MENTAL HEALTH LIAISON NURSING IN THE EMERGENCY DEPARTMENT: ON-SITE EXPERTISE AND ENHANCED COORDINATION OF CARE

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ABSTRACT

Objective

To evaluate the Mental Health Liaison Nurse (MHLN) service based in the emergency department (ED) of a large, inner city teaching hospital in Sydney, Australia.

Design:

Data were gathered over the first two years of the position. Information is presented regarding the length of time that patients waited to be seen by the MHLN. Results from two rounds of surveys conducted with ED nursing and medical staff are tabulated.

Results:

Data obtained from the Emergency Department Information System (EDIS) demonstrates that the Mental Health Nurse Practitioner (MHNP) is able to see a majority of patients at, or close to, the point of triage. These findings are reinforced by ED staff who rate highly the readily available access to mental health assessment and enhanced coordination of care. The strong clinical focus of the role is acknowledged by the ED staff who perceive that patients are better supported therapeutically and spend less time waiting in the department due to MHLN intervention

Conclusions:

This evaluation suggests that the MHLN role has significant benefit for patients presenting to the ED by reducing waiting times, streamlining transition through the department and improving follow-up. The MHLN is highly regarded by the staff as an on-site source of clinical expertise. The information obtained supports the established model and will be used to guide the direction of the service.

INTRODUCTION

Following a process of de-institutionalisation, and an emphasis on enhancing the integration of mental health services with mainstream medical services, the general hospital emergency department (ED) has become a major point of entry for consumers with mental health concerns. There is no doubt that this patient population requires specialist skills in terms of assessment, management and disposition. ED staff are generally uncertain in their interactions with mental health clients and lack confidence in their assessment skills and understanding of the mental health services that are available (Wand and Happell 2001). Mental health nurses have worked as part of consultation-liaison (CL) psychiatry teams in Australia for many years and the benefits of these positions is well documented (Meredith and Weatherhead 1980; Sharrock 1989; Hicks 1989; Sharrock and Happell 2000; Sharrock and Happell 2001; Sharrock and Happell 2002).

MHLN is an initiative which has recently gained considerable momentum within the Australian health care system. This is especially true in New South Wales (NSW) where funding was provided in June 2000 to establish MHLN positions in EDs across the state, particularly in rural hospitals. There is a dearth of Australian literature related directly to the work of MHLNs within the ED. It is therefore necessary to determine principles germane to all MHLN services. However, it must be emphasised that individual EDs have their own local characteristics and demands, which will largely determine the type of liaison service that will suit a particular environment.

The distinction between general hospital CL psychiatric nursing and MHLN is unclear. Roberts (1997) prefers the term mental health liaison nursing as it evokes a positive approach to mental health promotion. CL nurses working in the general hospital have mostly assisted in the management of patients with a primary medical condition and co-morbid mental health problem

that influences the provision of medical care. In contrast to this, MHLN based in the ED involves the assessment and management of those who present with predominantly mental health presentations. However, as with general hospital CL nursing the role also entails ensuring equity of access to medical treatment for people with mental health concerns.

The most noteworthy Australian study related to mental health nurses working in the emergency setting was undertaken in Melbourne, Victoria, Australia, by Gillette et al (1996). Results from their nine month evaluation suggested that the mental health consultation-liaison nurse produced more positive outcomes including: increased client satisfaction with the services offered in the ED; decreased length of stay; more efficient management of aggressive and potentially aggressive occurrences; and, attitudinal changes in nurses when working with clients with mental health related problems.

International perspective

There are basic descriptions of mental health services based in the emergency setting in the USA in the early 1990s (Snyder 1992; Kordilla 1994; Stutesman and Yohanna 1994). There are few recent international publications examining the MHLN role. However, there are some accounts from the UK of mental health liaison services that work from the ED. Brendon and Reet (2000) have developed a MHLN service 'parallel to, but independent of', the existing consultation liaison psychiatry service in the West Middlesex University Hospital. Their team consists of two nurses, a psychologist and a 'development post', whereby a nurse is seconded into the team for six months to acquire a number of skills that are focussed upon clinical competencies. The service includes after hours cover until 9pm 'most evenings'. The service concentrates on the ED and also extends to the general medical wards of the hospital. The authors purport that early response and intervention assist in reducing repeat episodes or attendances to the ED and prevent beds on the medical wards becoming filled with patients who are solely awaiting psychiatric or psychosocial input.

