

---

**REPORT ON THE SURVEY OF  
SPECIAL CARE NURSERY  
REQUIREMENTS**

---

# October 2000 Contents

**Overview**..... **i**

**Introduction**..... **1**

Background..... 1

Survey Method..... 1

Response Rate..... 2

Analysis of the Survey..... 2

**Survey Results**..... **3**

Professional Links with Level 3 NICUs..... 3

Staffing..... 4

Professional Development..... 5

Barriers to Attending Professional Development Activities..... 8

Intersite Visits and Staff Exchanges..... 10

Consultation..... 11

Communication..... 12

Resources for Nursing Staff..... 12

Resources for Medical Staff..... 13

Funding for Professional Links..... 14

**Conclusion**..... **16**

**Appendix 1: Survey of Level 2 Special Care Nursery Requirements**..... **17**

---

## Overview

The *Survey of Special Care Nursery Requirements* was undertaken to identify the educational and professional requirements of staff working in Level 2 Special Care Nurseries (SCNs) and how these needs could be met through a professional link with one or more of the Level 3 Neonatal Intensive Care Units (NICUs). Whilst the majority of Level 2 SCNs valued the professional support they received from NICU staff, the survey highlighted a number of issues in relation to the professional links as well as areas in which Level 3 staff could provide further expertise and support.

## Issues

The key points identified by the Survey are summarised below.

### Professional Links

- Whilst the majority of Level 2 nurseries have established a professional link with one or more of the Level 3 NICUs, the nature of these links varies in respect to the frequency and the type of contact.
- Significantly more metropolitan hospitals than rural hospitals have a medical professional link with a Level 3 NICU (80 per cent and 50 per cent respectively). However, there is very little difference between rural and metropolitan hospitals in the development of a professional link for nursing staff.
- As professional links are established for different purposes, Level 2 SCNs may have a link with more than one of the Level 3 NICUs.
- Whilst some SCNs do not have a formalised link with a Level 3 unit, they may have an informal link with one or more of the NICUs for advice and support on specific issues.
- The Newborn Emergency Transport Service (NETS) is an important source of advice and support for both nursing and medical staff.

### Staffing and Education

- Providing appropriate training programs is a challenge as most staff work across a range of areas and/or are not working on a permanent, full time basis in the SCN.
- With midwives comprising almost 90 per cent of the SCN workforce, training in basic neonatal skills is a priority, as current midwifery training does not prepare midwives for caring for the premature and sick newborn baby.
- The continuing education of trained Level 2 nursing staff is required to enable them to maintain and advance their skills, particularly as babies with more complex conditions are being cared for at Level 2 SCNs.
- SCN staff access a range of inservice activities such as intersite visits and staff exchanges, external courses, internally organised training sessions and 'on the job' training. However, professional development programs are generally conducted on an 'ad hoc' basis. A more coherent and structured approach to educational programs is needed to meet the varying skill levels and expertise of SCN staff.

---

## **Consultation and Communication**

- Closer working relationships could be established by improving mechanisms for communication between SCNs and NICUs.
- As a result of staff being required to perform increasingly complex procedures, more advice and training is required on specific clinical issues such as management of premature babies transferred from Level 3 units, of babies requiring Continuous Positive Airways Pressure (CPAP), of babies of chemically dependent mothers and of babies with chronic liver disease.

## ***Practical Support for Level 2 Staff***

Survey respondents proposed a number of specific measures that could be set in place to address some of the professional needs of Level 2 SCN staff. Some of these measures could be implemented through a professional link with one or more of the Level 3 units whilst others would involve a more system wide approach. Resources and supports that were suggested by respondents are summarised below.

## **Education and Training**

- Offer update sessions for paediatric staff on a six-month basis which are coordinated across the four Level 3 NICUs.
- Conduct training programs at suitable times and at regional locations to facilitate access to professional development activities.
- Increase incentives for staff to undertake further development and training, such as the provision of scholarships, paid study leave or reimbursement of expenses.
- Provide more opportunities and assistance for Level 2 SCN nursing staff to undertake rotations to Level 3 NICUs to assist them in gaining more clinical experience and broadening their skill base.
- Provide education in accessing current technology to expand training opportunities for Level 2 SCN staff and facilitate retrieval of up to date information. In particular, make greater use of technology by producing videos on topics of relevance to Level 2 SCN staff, video taping Level 3 meetings and education sessions and utilising video conferencing for case reviews, clinical updates and information exchange.

## **Clinical Support and Collaboration**

- Develop a regularly updated portfolio, listing designated experts within each NICU and their contact details to facilitate information exchange.
- Develop a Neonatal Handbook that provides Level 2 SCN staff with a uniform approach to clinical management and disseminates best practice information on common conditions and protocols.
- Improve communication in relation to neonatal transfers by providing more comprehensive patient information at the time of transfer and encouraging Level 3 hospitals to provide more feedback about the diagnosis and prognosis of babies referred to their units.
- Introduce shared equipment purchases to enhance the buying power of hospitals.

---

# Introduction

## Background

The Neonatal Services Advisory Committee (NSAC) has been established to provide advice to the Department of Human Services on various issues relating to the provision of neonatal care in Victoria. In line with the recommendations of the *Report on Victorian Neonatal Care Services*, the NSAC, through the Neonatal Professional Links Sub-Committee, is exploring how links could be developed and strengthened between the Level 3 NICUs and the Level 2 SCNs, particularly with respect to professional and educational advice and support. To assist the committee in its consideration of the professional and educational requirements of staff working in Level 2 nurseries, a survey was undertaken to ascertain their views.

## Survey Methodology

A self-enumeration questionnaire was used to collect information on how the educational and professional development needs of staff working in Level 2 SCNs could be met through a professional link with one or more of the Level 3 NICUs.

Two surveys were forwarded to each of the 18 Level 2 hospitals with SCNs. Both the Nurse Unit Manager and the Medical Director were requested to complete a separate survey. Whilst both surveys contained identical questions, it was considered important that separate surveys be completed as the professional and educational needs of the nursing staff may differ from those of the medical staff. A copy of the survey is presented at Appendix 1.

Upon receipt of the completed surveys, a number of follow up telephone calls were made in order to clarify some data items. Clarification was mainly sought in relation to the qualitative questions - questions 5, 6 and 7. Overall, the survey provided some useful information on the needs of staff working in Level 2 SCNs and the role of Level 3 NICUs in meeting these needs. However, the following changes to the questionnaire may have reduced the need for the amount of follow up that was undertaken.

