Rural Extended Practice for Registered & Enrolled Nurses – Emergency.

Curriculum Outline

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Background Information.

The Mount Barker District Health Services website (2005) describes the Mount Barker District Soldiers Memorial Hospital Inc. (MBDSM) as a 34 bed Sub–Regional Country Hospital which provides accident and emergency, inpatient and day patient services. These services are principally in the areas of obstetric and gynaecology, paediatrics, general medicine, surgery and palliative care. The primary service area is defined by the boundaries of the Mount Barker District Council or the Wards of Onkaparinga Valley, Monoah and Mount Lofty. These boundaries being Wards of the Adelaide Hills Council.

The hospital services one of the fastest growing populations in Australia and is located in the Adelaide Hills approximately 35 kilometres from Adelaide. The Mount Barker Council (2002) estimates the population of the district for the year 2003 as 24,955. (I was unable to find any more current population estimation at the time of writing.)

The Mount Barker Council (2004) describes how the area has a lower percentage of persons aged between 70 – 84 and 18 - 24 than the Adelaide studied division. The area also has a higher percentage of 5 – 11 and 35 – 49 than Adelaide. This may be explained by the high residential development in the area that traditionally involves this age group.

The MBDSM describes its philosophy as

“To provide the community with quality health care and services, in accordance with the standards set by the Australian council on Healthcare Standards, and with the principles of social justice and primary health care strategies.”
Accident and Emergency Services at MBDSM

The hospital operates an emergency service that is available to the community 24 hours per day. The service is operated by General Practitioners (GP) who are not employed by the hospital and are paid on a fee for service. The G.P's have an alternating roster system for the department that sees a G.P. rostered from either 0800 – 1800 or 1800 – 0800. The doctor is not required to stay in the hospital but accommodation and food is supplied if they wish to.

The department is staffed with a Registered Nurse on a Saturday and Sunday for one eight hour shift only. (This is becoming inadequate due to the number of presentations on the weekend at all times of the day.) During the week, the department is not staffed and it is up to the staff on the wards to determine which area is the least busy and who can assess the patient.

When a patient presents to the department, a nurse (usually the Registered Nurse) will perform a triage assessment and initiate any first line treatment if required. The nurse will then determine how soon the patient needs to be assessed by the doctor. It is at this point that the doctor will be notified and a telephone consultation would occur with the nurse involved. The doctor will inform the nurse how they wish to proceed with the patient. This has become a point of issue with the department between the medical officers and the nursing staff. (This will be covered further on)

Not all patients need to see a G.P. and so the nurse will assess, interpret and initiate any treatment required for these patients. Common presentations would include a cut or abrasion that does not require suturing. Another common presentation becoming more common (perhaps a reflection of the population shift) is the mother who brings her child in who wants advice and reassurance. Obviously the nurse would still perform a triage assessment and gather all needed information before making a clinical decision that the child did not need to see the G.P. We have encouraged the nurses to ring the G.P. to discuss any patient with them and if unsure, let the G.P. make the decision of whether or not to attend.
Accident and Emergency Services at MBDSM

The hospital uses the Australasian Triage Scale and any category 1 or 2 which require urgent attention will have the nurse commence emergency care of the patient until a medical officer or paramedical support arrive. These patients will not remain at the hospital (due to the lack of cardiac monitoring and clinical medical expertise to support these patients) so the staff are encouraged to initiate transfer proceedings whilst waiting for the G.P. to arrive. (This involves notifying the South Australian Ambulance Service – SAAS)

Prior to the commencement of the course the hospital had very limited number of staff that were clinically competent in the insertion of an IV cannula or airway management. *This is fundamental treatment in first line emergency care*

The current service has shown to have many problems that include:

1. The different levels of skill and experience among the nursing staff in triaging and emergency care.
2. The reluctance of G.P’s to come into the department when they have been asked by the nursing staff to review a patient.
3. The interpretation of the information obtained by the nurse and the passing on of this information to the on-call G.P. This can lead to an incorrect clinical picture being given that may unnecessarily call a doctor out or alternatively may not indicate the actual severity of the situation.
4. The staffing of the department by nursing staff. This encompasses most of the problems associated with the nursing staff as it is being seen more and more that a nurse needs to be rostered out there between the hours of 1800 – 2300.
5. Communication. We aim to look at ways of enhancing the communication between medical officers, nursing staff and the general community.
6. The lack of understanding by the general community of how a rural emergency department is run. As we have a proportion of the community (approximately 40%) who live in Mt. Barker but work in other areas there is the expectation that we provide 24-hour on-site x-ray, medical officers and laboratories. This misunderstanding of how the department function can greatly influence how a patient or significant others will react to the situation. In a time of an emergency, people are stressed and to find that your perception of how a service is run is different from how it is actually run can greatly affect your mood and decision making ability. This is seen quite often with parents of children who present with a suspected simple fracture of the arm who following assessment have to travel down to the Women’s & Children's’ Hospital for treatment.