Callahan et al (2001) have analysed the work of an ED mental health service in East London. Their team comprises mental health nurses, social workers and psychiatrists on rotation. The service operates from 8am to 9pm midweek and 1pm to 9pm at weekends and is also available to the general wards of the hospital. Over a 14-month period data were reported on 949 people seen by the mental health liaison service. The information collected includes client demographics, time of arrival, time seen and waiting times. The majority of referrals (33%) were seen immediately upon arrival to the liaison service and the average waiting time was 10 minutes. The service aims to provide a speedy response to mental health presentations and to reduce the demands placed on health services.

Beech et al (2000) conducted a 12-week pilot project which explored the demand for an after hours on-call service delivered by two experienced psychiatric nurses in an ED of a large Midlands hospital. The nurse-led service was available nightly from 10pm until 8am. The aim was to provide an alternative to the on-call psychiatric service, thereby relieving the demands on junior doctors. This followed concerns over the long hours worked by junior doctors as well as the belief that nonmedical health professionals can deal with a wide range of mental health problems/disorders. The nurses recorded 88 occasions of service, an average of one per shift. Approximately 75% of the presentations involved patients already known to services and the psychiatric junior doctor on call was involved in 37.5% of presentations.

While these descriptive accounts of MHLN services are promising, they fail to present any data regarding the value and benefits of this initiative from those groups the role is designed to serve. ED consumers are major service beneficiaries and follow-up telephone surveys are currently underway. However, the main focus of a liaison service is to provide support and consultation for the staff of the particular facility. Consulting with the ED staff is therefore imperative, both in terms of appraisal and feedback and providing a sense of ED staff ownership.

Healthcare directions in Australia

The three UK papers make reference to addressing the National Service Framework for Mental Health Services (1999). In Australia similar documents exist. The National Standards for Mental Health Services (1997) upholds the principles of prevention, early detection, early intervention and mental health promotion. The Standards require mental health services to 'identify and respond to mental disorders and/or mental health problems as early as possible' and provides as an example 'minimal waiting times for assessment' in locations such as the ED. The strategy also calls for services to share expertise with emergency departments to promote 'inter-agency collaboration' and to share resources.

At a state level, NSW Health (1998) have published recommendations for mental health care in EDs, which stipulate 'That mental health services will respond to emergency department consultation requests with equal clinical priority to other emergency requests'. Another recommendation from the same working group states; 'That where possible, designated mental health staff should be rostered to provide consultation to EDs, in order to foster a team working relationship'.

The current model

Importantly, the MHLN service developed at Royal Prince Alfred Hospital (RPAH) is based in the department and viewed as a member of the ED team. The current model of MHLN at RPAH was developed from a pilot study conducted over four months in early 2000 (Wand

and Happell 2001). The purpose of the pilot study was to devise a MHLN model specific to the needs of the environment. It involved focus groups, questionnaires and a pilot study evaluation with ED staff. The model was also derived from synthesis of local and overseas literature and is consistent with both Federal and State Government initiatives that promote integration of mental health services with mainstream medical care. The overriding principles of the MHLN service are that:

- Overall ED care including triage, medical assessment, the process of consultation, referral and disposition is enhanced by MHLN intervention.

- The effectiveness and efficiency of the ED is improved by utilisation of MHLN assessment skills, therapeutic skills and care coordination.

- The MHLN coordinates a system of education and training for ED staff.