1. Some respondents experienced difficulty in categorising their responses within the relevant question, as there was some overlap in the issues examined. Changing the question sequence may have addressed this issue. For example, it would have been more logical for question 7 to precede question 6, that is, to seek information about the educational needs of staff before asking how these needs were being met or could be met through a professional link with the Level 3 NICUs.
2. As open-ended questions take more time to complete than closed questions, some respondents may not have provided comprehensive responses due to time constraints. Replacing some of the open-ended questions with a closed question and providing a section for further comment may have encouraged respondents to cover a wider range of issues in some instances.
3. Equivalent Full Time (EFT) staffing figures were provided by some respondents in response to question 3 rather than the actual number of people working in the SCN. Whilst it may have been useful to collect EFTs as well as the number of individual

---

staff numbers, particularly for SCNs with a large number of staff working on a rotational basis, a considerable amount of follow up was required to obtain consistent responses.

4. Highlighting key words in some questions may have made the intent of the question more clear. For example, it was unclear from the responses to question 5 whether respondents were providing details on the current situation in respect to establishing professional links with Level 3 NICUs or on the preferred method (the latter being the intent of the question).

## Response Rate

A total of 32 surveys were returned, which is a response rate of 89 per cent. Nursing surveys were returned by 17 (or 94 per cent) of the Level 2 SCNs and medical surveys were returned by 15 (or 83 per cent) of the Level 2 SCNs as shown in Table 1. The return rate was slightly higher for non-metropolitan hospitals than for metropolitan hospitals with 91 per cent and 86 per cent respectively.

**Table 1: Number of Returns**

Region	Total No. of SCNs	Nursing Surveys		Medical Surveys	
		No.	%	No.	%
Non-Metropolitan	11	10	91	10	91
Metropolitan	7	7	100	5	71
<b>Total</b>	18	17	94	15	83

## Analysis of the Survey

Two approaches were used in analysing the survey results. Questions 3, 4, 8, 9 and 10 have been analysed separately as these questions relate to discrete areas such as staff profile, identification of professional links, barriers to attending professional development activities, evaluation of resources and prioritising activities for the allocation of the funding.

On the other hand, question 5 (establishment and development of professional links), question 6 (outcomes from professional links) and question 7 (education) were grouped together and analysed on the basis of themes. These questions relate to the professional needs of nursing and medical staff working in Level 2 SCNs and how these needs are being met, or could be met, through professional links with the Level 3 NICUs. As the responses to these questions highlighted a number of recurring themes – professional development, intersite visits, consultation and communication - it was considered that the analysis would be more meaningful if the questions were analysed on a this basis.

---

# Survey Results

## Professional Links with Level 3 NICUs

Whilst the majority of Level 2 hospitals indicated that a professional link had been established with one or more of the tertiary hospitals providing neonatal care, the data suggests that the nature of these links varies across the system in respect to the frequency and type of contact. In most cases, contact between the two levels of nurseries occurs in relation to a specific issue. However, a small number of Level 2 SCNs have processes in place for more frequent and formalised contact with Level 3 hospitals for information exchange and advice and assistance on training and clinical management issues.

The data shows that 71 per cent of Level 2 SCNs have a nursing professional link with a Level 3 NICU and 60 per cent have a medical link. The Royal Women's Hospital was the most frequently nominated nursing professional link. Approximately 40 per cent of SCNs indicated that they have established a nursing link with the Royal Women's Hospital. On the other hand, slightly more Level 2 SCNs have a medical professional link with Monash Medical Centre (27 per cent) than with the Royal Women's Hospital (20 per cent). Table 2 shows the number of SCNs that have a professional link with each Level 3 NICU.

**Table 2: Nominated Professional Link with a Level 3 NICU**

Level 3 NICU	Nursing Link		Medical Link	
	No.	%	No.	%
Mercy Hospital for Women	2	11.8	1	6.7
Monash Medical Centre	2	11.8	4	26.7
Royal Children's Hospital	1	5.9	1	6.7
Royal Women's Hospital	7	41.2	3	20.0
None	5	29.4	6	40.0
<b>Total</b>	17	100.1	15	100.1

Note: Totals exceed 100 per cent due to the effect of rounding.

In general, where a SCN has a nursing and a medical professional link with a Level 3 NICU, the link is with the same hospital. In the seven instances where SCNs nominated both a medical and a nursing professional link with a Level 3 NICU, only one reported that the link was with a different hospital.

There was a significant difference between rural hospitals and metropolitan hospitals in the establishment of a medical professional link with the Level 3 units. Whereas 80 per cent of metropolitan hospitals reported that a medical professional link had been established, only 50 per cent of rural hospitals had formed a medical professional link with a Level 3 NICU. On the other hand, there was very little difference between rural and metropolitan hospitals in the development of professional links for nursing staff, with approximately 70 per cent of both groups indicating that they had established a nursing link with a Level 3 hospital.

The data also showed that, in many cases, professional links have been established with more than one Level 3 unit. As professional links are developed for different purposes, Level 2

SCNs may have links with more than one of the Level 3 NICUs. Of the 12 Level 2 SCNs that nominated a primary nursing link, nine (or 75 per cent) indicated that they also had contact with one or more of the other Level 3 NICUs for advice and support on clinical, equipment or protocol issues and/or for professional development. Similarly, seven (or 78 per cent) of the Level 2 SCNs that nominated a primary medical professional link also reported that a link had been formed with one or more of the other Level 3 hospitals.

Furthermore, even though some SCNs do not have a formalised professional link with a Level 3 unit, they may have informal links with one or more of the Level 3 hospitals. Five SCNs that reported that no formal nursing professional link had been established, also reported that they had contact with staff from a Level 3 unit for advice and support on specific issues. In comparison, of the six SCNs that reported no formal medical professional link had been established with a Level 3 unit, only three reported that they had contact with a Level 3 unit for professional advice and support.

The data also showed that NETS is an important source of advice for both nursing and medical staff. Nine hospitals (or 50 per cent) indicated that either their nursing staff, medical staff or both contacted NETS for advice. However, these figures may understate the role NETS plays in providing advice and support as the question about professional links only referred to Level 3 hospitals, and some respondents may not have considered including NETS in their response, or they may have considered that the link with the Royal Women’s Hospital included NETS.