**Formation of the Project.**

In May 2004 a meeting was called for all senior nursing staff to brainstorm ways of improving the emergency service at the hospital. At this meeting the senior staff were informed that the G.P’s were in fact considering pulling services at the hospital. This highlighted the urgency and seriousness of the situation that the hospital was facing within the clinical setting.

After much discussion it was identified that we had identified urgent issues to address if we were wanting to improve the service. Some of these issues were:

1. More in-service education to meet the identified shortfalls in nurses’ education in emergency nursing. This education would also include the Enrolled Nurses as after discussion it was felt that in the rural setting the role of the Enrolled Nurse is different from the city-based hospitals and that the Enrolled Nurse may be the nurse doing the initial assessment if the Registered Nurses were busy and unable to leave what they were doing. (A reality in rural health)

2. Training in communication issues for nursing staff.
3. Establish a better liaison between the hospital and the South Australian Ambulance Service. This was identified to help the nurses better stabilise priority one and two patient’s or any patient that may require transfer to a larger health facility.

4. Train the Registered Nurses in Advanced Life support so that they would be able to maintain the airway and to establish an IV access. This would also give the nursing staff scope to initiate drugs, IV fluid therapy and defibrillation if required.

5. Establish standing orders that were hospital specific that medical officers were obliged to endorse and allowed the nursing staff to initiate more extended first line treatment whilst waiting for the medical or paramedical backup.

6. Establish hospital policies and protocols that supported the nursing staff in their extended practice role within the emergency setting.

7. To review the staffing issues within the department and look at creative ways to improve the situation by providing more nursing support for the ward staff.

8. Educate the community in the role of the Emergency Department at the hospital.

9. Setting up some form of support from the Royal Adelaide Hospital for the times a medical officer was not in attendance. This would allow the nursing staff to discuss any patient that they were unclear of the best way to proceed. This was anticipated to be mainly category 3 patients.

Overall:

10. Empower the nursing staff with the clinical knowledge to allow them to skillfully and professionally clinically assess and initiate first line treatment to the community. To provide the support mechanisms both within the hospital and from other health facilities that will allow the nurses to feel confident in the clinical decision making abilities and their triaging of patients. To encourage and applaud their communication skills with not only the medical officers but the general community as well. To lift the profile of the hospital within the catchment area so that the community has a better understanding of how the Accident and Emergency department functions.
A project officer was appointed Level 2 (now Level 3) 0.5 FTE to address these issues and a hospital working party established which included all members of the senior nursing staff, Ro Horden (social worker) and Mark Voc (mental health worker).

**Rationale for the Education programme.**

Due to the urgency of the situation a detailed needs analysis was not conducted. Instead the staff was asked in an informal way what they saw as the problems within the department. This was conducted as part of the Triage Study Day that was made mandatory to all staff. This day was co-ordinated by the project officer Jenny Smith with Cate Curry EO/DON of Meningie Hospital as the principle educator. Kevin Holliday CNC Royal Adelaide Hospital Retrieval Service was also an educator for the day. Kevin was chosen because at informal meetings with the staff around the hospital prior to the study days commencing, it was mentioned that some of the staff were very unsure of the retrieval service and what they should do when the team arrived to take a patient. Some felt it was better to go away and leave the team to it! From this it was decided to allow Kevin the opportunity to discuss with the staff what the team want and need from the hospital on arrival.

Cate Curry was chosen as she had previously taught in the region and she bought both a city and country perspective to the day. The problems previously identified at the brainstorming meeting were repeated at these study days by nursing staff. Having previously worked out in the emergency department, I was able to reflect on what I considered to be areas of concern both with the geographical layout and in the professional practice.

The staff felt positive in participating in the education process providing the hospital would reflect their support with policies, standing orders and other health facility support. The staff did, however, almost unanimously agree that they were unwilling to undertake tertiary postgraduate work in the area of emergency nursing. This I believe is due to a high proportion of the nursing staff being midwives who would prefer to consolidate and expand their clinical knowledge and expertise in this area with postgraduate work rather than in the area of emergency. Also it would be remiss not to mention the cost involved in postgraduate study and this was expressed to me on numerous occasions.
The staff felt that they wanted education to come to them as some expressed concern at leaving the district to attend sessions on a regular basis and were also concerned at the distance required to travel.