- Knowledge of mental health issues is improved through mental health promotion, guideline development, role modelling and clinical teaching by the MHLN.
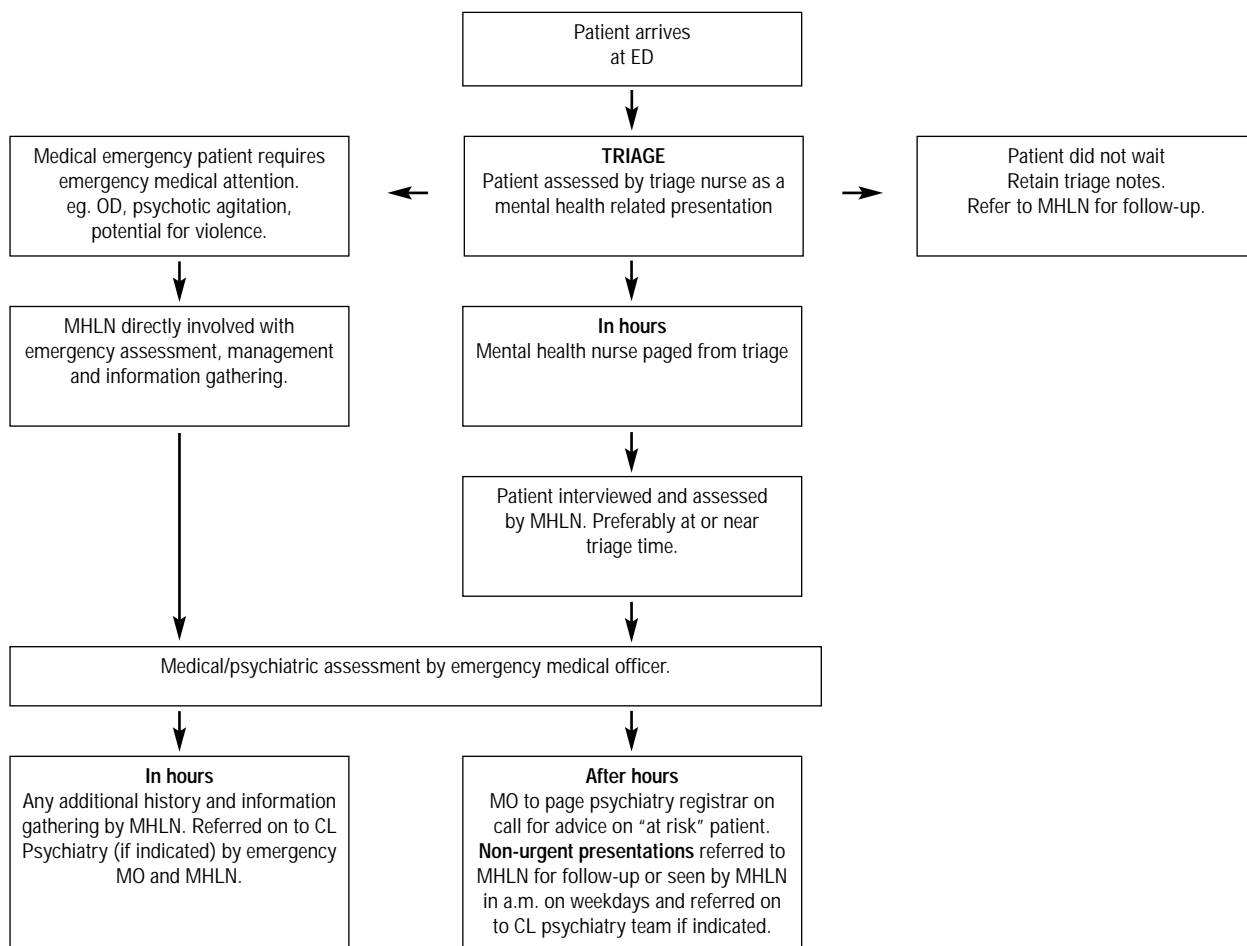
- The MHLN maintains regular communication with the consultation-liaison psychiatry team and the staff of the mental health service.

Referral process

The MHLN sees patients of all ages with mental health concerns. This includes major mental illnesses and disorders as well as drug and alcohol problems, behavioural and emotional disturbances, psychosocial issues and patients having difficulty coping with physical illness. Referrals are made verbally by nurses, doctors and social workers. The MHLN is available Monday to Friday from 8am to 4.30pm. Although funded as an ED position by the Area Mental Health Service, the MHLN occasionally provides consultation to general hospital wards as there is currently no other nurse-to-nurse consultation available for mental health issues.

A flow chart outlining the pathway for mental health related presentations to the ED illustrates how the MHLN service adds considerably to the structure already in place. The flowchart clarifies how the position has become integrated with the routine management and follow-up of mental health related presentations to the ED and emphasises the clinical focus of the role.

Flow chart: Referral pathway for mental health liaison nurse in RPAH emergency department

Patient arrives at ED
↓
TRIAGE
Patient assessed by triage nurse as a mental health related presentation

Medical emergency patient requires emergency medical attention. eg. OD, psychotic agitation, potential for violence.
←

→
Patient did not wait
Retain triage notes.
Refer to MHLN for follow-up.