**Staffing**

The survey contained a question on the number of staff working in Level 2 SCNs as well as the basis on which they worked (permanent or rotational) in order to identify potential training issues. An issue highlighted by a number of respondents was the difficulty in providing appropriate training programs for staff who work across a range of areas and/or are not working on a permanent, full time basis in the SCN. The results show that:

- The majority of Level 2 SCN staff work on a rotational basis (approximately 58 per cent).
- Midwives comprise the largest proportion of the SCN workforce (about 66 per cent of the total workforce and 88 per cent of the nursing workforce).
- A significant number of the medical staff are registrars or residents who are at the hospital for a brief period of up to six months (approximately 30 per cent).
- Many medical staff and nursing staff in Level 2 SCNs work across a range of areas. For example, the Nurse Unit Manager is usually responsible for other units as well as the SCN and paediatric staff generally have their own practices as well as working in the SCN.

**Table 3: Staffing Profile**

<b>Medical Staff</b>	<b>Perm.</b>	<b>Rot.</b>	<b>Nursing Staff</b>	<b>Perm.</b>	<b>Rot.</b>
Staff Paediatricians	4	5	Nurse Unit Managers	14	1
Visiting Paediatricians	38	10	Associate Unit Managers	10	0
Registrars	0	15	Midwives	75	156
RMOs/HMOs	0	16	SENs/MCNs	5	1
<b>Total</b>	42	46	<b>Total</b>	104	158

---

## Professional Development

Significantly more hospitals have a program of continuing inservice education for nursing staff than for medical staff. A total of 14 (or 82 per cent) of Nurse Unit Managers reported that there was a continuing inservice program for nursing staff whereas only five (or 33 per cent) of Medical Directors reported that there was a continuing inservice program for medical staff.

The survey requested information about the type of professional development activities undertaken by staff rather than the frequency of their involvement in these activities. Whilst respondents indicated that a range of educational and professional development activities were undertaken, it is unlikely that all activities were reported as discussed above under 'Survey Methodology'. The training activities noted by respondents have been grouped into the five broad categories of intersite visits/staff exchanges, external courses, internal training, 'on the job' training and other and include, but are not limited to, the following:

### *Intersite Visits and Staff Exchanges*

- Exchanges to Level 3 NICUs
- Level 3 staff visits to Level 2 site
- Level 2 staff visits to Level 3 site

### *External Courses*

- Distance Education Program for midwives offered by NETS/LaTrobe University
- Joint seminars, eg., Victorian Association of Neonatal Nurses seminar, evening seminars for Level 2 and Level 3 nursery staff
- NETS education activities, eg., 'Stabilisation of the At Risk Neonate', 'Resuscitation'
- Annual Royal Women's Hospital workshop for medical staff
- Three month Level 2 course conducted by Women's and Children's Health

### *Internal Training*

- 'In-house' courses conducted by experienced staff for less experienced staff, eg., courses run by midwives having completed external courses, seminars on topics suggested by nursing staff, weekly tutorials on topics suggested by Hospital Medical Officers
- SCN inservice education conducted by invited Level 3 unit staff
- Training on aspects of Level 2 SCN care for midwives and paediatric staff, facilitated by Associate Unit Manager of the SCN
- 'In-house' orientation for rotating staff (procedures and education sessions)

### *On the Job Training*

- Regular ward rounds with consultant
- Case reviews and clinical updates with a Level 3 consultant
- Phone consultations with NETS, Level 3 staff, the chemical dependency unit
- Regular and 'ad hoc' meetings, including monthly postnatal audit meetings, monthly ward meetings and meetings with consultants

### *Other*

- Professional reading, eg., journals
- Equipment training during upgrades

There was a difference in the type of professional development activities undertaken by nursing staff and medical staff. Whereas external courses comprised the largest proportion of professional development activities reported by nursing staff (45 per cent), ‘on the job’ training was the most frequently reported training activity by medical staff (40 per cent). For both groups, there appeared to be very few opportunities for intersite visits or staff exchanges. The professional development activities undertaken by nursing and medical staff, and the frequency with which they were reported, are shown in Table 4.

**Table 4: Professional Development Activities Undertaken by Nursing and Medical Staff**

Activity	Nursing Staff		Medical Staff	
	No.	%	No.	%
Intersite Visits/Staff Exchanges	1	1.5	2	5.0
External Courses	29	44.6	11	27.5
Internal Training	18	27.7	9	22.5
On the Job Training	15	23.1	16	40.0
Other	2	3.1	2	5.0
<b>Total</b>	65	100.0	40	100.0

### **Educational Needs of Nursing Staff**

Although 82 per cent of Level 2 SCNs reported that a continuing inservice program was in place for nursing staff, the need for a more coherent and structured approach to inservice education in order to meet the diverse needs of SCN nursing staff was highlighted by a number of Nurse Unit Managers. A structured inservice program should take account of training in basic neonatal skills for staff less experienced in neonatal care as well as continuing education for qualified SCN staff.

With midwives comprising almost 90 per cent of the SCN nursing workforce, training in basic neonatal skills was identified as a priority. Midwifery training does not prepare nursing staff for working in a SCN as the course covers general midwifery skills and does not specifically address care of ill newborns. Consequently, few midwives are trained in caring for the premature and sick newborn baby.

*Basic midwifery training is insufficient to cope with “sick” babies.*

*We need more people with specific training in SCN and, specifically, an understanding of long-term premature care.*

Basic skills training identified by respondents included use of surfactant, resuscitation, ventilator care, umbilical catheterisation, infants of diabetic mothers, basic neonatal physiology and immunisation of babies.

Providing experienced staff with ongoing educational opportunities to ‘refresh’ skills and to enable them to keep up to date with current practices and developments was also identified as an important area of need. Frequent up-skilling and education of staff is required as more complex neonatal cases are presenting at Level 2 SCNs. For example, the performance of clinical procedures such as CPAP is becoming increasingly common at Level 2 SCNs and

---

staff require the skills to perform this procedure and to monitor the infants on this level of respiratory support.

A further training issue identified by the survey was that of providing nursing staff with the skills required to deal with a range of social issues associated with caring for sick newborn babies. Due to the changing nature of society and increasing complexities in neonatal care, nursing staff are becoming increasingly involved in supporting distressed families, preparing parents to independently care for their premature baby and dealing with issues such as anger management, breakdown of family structures and drug dependency. There was concern that staff were not well prepared to provide this social support and that specific skills training was required to assist them to manage these situations more effectively.

