 hour telephone advice line staffed by nurses) as one its key components. This is probably the largest

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public sector project to date for a health advice line that facilitates access and triage. In Australia, a similar service ("HealthDirect") provides health information, advice and service access to the population of Western Australia and now receives more than 200,000 calls per annum (Turner V, unpublished data, 2001). A statewide health call centre service providing mental health triage, information and advice ("Mental Health Direct") has also recently commenced. Evidence suggests that appropriate triage and assessment can manage unnecessary demand for services and reduce the need for face-to-face attendances while ensuring quality of interactions.[9,10] This is of particular relevance to rural and remote areas of Australia where the provision of adequate community mental health services remains a constant challenge.

The Greater Murray Area Health Service (GMAHS) is located in southern NSW and services a population of 251,000 people, with a mixture of provincial, rural and remote centres. A 1997 report to review access and availability of mental health services in the Greater Murray Area[11] identified a number of consumer priorities. In particular the report noted problems obtaining out of hours support, difficulties with the provision of services to those who did not meet the 'seriously mentally ill' criteria and the absence of facilities providing 24 hour supervision aside from two acute care facilities. One of its recommendations was for the GMAHS to develop an integrated telephone triage, information, advice and counselling service ("Accessline") that would supplement existing mental health and community health services in the area.

ACCESSLINE – HOW DOES IT WORK?

Accessline commenced in June 1998, initially for a pilot period of 12 months, although this period has been subsequently extended. The service provides 24 hours a day, 7 days a week telephone-based mental health assessment, triage, crisis management, referral and information for the Greater Murray region. Access is via a freecall 1800 number available only in the Greater Murray area.

Operating from the McKessonHBOC Sydney health call centre, the Accessline is staffed by a team of experienced mental health professionals with qualifications in psychology, nursing or social work. These staff have received further training in telephone counselling, customer service, call centre technology and computer skills. The call centre environment provides an infrastructure of sophisticated telecommunication and information technology systems. These both assist and support the staff in providing best practice clinical care as well as ensuring a highly responsive service.

The service focuses on:

1. A needs assessment of the caller
2. The provision of the appropriate assessment or advice
3. Coordination, integration and referral to existing service providers
4. Follow up to ensure linkage with services
5. Facilitation of self management where appropriate
6. Process driven quality using clearly defined protocols
7. Documentation of all steps of interactions using proprietary software

The assessment process is guided by a series of protocols and clinical management guidelines for most mental health problems. For example, the assessment of a depressed patient would prompt an automated system flag to mandate the use of the suicide assessment protocol and intervention procedures.

The most appropriate level of care is selected for the patient based on the nature of the presenting problem and the level of urgency. Again, detailed decision support protocols are accessed within the case management software to assist the mental health professional consider appropriate care alternatives.

A wide section of care delivery pathways are available including:

- Telephone advice and counselling
- Referral to crisis and emergency services
- Advice to General Practitioners (GPs) on patient management
- Referral to GPs or community health services
- Referral to private practitioners (psychiatrists & psychologists)
- Written information packages on services and treatment alternatives

Intake

The Accessline provides a single point of entry for mental health, sexual assault and drug and alcohol services. Referrals are taken from all persons wishing to access any of these services and includes consumers, emergency services, GPs, Emergency Departments, family and friends. The intake assessment aims to determine the urgency of the referral and to triage accordingly. Risk assessment, suicide assessment and/or child protection protocols guide the decision making process of the staff member and assist in determining the appropriate action to be taken. A hard copy of the electronic assessment record is faxed to the appropriate on-ground service either immediately or at a later pre-arranged time, depending on the urgency of the referral.

Assistance with case management

The Accessline provides on-the-ground case managers with the facility to leave "standing orders" for their clients that are recorded in the case management software. A standing order can be included in the client management plan for a variety of reasons, including medication compliance, discharge planning, weekend leave, on-going support and/or to ensure a consistent approach is taken by both the case manager and the Accessline health professional with specific problem clients.

Information and advice

While intake and assistance with case management comprise the primary functions of the Accessline, the staff have access to a wide variety of resources, such as the Internet and a corporate Intranet which has an extensive database of referral sources and approved fact sheets covering mental health issues. This ensures the provision of timely and accurate advice, information and referral, particularly to callers in remote areas who are unable to easily access such information.

RESULTS

Call volumes

Between June 1998 and December 1999 a total of 29 317 calls were handled, 14 787 of these being inbound calls and 14 530 being outbound. The high number of outbound calls is indicative of the Accessline case management function. Call volumes steadily increased during the first eight months of operation (Fig. 1) and have subsequently plateaued at an average 1700 calls/month.

Call reason

Data collected on presenting problem or reason for call (Fig. 2) shows that mental health issues comprised approximately 80% of all calls. Five per cent of callers had made a suicide attempt prior to calling the Accessline. Sexual assault accounted for approximately 5% of calls and substance abuse approximately 7%. The majority of calls fall into the broad categories of intake and assistance with case management. However, a significant number of callers are simply seeking information and advice on mental health issues.