Within the first month of the project it was clear that in-service education sessions were not going to be able to meet the educational needs that had been identified. A more structured education programme was needed that encompassed the problems identified and areas that require some updating and expanding.

The Postgraduate courses available through Flinders University and University of South Australia are excellent courses in emergency nursing. Staff needs had already been identified and we knew we would be unable to get the staff to enrol in these courses. Instead it was decided that we would bring a course to the nursing staff. It was also felt that we would try and identify a course that dealt with the issues of a rural emergency department in South Australia. An examination of interstate courses eg: First Line emergency care (FLEC) did not completely match out needs and the same for Western Australia’s Rural Survival Kit for Nurses. After consultation with the working party it was decided we would formulate a Mt. Barker Hospital course for rural nurses. It was also decided to send off 7 Registered Nurses to do the Advanced Life Support with the Australian Confederation of Critical Care Nurses (ACCCN). Four Enrolled Nurses were also chosen (2 were doing the Diploma bridging course at the same time) to complete the hospital course with the Registered Nurses.

**Target Group**

When choosing who would undertake the first course, we looked at Registered and Enrolled Nurses who work frequently at the hospital as well as staff who do night duty (this is a difficult time to get a doctor to come and assess a patient at times). We wanted staff who showed motivation and who had identified areas of concern within the department. We also wanted staff that had showed leadership qualities, as other staff would look to them for clinical guidance following the completion of this course. The Acting Clinical Midwife (Carol Salmon) was approached as she had already finished the advanced life support for obstetrics course and she is an excellent role model for the staff who were displaying some hesitancy in undertaking an advanced life support component.
The first group was chosen with the hope that they would encourage or motivate other staff within the hospital to undertake the same training and perhaps go onto tertiary studies or consider the nurse practitioner programme. The Enrolled Nurses picked were chosen for their motivation and willingness to undertake new training that would impact on their scope of practice and challenge how their role is perceived within the emergency setting.

Aims and Objectives of the course.

The overall aim of the course is to provide an educational tool that will address the identified problems within the emergency department of the Mt. Barker DSM Hospital Inc. This course will provide the learning opportunities and practical support for the nurses. We aim to empower the nurses with better clinical assessment and decision making knowledge and skills which will in turn enhance the provision of a better emergency service and will also promote a more positive working relationship with the medical officers who participate in the on-call roster.

Objectives:

1. To provide the nurses with self-directed learning packages that will be supported with classroom sessions.
2. To provide expert lecturers for classroom session. These will be from different health provider services.
3. To provide the nurses with the clinical practice sessions to allow opportunity to consolidate new skills.
4. To provide a programme that reflects the identified needs of the department.
5. To provide support from the hospital for these nurses in both financial and policy support.
Expected Outcomes

The overall expected outcome of this programme is to improve the current Emergency Service currently available at the hospital by education of the nursing staff to an extended practice level. It is expected that this increase in knowledge will empower the nursing staff in their clinical decision making skills. In particular the triage assessment of the patients and the commencement of first line treatment in the emergency situation. It is anticipated that the nursing staff will be able to manage priority 1 & 2 prior to either medical or paramedical arrival. If no medical officer is available the nursing staff will handle priority 4 & 5. Priority 3 will always be the area of concern, however the establishment of a support system with the Royal Adelaide Hospital will allow the nursing staff to consult with them if they are unsure of how to proceed with the patient. This may include transferring the patient down to Adelaide.

We are not endeavouring to train emergency nurse specialists. Rural nurses are required to be multi-skilled in so many areas of clinical specialties that we acknowledge that this course is not designed to produce experts in the area but rather proficient nurses who may go on to become experts. The up skilling of rural nurses is not creating a new role in nursing but rather providing a legitimate pathway for this group. It is a contemporary approach with the transference of knowledge and clinical skills to all areas of nurses within the clinical setting. With the formulation of any learning environment it must be evaluated as to whether or not the clinical setting will support the knowledge gained in the learning setting and this will be one of the many challenges that we will have to assess when the first course is completed.

Programme Content

The programme content was formulated following discussion with the working party and consultation with the staff at ward level. I also reflected on previous study in emergency nursing that I had undertook to add certain areas that I considered essential information for emergency nurses.

As the aim of the course is to provide an educational tool that will provide Nursing staff with the clinical knowledge to perform triage assessments at a more advanced level to programme content needs to reflect this.
Subjects

Advanced Life Support
This was chosen as it was felt that it was important for the nurses to be able to initiate first line management in a life-threatening situation. This is especially true when there is no medical backup onsite. The ability to maintain an airway gives the patient a better chance of survival. The ACCCN was chosen as they are a recognised training provider for this level of skill acquisition and their course reflected the aims of this programme. The hospital paid for the nurses to attend and is committed to paying for their updates and reaccreditation.
Topics included: cardiac arrhythmias and early clinical management. Defibrillation and intubation.