### **Educational Needs of Medical Staff**

Education for residents and registrars emerged as the most important training area for medical staff. Unlike the nursing staff who work more broadly in midwifery and rotate through the SCN over time, residents and registrars are more transient. They are only working in the SCN for a very brief period and, consequently, need intensive training in basic neonatal skills in a very short time, especially with respect to invasive procedures.

*The major area of weakness is in providing adequately for the needs of inexperienced junior staff during a 3 month term in paediatrics (often with no previous paediatric or neonatal experience), and working a roster where it is impossible to bring more than two out of four of them together at the same time.*

Professional development for junior staff generally takes the form of ‘on the job’ training, involving activities such as ward rounds, seminars and clinical updates with senior medical staff, ‘hands on’ training and informal, case based training. As the name implies, ‘on the job’ training relies very much on support from the paediatric staff. However, there is only a limited amount of training that can be provided during the short time that residents are working in the SCN as paediatricians are generally not full time hospital employees and have commitments to their own practices as well as care of babies in private hospitals.

To address some of the training issues for residents and registrars, it was suggested that a handbook and/or videos on routine SCN procedures as well as professional training packages be developed to support ‘on site’ training. It was also suggested that opportunities be provided for residents to develop basic skills in the assessment and management of common neonatal problems, skills that are also relevant to general practice.

The professional development needs of paediatricians can generally be met by attending conferences and seminars on an occasional basis to keep up to date with the latest management protocols and techniques. Paediatricians are encouraged to be involved in a range of continuing educational activities through participation in the Maintenance of Professional Standards (MOPS) program. This is a voluntary program organised by the Royal College of Physicians. However, as MOPS has no specification that a certain percentage of credit points must be accumulated in neonatal skills, paediatricians must seek out appropriate training opportunities. Whilst update seminars are conducted by all of the Level 3 hospitals, there is very little coordination between the four units in the timing or subject matter of the seminars. One respondent suggested that the four Level 3 units could organise a coordinated program of six monthly updates for paediatric staff. These sessions would entail each neonatal unit providing an update every two years.

---

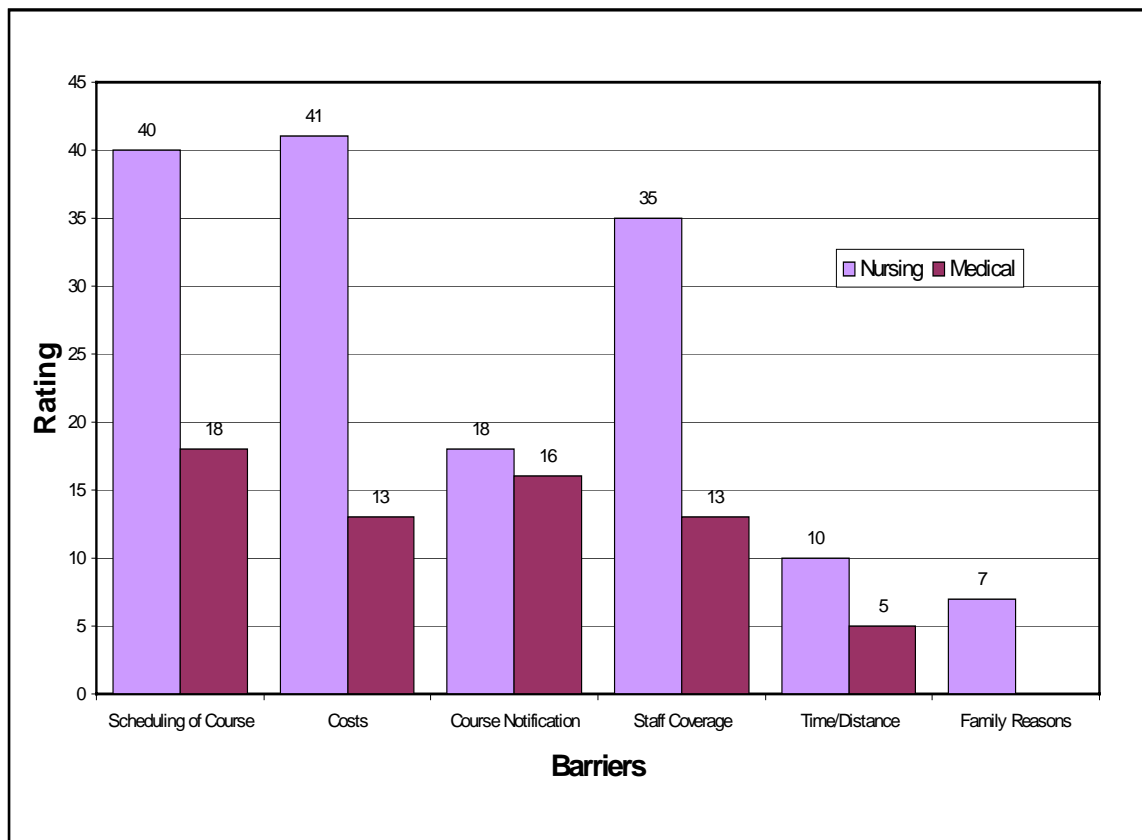
## Barriers to Attending Professional Development Activities

Although there was considerable support for greater access to professional development activities, opportunities to attend training programs are limited, to varying degrees, by a number of factors:

- Costs associated with attending courses, including transport, accommodation, registration fees and child care;
- Scheduling of courses;
- Timely notification of courses, including adequate advance notice and advice that courses are being conducted;
- Covering staff absences;
- Time required to travel to courses (more relevant for rural staff than metropolitan staff as courses are usually held in Melbourne); and
- Family reasons such as lack of child care facilities and family commitments.

The barriers to staff accessing training activities are shown in Figure 1. A scoring system, based on the number of options ranked, was used to determine the relative importance of each of the identified barriers. Where a respondent ranked five options in priority order, the most significant barrier was given a score of five and the least significant barrier a score of one. On the other hand, where a respondent ranked only three options, the most significant barrier was given a score of three and the least significant barrier a score of one.

**Figure 1: Barriers to Attending Professional Development Activities**



---

## **Barriers for Nursing Staff**

The costs associated with attending courses as well as the time at which some courses are scheduled were given as the main barriers to attending training courses for nursing staff.