MHLN directly involved with emergency assessment, management and information gathering.

In hours
Mental health nurse paged from triage
↓
Patient interviewed and assessed by MHLN. Preferably at or near triage time.
↓
Medical/psychiatric assessment by emergency medical officer.

In hours
Any additional history and information gathering by MHLN. Referred on to CL Psychiatry (if indicated) by emergency MO and MHLN.

After hours
MO to page psychiatry registrar on call for advice on "at risk" patient. **Non-urgent presentations** referred to MHLN for follow-up or seen by MHLN in a.m. on weekdays and referred on to CL psychiatry team if indicated.

AIM

The aim was to evaluate the model of MHLN that is in place and to seek anonymous feedback from nursing and medical staff of the ED regarding the ongoing development of the MHLN service. It was also anticipated that the data would be consistent with Australian Federal and State Government expectations that mental health services respond promptly to requests for assessment in the emergency setting and therefore, also support an extension of the MHLN service to provide consultation in the department after hours and on weekends. Aspects of the evaluation are discussed below.

METHODS

The data were presented to the Ethics Committee of RPAH and there was no objection to publication. The number of people seen by the MHLN in one year from October 2001 to October 2002 was identified. Information on occasions of service, the waiting times for patients to be seen by the MHLN and follow-up arrangements made in the community were entered into the ED Information System (EDIS) and then transferred onto an Excel spreadsheet so that triage times could be compared with the times that patients were seen by the MHLN.

The time patients waited to be seen by the MHLN from the time of triage was quantified. There was then an assessment of the number of mental health presentations occurring in the department outside of current MHLN hours.

ED staff evaluation of the MHLN service

Surveys were conducted in January 2001 and October 2002. Feedback has been sought on the development and direction of the MHLN service and as part of the quality improvement process. Surveys were distributed on both occasions over a two-week period to nursing and medical staff. Participants were handed the survey in an envelope, and a box labelled 'mental health liaison evaluations' was placed in the staff base of the ED for the return of completed surveys. The survey consisted of six questions. Three related to gender, experience in the ED and professional designation. The ED staff were then asked to rate the effectiveness of the MHLN using a Likert Scale adapted from Gillette et al (1996). The effectiveness rating was 1= not at all, 2= somewhat, 3= fairly, 4= very. If a particular aspect of the mental health liaison service was not utilised the participant indicated this with a N/A. The last three questions asked the staff to identify what the MHLN had done to positively influence the care of mental health presentations through the ED, what staff perceived as their own deficits in the management of mental health presentations and finally, any comments or recommendations. The data were analysed using the Statistical Package for the Social Sciences (SPSS) version 11.0.1 for Windows.

RESULTS

Waiting times for patients

Figure 1 illustrates that from October 2001 until the end of October 2002, 600 occasions of service were recorded by the MHLN on EDIS. Most significantly, 40% (n=235) of patients were seen within an hour of triage and 14% were seen within three hours of arrival in the department. The rise in the 5-10 hours (n=118) and 10+ hours (n=110) category represent those presentations that arrived after hours and were seen by the MHLN the following day. The bar labelled 'Follow-up' refers to those patients who were referred to the MHLN for follow-up and therefore were not seen on that particular presentation.

Figure 1: Occasions of service (n=600) for MHLN in RPA ED, October 2001-October 2002
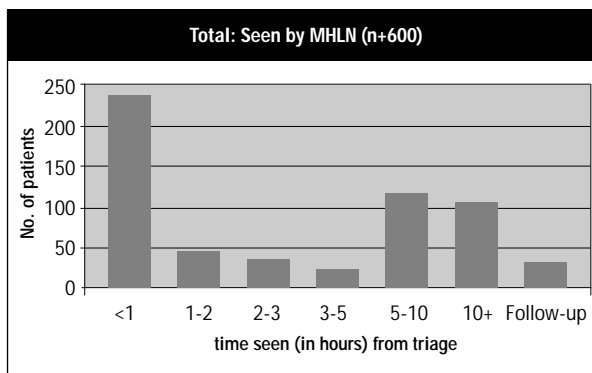
Follow-up refers to those patients who were referred to the MHLN for follow-up, but were not seen in the department.