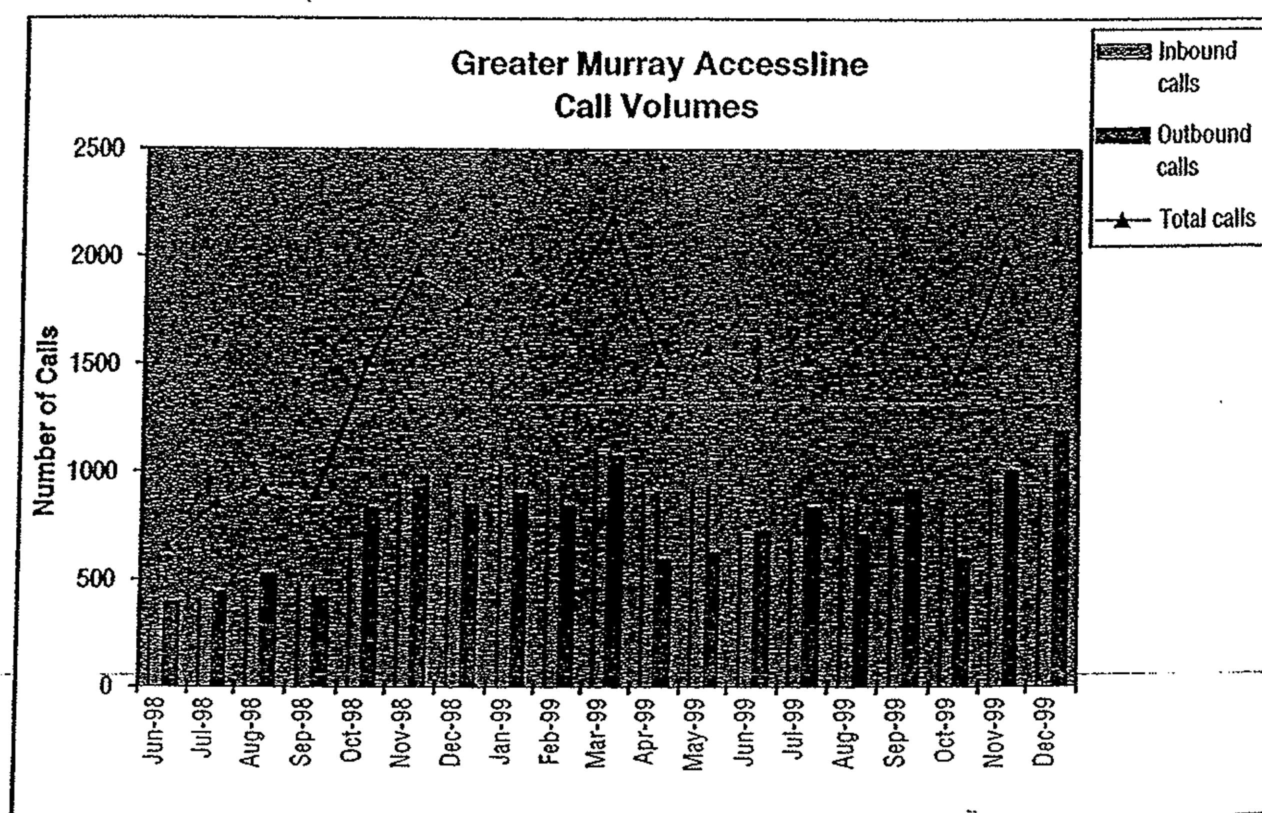

Figure 1 Accessline Call Volumes.