*It is difficult for staff with young children to travel to Melbourne, as they have to pay for child minding, petrol, registration fees and have the day off.*

*Christmas/New Year is a particularly bad time to expect staff to be a three and a half hour drive away from families.*

Covering staff absences was also identified by nursing staff as a barrier to attending training courses. Backfilling of positions is difficult due the shortage of appropriately skilled staff to work in the SCN and to the costs involved in employing replacement staff. In addition, at the time of the survey, there were few incentives for nurses to undertake further development and training, such as paid study leave or reimbursement of fees. Furthermore, the nursing career structure did not encourage nurses to upgrade their skills as it could take many years of full time employment for nurses to recoup the costs of studying, including lost wages.

*There needs to be some financial support for staff to undertake additional qualifications such as the Graduate Diploma in Neonatal Nursing.*

The recent announcement by the Government of a qualification allowance to recognise additional training, the introduction of senior nursing positions and paid study and conference leave may encourage nurses to undertake further development and training, although it may be some time before the positive results of these initiatives are realised.

## **Barriers for Medical Staff**

The data suggests that there are fewer obstacles for medical staff in attending training courses than for nursing staff. Whereas medical staff usually selected only one of the options from those given, nursing staff generally ranked a minimum of three barriers. In addition, there was less disparity in the responses provided by medical staff than there was in the responses provided by nursing staff. The four options provided on the survey (course scheduling, costs associated with attending courses, course notification and covering staff absences) were all rated similarly by medical staff, possibly reflecting individual circumstances.

Staff coverage was an important consideration for paediatricians working in a 'solo practice'. Scheduling of courses on a week day was also noted by a number of respondents as being a barrier to attending course, especially for rural paediatricians. Family reasons were not cited by any of the medical staff as being a barrier to attending professional development activities.

However, the disparity between responses provided on the medical surveys and those provided on the nursing surveys may, in part, be due to the question not being as relevant for medical staff. A number of medical respondents qualified their response to this question by commenting that there were not many training opportunities available for medical staff.

## **Addressing the Barriers**

The following specific measures were suggested as a means of increasing opportunities for staff to access information and to attend professional development activities:

### ***i. Local Training Sessions***

The majority of training courses are held in Melbourne. Rural staff in particular reported difficulties in attending courses in Melbourne because of the cost and time involved in travelling. Conducting more professional development activities in the

---

local area would overcome the barrier of distance. In addition, where regional training sessions are organised, it would be more convenient to schedule sessions during the evening as staff from a number of hospitals may be able to attend at the one time.

**ii. *Weekend Courses***

Scheduling courses for the weekend rather than during the week would make it easier for both medical and nursing staff to attend professional development activities more frequently. Coverage for staff attending training courses held during the week is an issue, particularly for rural staff when courses are held in Melbourne.

**iii. *Technology***

Greater use of technology would enable information to reach more people as staff could access it in their own workplace rather than having to travel to training courses. Suggestions for making information more accessible through technology included video taping Level 3 meetings and education sessions, posting notes of meetings and lectures on a website, making greater use of video conferencing, producing videos on specific topics and circulating information via email.

**iv. *Reference Materials***

Staff reported difficulty in accessing up to date information on latest practices and developments. A newsletter on contemporary issues, regular updates via bulletins and/or a handbook on standard SCN procedures would provide staff with immediate access to current reference materials.

**v. *Incentives***

Financial assistance to undertake further development and training such as scholarships, paid study leave or reimbursement of expenses would encourage more people to access professional development opportunities, particularly nursing staff.

## **Intersite Visits and Staff Exchanges**

There was a high level of support for intersite visits and staff exchanges with the majority of hospitals indicating that these were an important means of establishing professional links between Level 2 SCNs and Level 3 NICUs. Intersite visits offer staff the opportunity to update skills, gain experience in different areas, increase understanding of facilities in Level 2/Level 3 nurseries and obtain an understanding of issues which affect Level 2/Level 3 nurseries.

*The clinical experience acquired by the few staff who have been seconded to Level 3 units has been most valuable for the ongoing education and skills development of other Level 2 SCN staff.*

The data showed that providing opportunities for Level 2 SCN staff to work in a Level 3 NICU was of higher priority for nursing staff than for medical staff. Of the 17 nursing surveys returned, 16 or 94 per cent showed support for intersite visits and, in particular, nursing rotations, whereas, of the 15 medical surveys returned, only seven or 47 per cent noted the value of intersite visits and/or rotations for medical staff. Interestingly, the possibility of staff exchanges with Level 3 staff rotating to Level 2 nurseries was only suggested on four nursing surveys (or 24 per cent) and one medical survey (or 7 per cent).

However, whilst nurse rotations are strongly supported as a means of assisting Level 2 staff in gaining more clinical experience and developing a wider skills base, it was noted by a significant number of respondents that this was an area of need that was not currently being

---

met. Of the eight nursing surveys that noted that staff exchanges could be fostered through a professional link with a Level 3 NICU, only one reported that this was currently occurring. A number of respondents highlighted the need to provide more support mechanisms to assist Level 2 staff in undertaking secondments to Level 3 NICUs. In particular, the difficulty of replacing staff for an extended period is an important consideration in organising nursing rotations to Level 3 units.

*There are frequent visits from Level 3 staff, but fewer visits of Level 2 staff to Level 3 sites. This could improve if there were more staff to cover Level 2 staff.*

For rural staff, there is also the additional issue of family dislocation when staff are away from home for an extended period of time.

*Rotations between Level 2 and Level 3 would be ideal but many staff in this unit would find it difficult because of family issues as many are married to farmers.*

Rotations between Level 2 nurseries were also suggested as a means of gaining a greater understanding of the operation of other Level 2 units. However, it was noted that staff had less incentive to participate in these exchanges as they were less likely to get as much benefit from them compared to spending time in the Level 3 NICUs.

## **Consultation**

Staff from Level 3 NICUs and from NETS play an important role in providing clinical advice and support to Level 2 staff. Overall, there is a high level of satisfaction with the advice that is being provided and the willingness with which that advice is given.

*System works very well mainly due to the generosity of the medical and nursing staff at the Level 3 units.*

Of the 10 medical surveys and 11 nursing surveys that indicated that clinical advice and support could be provided through a link with a Level 3 unit, 80 per cent and 64 per cent respectively reported that their clinical needs for advice and support were being met. However, some respondents identified a number of specific clinical issues on which they would like more advice and training, such as management and care of:

- Preterm babies transferred from Level 3 units;
- Babies of mothers with chemical dependency;
- Babies with chronic liver disease; and
- Babies requiring nasal CPAP.