IV Cannulation
It was identified that within the nursing staff there were only a small number of staff competent in the insertion of an intravenous cannula. This is an essential skill for rural nurses as the insertion of a cannula provides an access for the administration of emergency drugs and fluids. These components are vital in a resuscitation scenario.

Airway Management
This was included as the enrolled nurses did not attend the advanced life support component and the registered nurses expressed that more clinical skills practice opportunity would be of benefit to them. As staffing in the rural hospitals is very different from larger hospitals it was felt that it was essential for out enrolled nurses to learn how to manage airways in an emergency situation. Especially as it may be the registered and enrolled nurse are the only staff members available to initiate this essential first line emergency treatment. The nurses will revise Guedel airway insertion and learn LM Mask insertion.
Neurological Assessment

The alteration in a patient’s neurological status is a common presentation to the emergency department. In particular concussion, cerebral haemorrhage or a mental health issue. The ability to assess and interpret a patient’s neurological condition is an essential skill for all nurses. This subject looked at how to assess and interpret these observations and conditions that might alter the neurological status of the patient. This subject will look at factors than can alter a patient’s conscious state and how to assess and initiate emergency treatment.

Diabetic Emergencies and Shock

The nursing staff identified this as an area that they felt required refreshing and extending their clinical knowledge. As we have a high proportion of patients who are diabetics it is essential that staff are familiar with emergency treatment of this group of patients. The shock component was included as the hospital had recently had a death of a patient from septic shock and the staff had verbalised to me that they really didn’t understand what had happened to the patient. It was felt that this was an area that needed further exploring, as it was not unreasonable to have this scenario present itself again. All areas of shock are included not only septic shock.

Orthopaedic (Fracture) Management

As this is a common area of presentation within the emergency department it was felt appropriate to include this subject. The subject covers the early management of the patient and preparing them for transfer. (Mt. Barker would not keep a patient with a fracture for any longer than a few hours) The subject also covers sprains, and soft tissue injury (a common presentation especially through winter with football and netball) The interpretation of neurovascular observations is covered in depth as it was shown that this was an area that the staff felt required revision.
Paediatric Emergencies

This was an area that was defined as the area that caused most concern for the staff. The hospital has many paediatric presentations (especially at night) and the staff felt the least confident in assessing this group of patients. By bringing in a paediatric expert nurse it is anticipated that we will be able to broaden the nurses knowledge base and confidence in dealing with the paediatric patient and their parents.

Obstetric Emergencies

MBDSM is the only birthing unit within the Adelaide Hills area. We have a very busy maternity unit. Obstetric emergencies present both as walk in and in the labour room. The staffing is such that is vital for non-midwives to be able to assist the midwife in these situations or be able to initiate first line treatment in the event that the midwife is not initially available.

Mandatory Reporting

This subject was included as it was identified that some of the nursing staff were unsure of their role in mandatory reporting. As we are in a position where by the hospital may be the first point of identification it is essential that the staff are aware of their role, responsibilities and how to handle these situations.

Pharmacology

As the hospital is anticipating the introduction of standing medication orders for these nurses to follow in the absence of a medical officer it was felt that a refresher on pharmacokinetics and drug interactions was needed.
Scope of Practice

As we are challenging the nursing staff to extend their role in clinical practice, it was felt that a session with a representative from the Nurses’ Board of South Australia would allow the nurses to question and explore how this will impact on their scope of practice and career pathway.

Communication skills

As it has already been identified that communication was a major issue between the nursing staff, medical officers and the general community it was mandatory to include a session on this topic. We focused on conflict resolution, telephone skills and how to deal with the difficult person. This session was designed to allow the nurses time to express their frustrations and to encourage them to problem solve as a team.

Policy Development

As we are exploring new pathways for rural nurses, it was felt that it would be of benefit to include a session on policy development that would reflect the new direction of their clinical practice. This session would assist nursing administration to formulate policy and protocols that would support the extended practice role.

Methodology of implementation

The programme was designed to run over 9 study days that are spaced at two week intervals. The students will each received the self – directed learning packages prior to the study day to allow enough time to complete the package. The nursing staff will be paid by the hospital to attend each study day.

The programme has been designed using both self – directed learning packages that include appropriate readings and classroom support. The classroom sessions will include tutorial style sessions, discussion and small group work and practical experience.
Who will teach the programme?