Occasions of service for business hours only patients

Figure 2 represents all occasions of service for the MHLN that were seen and discharged within business hours. This data is of interest as the MHLN has the greatest influence over the transition through, and disposition from the department for people who present and are discharged during business hours. A total of 138 patients in the sample were seen and discharged within business hours, and of this number 75% (n=103) were seen by the MHLN within an hour of triage.

Figure 2: Occasions of service for MHLN in RPA ED, October 2001-October 2002. Patents admitted and discharged within business hours only.
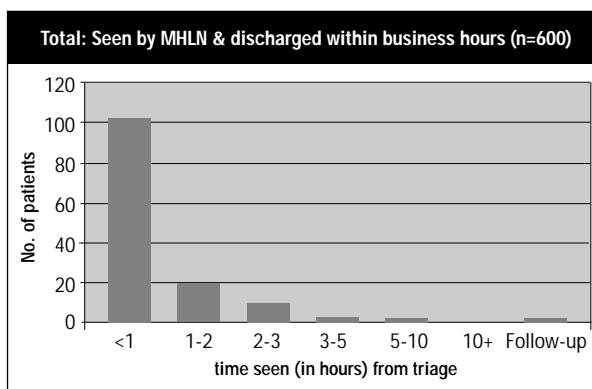
Emergency department activity

The following pie chart represents the same 600 patients (2001-2002 occasions of service) and illustrates the significant amount of activity in the department out of business hours. The 'out of hours activity' section refers to all patients who either arrived or were discharged outside business hours. This represents a sizeable period of time, from 5pm until 8am Monday to Friday and across the whole weekend. The pie chart highlights the significant workload placed on the ED when the MHLN is not available. During this time there is also only one psychiatric registrar available for the whole hospital. This places a heavy burden on ED staff and the psychiatric registrar and is in marked contrast to the service provided for mental health consumers during business hours.

Figure 3: Pie chart representing ED activity.
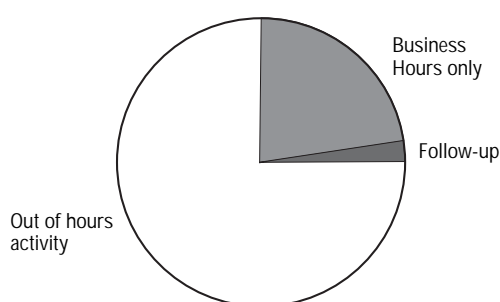
Emergency department staff surveys

In January 2001, 70 surveys were distributed to staff of the ED and a total of 46 surveys were returned providing a response rate of 66%. Twenty-six of the respondents were nurses and 20 were medical officers. Experience of working in the ED ranged from 15% with less than six months experience to 17% with more than five years experience in ED. The largest group in the survey were those who had worked in ED for one to five years, 44%.

In October 2002, 65 surveys were distributed and a total of 50 were returned, a response rate of 80%. In this survey 27 respondents were nurses while 23 were medical officers. ED experience in this survey was similar to the 2001 survey. Sixteen percent had worked in ED for less than six months and 24% for more than five years. Again the largest group in the survey, 38%, had worked in ED for one to five years. Both surveys achieved a convenience sample that is a significant representation of ED nursing and medical staff.

Rating effectiveness of the MHLN

The mean scores listed here show that the MHLN's expertise has been consistently viewed as fairly effective to very effective. Assessment of mental state and aspects related to the management of challenging behaviour were the most highly rated attributes of the MHLN. The relatively low scores for education can be explained by the number of medical staff who responded with N/A, as formal MHLN education sessions in the ED is conducted mainly with nursing staff.

Table 1: Rating of MHLN effectiveness		
(Effectiveness rating 1= not at all, 2= somewhat, 3= fairly, 4= very)	Jan 2001	Oct 2002 Mean scores
Information about past history	3.4	3.6
Assessment of mental state	3.7	3.8
Risk assessment	3.7	3.7
Management of agitated and aggressive patients	3.5	3.7
Working with self-harm patients	3.6	3.8
Therapeutic communication	3.4	3.5
Symptoms of mental illness	3.4	3.6
Treatment of mental illness	3.5	3.5
Community resources	3.4	3.5
Mental Health Act/Legal Issues	3.4	3.4
Informal education	3.4	3.4
Formal education	3.2	3.2

MHLN and patient care

In the first survey, participants were asked; 'what has the MHLN done to positively influence the care of mental health presentations through the ED?' The ED staff were given space to respond to this open question in their own words. Several themes emerged from these written responses. This information was then grouped under a number of thematic clusters. The responses to this question are presented in table 2.