Equipment specification and purchase was also identified by Level 2 staff as an area where more advice and support from Level 3 NICU staff would be valuable. A number of respondents suggested that shared equipment purchases could also be introduced to enhance the buying power of hospitals.

Consultation with Level 3 staff generally occurs over the telephone in response to a specific issue needing to be clarified. However, it is sometimes difficult for Level 2 staff to initially contact the appropriate Level 3 person who can provide the assistance required. A number of respondents noted the need for a designated contact to assist in contacting the relevant person on specific issues such as drug dependency, specific treatments, equipment purchases, case reviews or protocols.

---

*Most Level 3 hospitals are always willing to be helpful, however a list of resource people would make contact a lot easier. A lot of time may be wasted on the phone trying to locate the appropriate person to assist with an issue.*

A regularly updated portfolio of designated contacts in each of the Level 3 NICUs and their contact details would assist staff to quickly and easily contact the appropriate person. Whilst respondents did not identify the need for a portfolio of designated Level 2 staff, it may also be appropriate to develop a similar contact list for SCN staff.

## **Communication**

Whilst the importance of communication in developing good professional relationships between Level 2 and Level 3 staff was highlighted by a number of respondents, there was very little information specifically provided about strategies for improving information exchange.

One area that both medical and nursing staff identified for improved communication was in relation to neonatal transfers. A number of respondents suggested that more comprehensive patient information should be provided at the time of transferring a baby from a Level 2 SCN to a Level 3 NICU and vice versa. Furthermore, some respondents also commented that they would like more feedback regarding the diagnosis and prognosis of babies referred to the Level 3 hospitals. As one respondent commented:

*Lack of feedback is a major barrier to good relations.*

Closer working relationships could be established by improving the communication mechanisms between the two levels of nurseries. The survey results suggest that there are very few occasions on which Level 2 staff meet with Level 3 staff. Only about 20 per cent of Level 2 SCNs indicated that they met regularly with staff from the Level 3 units to discuss case histories, clinical practices and management issues. The annual Royal Women's Hospital workshop was also identified as an opportunity for medical staff to maintain contact with colleagues.

A number of respondents signalled their intention to foster stronger professional relationships with the Level 3 NICUs through the development of more formal professional links. Opportunities for initiating and maintaining contact between Level 2 and Level 3 staff should be encouraged, such as joint seminars and workshops, intersite visits, regular meetings, involvement in committees, journal clubs and joint projects.

## **Resources for Nursing Staff**

Nursing staff rated NETS education activities and the staff from Level 3 NICUs as the most valuable resources, with 82 per cent rating them as 'very valuable'. However, one respondent, whilst noting that Level 3 unit staff had the potential to be an extremely valuable resource, rated them as 'not valuable' due to the many demands on their time.

Professional development courses were also rated very highly by nursing staff with 65 per cent of respondents rating training courses as 'very valuable'. Not surprisingly, slightly more respondents rated local seminars as 'very valuable' (71 per cent of respondents). As noted above, having access to training activities in the local area means that there is very little travel time lost and costs are reduced.

Support for electronic resources was more divided. Whilst more than half the nursing surveys rated electronic resources as ‘very valuable’, there was more support for electronic resources amongst metropolitan hospitals than rural hospitals. Six metropolitan SCNs (or 86 per cent) rated electronic resources as ‘very valuable’ compared with only three rural SCNs (or 30 per cent). Access to computer facilities may account for this discrepancy as the data suggests that staff in rural SCNs have less access to computers than staff in metropolitan SCNs.

Other Level 2 SCN staff were seen as the least valuable resource with six respondents (or 36.3 per cent) rating them as ‘not valuable’. Table 5 shows the assessment of resources by nursing staff.

**Table 5: Evaluation of Resources By Nursing Staff**

Resources	Very Valuable		Valuable		Not Valuable		No Response	
	No.	%	No.	%	No.	%	No.	%
Videos	7	41.2	10	58.8				
Written Materials	7	41.2	10	58.8				
Electronic Resources	9	52.9	6	35.3	1	5.9	1	5.9
NETS Activities	14	82.4	3	17.6				
Training Courses	11	64.7	6	35.3				
Local Seminars	12	70.6	5	29.4				
Own Level 2 Staff	5	29.4	12	70.6				
Other Level 2 Staff	2	11.8	9	52.9	6	35.3		
Level 3 Staff	14	82.4	2	11.8	1	5.9		

Note: Totals may not equal 100 per cent due to the effect of rounding.

## Resources for Medical Staff

Overall, medical staff gave individual resources a lower rating than those given by nursing staff with resources generally being rated as ‘valuable’ rather than ‘very valuable’. Medical staff also rated more resources as ‘not valuable’ compared to nursing staff.

Amongst medical staff, local seminars were rated as the most valuable resource with 67 per cent of respondents rating them as ‘very valuable’. There was slightly more support for local seminars amongst rural staff than metropolitan staff, with 70 per cent of rural SCNs rating local seminars as ‘very valuable’ compared with 60 per cent of metropolitan SCNs.

*Seminars given within a reasonable travelling distance at a workable time is the most valuable resource at present.*

NETS education activities and electronic resources were also considered to be ‘very valuable’ by almost 50 per cent of respondents. In both instances, more rural hospitals rated these resources as ‘very valuable’ compared to metropolitan hospitals. In commenting on the value of electronic resources, a number of respondents noted that having access to tapes, summaries or videos of meetings and lectures would expand opportunities for professional development. Video conferencing was also seen to be an important area that could be further developed for

information exchange. It was further noted by one respondent that it would be extremely valuable to be able to send digital images to neonatologists for discussion and advice.

Level 2 staff were also seen by medical staff to be the least valuable resource with 47 per cent and 27 per cent of respondents respectively rating other Level 2 staff and their own Level 2 staff as 'not valuable'.

**Table 6: Evaluation of Resources By Medical Staff**

Resources	Very Valuable		Valuable		Not Valuable		No Response	
	No.	%	No.	%	No.	%	No.	%
Videos	3	20.0	11	73.3	1	6.7		
Written Materials	2	13.3	12	80.0	1	6.7		
Electronic Resources	7	46.7	6	40.0	2	13.3		
NETS Activities	7	46.7	7	46.7	1	6.7		
Training Courses	5	33.3	9	60.0	1	6.7		
Local Seminars	10	66.7	3	20.0	1	6.7	1	6.7
Other Level 2 Staff	2	13.3	5	33.3	7	46.7	1	6.7
Own Level 2 Staff	4	26.7	6	40.0	4	26.7	1	6.7
Level 3 Staff	8	53.3	6	40.0	1	6.7		

Note: Totals may not equal 100 per cent due to the effect of rounding.