The clinical expertise of some of the Mt. Barker Hospital nursing staff is being utilised in the areas of orthopaedic emergencies and obstetric emergencies. For the sessions on communication Ro Horden who is a senior social worker from Adelaide Hills Community Health Service was used. The South Australian Ambulance Service (SAAS) was involved due to their close association with the hospital in times of emergencies. The ambulance officers have both the knowledge and clinical expertise to support their role in the teaching of this course.

The nurse educator for the emergency department at the Women’s & Children’s Hospital will take the paediatric session. Child, youth family health service will take the mandatory update session. A representative from the Nurses Board of S.A. will come along to examine the scope of practice with the students.

Resources required for the programme.

For the following subjects a self – directed learning package is formulated to support classroom learning. We have not included all subjects as it was felt that this was enough for the time frame of the course.

1. IV Cannulation
2. Airway Management
3. Diabetic/Neurological and Shock emergencies
4. Paediatric and Obstetric Emergencies
5. Triage
6. Common Presentations to an emergency department (eg: Orthopaedic and cardiac emergencies)

For these packages to work, current readings and references are needed to ensure the staff is getting the correct information that will support their scope of practice.

SAAS are providing the practical support with practice arms for cannulation insertion and dummies for airway insertion. This equipment is essential to allow the students time to practice new skills and to allow time for the SAAS staff to correct any bad technique prior to assessment.
The final study day is a clinical assessment day where the students will be given patient scenarios (which reflect the study programme content) and they will be assessed on:

1. How they perform the triage assessment.
2. What score they give the patient and does this reflect the patient’s condition.
3. What initial first line treatment do they instigate for the patient and what is their rationale for this course of action. I.e.: does the nurse understand what the clinical picture reflects of this patient’s condition.
4. When would they (if at all) notify the medical officer on call or initiate transfer to a bigger health facility?
5. Documentation of the MR10 and any other paperwork involved in the care of the patient. E.g: transfer forms etc.
6. Can the nurse verbalise what is the anticipated treatment of this patient and why?

Course Evaluation:

The aim of the evaluation of this course to examine if the programme reflects the aims and objectives of the programme. Each study day and package will have an evaluation form for students to complete. This will enable a report to be formulated that reflects the outcomes of the forms. This will provide a forum for discussion and objective review of the outcomes.

The Hospital will seek outside evaluation through one of the tertiary institutions in South Australia. This evaluation will help to validate what we have developed and provide an alternative view of whether or not we have achieved our stated aims.

Changes to service delivery

We will be looking at anecdotal information on how the staff have adapted to their increased clinical knowledge and how they have applied this information to their clinical setting. This will also be supported by review of the MR10 to examine the documentation and the care provided by the nursing staff.
Sustainability of the programme

To sustain the programme the hospital will need to look at whether the project officer position can be sustained or incorporate this role into one of the senior nurses positions. The course will sustain the nurses by providing 6 monthly update and practical sessions to allow learned clinical skills to be maintained. Refresher days will also be offered as new developments in emergency care are made. The staff will also be supported by the introduction of a job description, hospital policy and clinical guidelines. With these in place the staff will be supported by the hospital in the nursing management of the patient in the emergency department.

Cost of the Programme:

Costing of the programme will be dependant on the number of participants in each group. This costing is based on the first group.

Project Officer:
- RN3 Band A year 1 including all costs 0.5FTE $39,901.00
- ASO2 Administrative support 4 hrs/week (in kind) $5,157.45
- Photocopying and printing (in kind) $2,000.00
- TOTAL $47,058.45

Applicants
- Registered Nurses X 7 (8 hour shifts) $2,065.00
- Registered Nurses X 7 Advanced Life Support @ $295.00 each $2,065.00
- Enrolled Nurses X 6 (8 hour shifts)

Guest Speakers
- Women’s and Children’s Hospital $200.00
To date this is the only speaker that has charged The hospital for speaking to staff.
Conclusion

This course will allow the nursing staff of this health facility to explore and expand their knowledge in the first line emergency management of clinical presentations to the Accident and Emergency Department. With the ongoing current situation with medical officers it is crucial that the hospital is able to maintain an emergency service to the community. This course will assist the nursing staff to maintain this service with a high level of clinical expertise and confidence in their ability. This is not a new career path for the nurses but rather a validation of the multiskilling already required of rural nurses.

Lastly, this course will allow the nursing staff the opportunity to become empowered by this knowledge that will flow on with the standard of care that our patients will receive when they present to the emergency department. This will allow the service to be maintained when there is no onsite medical or paramedical support.