Table 2: What has the MHLN done to positively influence mental health care in ED? 2001 survey.			
Most common responses Jan 2001	Nurses	Doctors	Total %
Readily available mental health consultation	15	6	46
Management of difficult presentations	8	3	24
Support for patients	4	6	22
Liaison with CL psychiatry team	3	7	22
Increased mental health awareness amongst ED staff	6	4	22
Decreased waiting time for patients	5	2	15
Enhanced communication with community teams	5	1	13

From these initial groupings the survey conducted in October 2002 was modified to reflect the benefits that were originally highlighted in the 2001 survey. In the 2002 survey, participants were asked to circle one or more of a number of MHLN interventions that they thought positively influenced the care of mental health presentations to the ED. The results are presented in table 3.

Table 3: What has the MHLN done to positively influence mental health care in ED? 2002 survey.			
Most common responses Oct 2002	Nurses	Doctors	Total %
Readily available mental health consultation	19	22	82
Management of difficult presentations	23	16	78
Support for patients	23	17	80
Liaison with CL psychiatry team	20	21	82
Liaison between ED and mental health unit	21	18	78
Increased mental health awareness amongst ED staff	19	11	60
Decreased waiting time for patients	18	20	76
Enhanced communication with community teams	9	16	50

ED staff perception of their own deficits

The ED staff were also asked; 'What do you perceive are your own deficits (if any) in the management of mental health presentations?' In both surveys the response rate to this question was comparatively low. However, the information gleaned from the responses that were given provides direction for educational and training initiatives.

The main difficulties expressed by ED staff relate to lack of confidence and skill in managing challenging presentations and behavioural emergencies. There is also a perceived knowledge deficit in areas such as mental health assessment, the Mental Health Act, psychiatric diagnoses and the community resources that are available to consumers.

Recommendations from the ED staff

Staff were given the opportunity to make additional comments or recommendations in relation to the MHLN service. Respondents were unanimous in their support for the MHLN service. The single most prominent recommendation in both rounds of surveys was to have the service expanded to cover the ED after hours.

DISCUSSION

Results from both ED staff surveys indicate that staff are enthusiastic in their endorsement of the MHLN service at RPAH. Their approval demonstrates that the benefits of this initiative were rapidly realised. The model that emerged from the pilot study has been validated. Readily available access to expert assessment and management of difficult mental health related presentations is of greatest value to ED staff. This is reinforced by the quantitative data obtained from the EDIS database, which demonstrates that the MHLN is able to see a majority of patients at, or close to, the point of triage. The strong clinical focus of the role is clearly recognised and appreciated by the staff who believe that patients are better supported therapeutically and spending less time in the department because of MHLN intervention.

Enhanced communication between services is highly rated by ED staff. There is a perception from both nurses and medical staff of the ED that the MHLN improves the relationship with the CL psychiatry team as well as the mental health unit attached to the hospital.

LIMITATIONS

This paper presents the perspective of a developing service, which has not at present been benchmarked with any other similar ED mental health liaison service. It is essentially a short-term review. Further evaluations will add greatly to the perspective of MHLN services in EDs.

Asking ED staff to list their 'deficits' has assisted greatly in developing relevant programs and guidelines however the wording of the question may account for the low number of responses. Deficit may have connotations of incompetence whereas 'difficulties with mental health presentations' may have been a more appropriate term.

CONCLUSION

The development of the MHLN role in the ED is consistent with tenets of Federal and NSW government mental health policies and is supported by evidence from overseas literature attesting to the benefits of MHLN in relation to the provision of specialised psychosocial nursing care in the general hospital setting.

The MHLN service has the potential to considerably enhance the coordination and continuity of care between general hospital and mental health services by placing an emphasis on minimal waiting times for patients, clinical expertise and mental health promotion. The MHLN is a highly valued resource and support for ED staff, improving their access to information and mental health/psychiatric services.

The success of the MHLN service in the ED appears to be based on ongoing transparency and collaboration between all staff, a positive attitude and equity among disciplines. These working principles are upheld by all members of the ED team.

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