## Funding for Professional Links

Funding totalling \$200,000 is available to foster professional links between the 18 SCNs and the four NICUs. Respondents were asked to prioritise activities for the expenditure of this funding. Once again, a scoring system based on the number of options selected, was used to determine the priorities. Only five respondents provided additional options to those presented on the survey form such as providing incentives for staff to undertake training (two respondents), networking with other agencies, funding regional seminars and developing an information system to enable benchmarking. The results are shown in Figure 2.

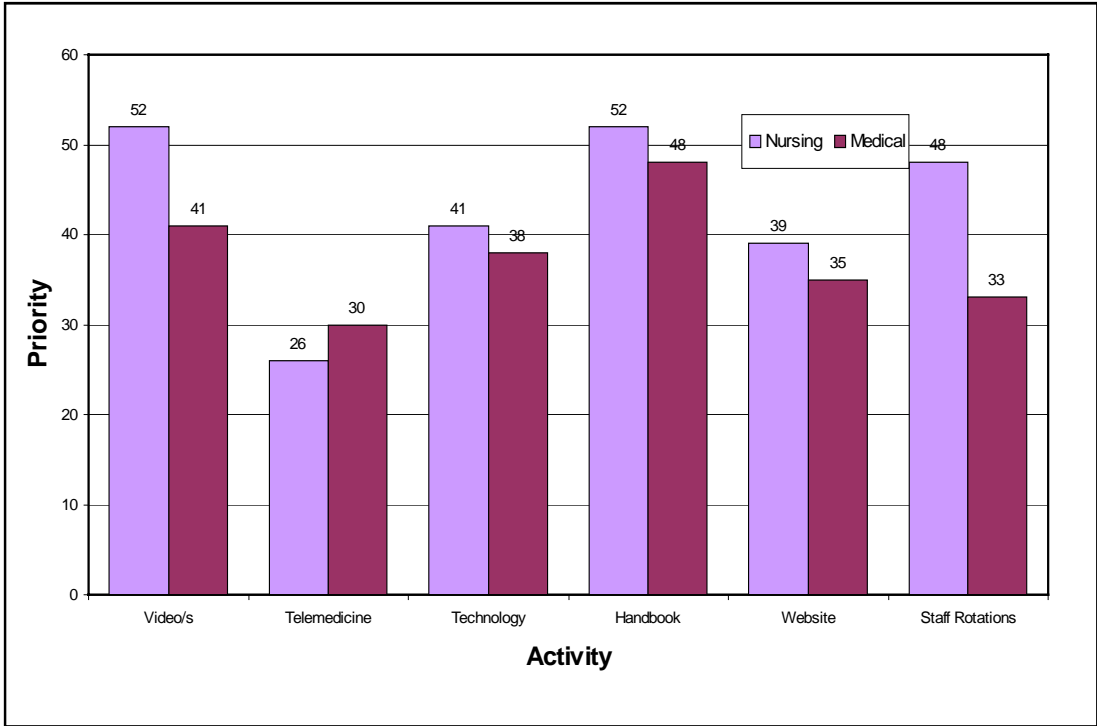
There was strong support amongst both nursing and medical staff for a Neonatal Handbook to provide staff in Level 2 SCNs with guidelines for a uniform approach to the care of babies in SCNs. Whilst information appears to be available through various sources, up to date information on common conditions and protocols is not readily accessible in a single publication. Some Level 2 SCNs have developed their own guidelines, however, updating and revising these on a regular basis is difficult. Assistance from Level 3 NICU staff in developing a Neonatal Handbook was identified by many respondents as an area of need.

There was also strong support amongst nursing staff for videos to be produced on topics of relevance to Level 2 SCN as these can be accessed at any time. Although support for the production of videos was not as strong amongst medical staff, it was rated by them as the second priority for expenditure of the funding.

Improving educational technology of Level 2 and Level 3 hospitals and establishing a centralised website were rated similarly by both medical and nursing staff. A number of respondents commented on the importance of technology in making information more widely available. For example, technology could be used to support the development of the Neonatal Handbook by making it available on a website, thus enabling it to be updated on a regular basis. However, it was also noted by some respondents that, for technology to be effectively utilised by all staff, access to computers would need to be increased and staff would require further training.

As discussed above, staff rotations are of a higher priority for nursing staff than for medical staff. Whilst nursing staff ranked staff exchanges as the third priority for the allocation of the funding, medical staff ranked it as a relatively low priority. Provision of the infrastructure for telemedicine was ranked as the lowest priority by both nursing and medical staff.

**Figure 2: Allocation of Professional Links Funding**



---

## Conclusion

Whilst the majority of Level 2 SCNs value the professional advice and support they receive from staff at Level 3 NICUs, the importance of developing good professional relationships between Level 2 staff and Level 3 staff was highlighted. A number of opportunities were identified for furthering the professional links between the Level 2 SCNs and the Level 3 NICUs.

Closer working relationships would be established by improving mechanisms for communication between the two levels of nurseries. Telephone contact to discuss specific issues appears to be the main form of communication between Level 2 and Level 3 nurseries. The development of a regularly updated portfolio listing designated contacts within each of the NICUs and their contact details would facilitate information exchange, as Level 2 staff would be able to contact the appropriate person more quickly and easily.

In addition, opportunities for initiating and maintaining contact between Level 2 and Level 3 staff should be encouraged such as joint seminars and workshops, intersite visits, regular meetings, involvement in committees, journal clubs and joint projects. Whilst many Level 2 SCNs indicated their interest in formalising communication channels, Level 3 NICU staff may need to be proactive in offering professional and educational advice to their regional SCNs.

Although staff currently access a range of inservice activities, professional development programs are, in general, conducted on an 'ad hoc' basis. A more coherent and structured approach to educational programs needs to be implemented in order to meet the varying skill levels and expertise of SCN staff.

A structured inservice program should use a variety of training methods and resources to ensure the widest possible access of all levels of staff to training opportunities. There was strong support for nursing rotations from Level 2 to Level 3 nurseries as a means of assisting Level 2 nursing staff in gaining more clinical experience and developing a wider skill base. Assistance from Level 3 staff to develop a Neonatal Handbook to provide Level 2 SCN staff with a uniform approach to clinical management and disseminate best practice information on common conditions and protocols was also strongly supported.