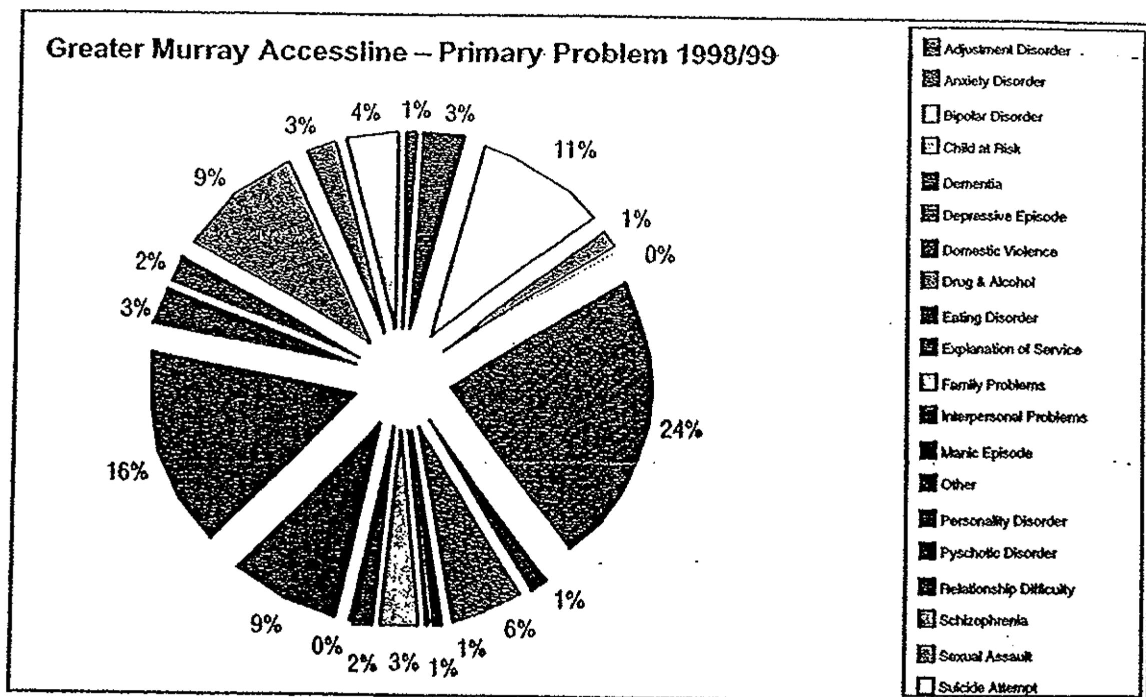

Figure 2 Accessline Caller Primary Problem.

Level of risk

Assessment of risk is a primary function of the Accessline, both in its role in intake and in assisted case management. All callers are assessed as high, medium, low or no risk using operationally defined definitions to provide consistency in triage dispositions. Almost forty per cent of callers presented with some level of risk, with twelve per cent of these calls falling into the medium/high risk category.

Age and ethnicity

Approximately fifty per cent of callers fell within the 30 to 49 year age group and the 20 to 29 year age group comprised almost 30% of calls. Interestingly, 12% of callers were from persons from indigenous background compared to an overall indigenous representation within the GMAHS population of 2.4%.

Service standards

The target average handling time of calls of 8 min per call was gradually achieved, as Accessline staff became more familiar with computer and telecommunication technology and more confident in telephone assessment and counselling. The average speed of answer for inbound calls during 1999 was 11 seconds with 95% of calls being answered in 20 seconds or less and less than 4% of calls abandoned.

Customer satisfaction

Accessline users were randomly surveyed to evaluate the service they had received. Although the response rate was low at 12.5%, the returned surveys generally indicate a high level of satisfaction. In all instances, the consumers reported being very satisfied or satisfied with the Accessline staff on dimensions of professionalism and empathy. Again 100% of respondents rated the verbal information provided as being helpful and relevant and 100% reported that they would use the service again.

A written survey of GMAHS case managers conducted in January 2000 achieved a 41% response rate. All respondents (100%) reported an improvement in case manager efficiency as a result of the availability of the Accessline with 57% reporting stating that they regularly used Accessline for shared case management. Eighty-six per cent stated that they felt clinical outcomes of their patients had improved since the service had been introduced.

Service utilisation

Anecdotal evidence from the inpatient unit suggested that there has been an impact on length of stay with an estimated saving of 100 bed days over a three month period.

DISCUSSION

This paper has presented initial data on an innovative programme operating in a rural area of NSW. To the authors' knowledge, Accessline is unique given the broad services provided including intake, triage, assessment referral and telephone-based case management. In addition, Accessline has tested a service delivery model from a location remote to the target population and the use of information and telephone technology to facilitate linkage between the remote telephone-based team and staff located in the Greater Murray region.

A variety of strategies to ensure integration and liaison have been developed. For example, the attendance of the Accessline Team Leader at local team meetings has proved successful as has the regular use of video and teleconferencing to discuss clinical and service issues. Similar initiatives are important to facilitate a seamless relationship between the Accessline and the on ground staff, with daily telephone contact being the norm.

The use of a single point of intake, assessment and triage service will increasingly become a feature of mental health service delivery in Australia in keeping with National Mental Health Policy. Results so far, particularly in relation to a wide range of calls in terms of problem, level of risk, age and ethnicity, suggest good acceptance by the local community. It also emphasises the value of measuring services responsiveness as well as clinical consistency as quality measurements.

The use of Accessline also provides an opportunity for consumers to learn more about their illness or concerns, take responsibility for considering options and alternative types of care and ideally use the most appropriate service for the presenting problem. Many studies have demonstrated that consumer behaviours can change after expert advice has been sought and received.[9]

The extent to which cost savings emerge is an important element of any service evaluation. There is anecdotal evidence suggesting that reduced length of stay, reduced demand on ambulance services and reduced attendance to the Emergency Department may be an outcome of such a service delivery model. Further investigation is underway to evaluate these trends.

It is worth speculating on this service from a consumer perspective. The concept of having a single number that is free of charge, available 24 hours, seven days a week regardless of location, is a considerable advantage in terms of gaining access to mental health services be they rural or urban. It helps overcome barriers to mental health services such as geography, ethnicity, time of day, education etc. Importantly, however, such a service should not be used as an indiscriminant entry point from which the "flood gates are opened" leading to excessive demand on traditional mental health services. The need for access to community mental health teams needs to be balanced with appropriate referral to primary care and/or utilisation of self-help or self-care interventions.

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