However, a comprehensive professional development program will only be effective if the right training environment is provided and there are support mechanisms in place to assist staff in accessing training opportunities. Access to professional development and training activities are limited by a number of factors. Offering training programs at suitable times and at convenient regional locations is critical as is the need for incentives for staff to participate. Providing staff with education in accessing current technology would also expand professional development opportunities and facilitate their ability to retrieve up to date information.

The findings of this survey will be fed back to all Level 2 SCNs in Victoria and also to the Level 3 NICUs so that they may address the issues and implement appropriate solutions.

## Survey of Level 2 Nursery Requirements (for Completion by the Nurse Unit Manager)

This survey has been prepared to assist the Neonatal Services Advisory Committee in identifying educational and clinical requirements of Special Care Nurseries (SCNs) which can be met through professional links with Neonatal Intensive Care Units (NICUs). The Survey comprises three sections:

- Section A: Background Information
- Section B: Professional Links With Level 3 Units
- Section C: Staff Development and Education

Where there is some overlap with the responses provided by the Medical Director, you may wish to provide a coordinated response for those particular questions. If taking this approach, please indicate this by writing 'Refer to Medical Director's Survey' in the appropriate question.

### Section A: Background Information

<b>1.</b>	<b>Name of Hospital:</b> .....
-----------	--------------------------------

<b>2.</b>	<b>Contact Details</b>
Your cooperation in completing this survey is appreciated. Please provide the following contact details for clarification of information if required:	
<i>Name of Nurse Unit Manager:</i> ..... <i>Phone No.:</i> .....	

<b>3.</b>	<b>Staff Profile</b>	
Indicate the number of staff who work in the SCN at this hospital and on what basis.		
<i>Responsibility</i>	<i>Permanent Staff</i>	<i>Rotating Staff</i>
Nurse Unit Manager	<input style="width: 80px; height: 25px;" type="text"/>	<input style="width: 80px; height: 25px;" type="text"/>
Staff Paediatrician	<input style="width: 80px; height: 25px;" type="text"/>	<input style="width: 80px; height: 25px;" type="text"/>
Visiting Paediatrician	<input style="width: 80px; height: 25px;" type="text"/>	<input style="width: 80px; height: 25px;" type="text"/>
Nurses	<input style="width: 80px; height: 25px;" type="text"/>	<input style="width: 80px; height: 25px;" type="text"/>
Registrar	<input style="width: 80px; height: 25px;" type="text"/>	<input style="width: 80px; height: 25px;" type="text"/>
Midwives	<input style="width: 80px; height: 25px;" type="text"/>	<input style="width: 80px; height: 25px;" type="text"/>
Other ( <i>specify</i> ): .....	<input style="width: 80px; height: 25px;" type="text"/>	<input style="width: 80px; height: 25px;" type="text"/>

---

## Section B: Professional Links With Level 3 Units

### 4. Nominated Links With Level 3 Units

- a. Whilst SCNs may have professional links with more than one level 3 unit for educational and clinical assistance, does the SCN at this hospital have a primary link with a level 3 unit?

Yes/No  If 'Yes', name of hospital: .....

- b. If your SCN has a professional link with more than one level 3 unit, please provide details, including the name of level 3 unit/s and the type of support provided eg clinical, education, protocols.

.....  
.....  
.....

### 5. Development of Professional Links

#### a. Establishing Links

What method of linking is the most appropriate for meeting the needs of the nursing staff in your SCN? *Prompts: how links should be established, nominated contact person for links, different types of links (eg visits to level 3 sites, staff from level 3s to visit level 2 sites, staff rotation, organising joint seminars).*

.....  
.....  
.....  
.....

#### b. Plans for Furthering Professional Links

Briefly describe your plans for establishing and maintaining professional links with level 3 units in the future. *Prompts: no change, encourage more/less contact with particular level 3 units, initiate discussions with specific level 3 unit with a view to establishing a link for a particular purpose.*

.....  
.....  
.....  
.....

**Section B: Professional Links With Level 3 Units**

**6. Outcomes from Professional Links**

**a.** Briefly outline the support that you would expect for the specific needs of your SCN and indicate (✓) whether the need is being met or could be met through a professional link with a level 3 unit.

<i>Identified Need</i>	✓ <i>Is Being Met</i>	<i>or</i>	✓ <i>Could Be Met</i>

**b. Additional Comments**

.....

.....

.....

.....

.....

.....

---

## Section C: Staff Development and Education

### 7. Staff Education

a. What are the professional development and educational needs of the nursing staff in your SCN?

.....

.....

.....

.....

.....

b. Is there a program of continuing in-service education for the nursing staff in your SCN? *Yes/No*

c. Please provide details of formal and informal in-service activities undertaken by the nursing staff in your SCN. *Prompts: structured educational programs, on the job training, advice and support from L3 and other L2 unit, NETS education activities, formal or ad hoc meetings, staff exchanges.*

.....

.....

.....

.....

.....

### 8. Barriers to Attending Professional Development Activities

Rank in order of importance (1,2 3 etc) which of the following (if any) have prevented the nursing staff in your SCN from attending training courses during the past 12 months (with the number '1' providing the biggest barrier).

Timing of course	<input style="width: 60px; height: 25px;" type="text"/>	Cost ( <i>transport, accommodation, backfilling position, etc</i> )	<input style="width: 60px; height: 25px;" type="text"/>
Insufficient Advance Notice	<input style="width: 60px; height: 25px;" type="text"/>	Covering Staff Absences	<input style="width: 60px; height: 25px;" type="text"/>
Other ( <i>specify</i> ): .....	<input style="width: 60px; height: 25px;" type="text"/>	Other ( <i>specify</i> ): .....	<input style="width: 60px; height: 25px;" type="text"/>

**Section C: Staff Development and Education**

**9. Resources**

**a.** Indicate (✓) the extent to which the following resources are valuable in assisting the nursing staff in the development of skills.

	<i>Very Valuable</i>	<i>Valuable</i>	<i>Not Valuable</i>
Videos	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Written Materials eg., books, articles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Electronic Resources eg., internet, other hospital sites	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
NETS Education Activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
In-Service Teaching Courses	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Local Seminars	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Staff from Own Level 2 Unit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Staff from Other Level 2 Units	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Staff from Level 3 Units	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other ( <i>specify</i> ): .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**b. Additional Comments**

*Prompts: most valuable resources, names/titles of useful resources, adequacy of current resources, gaps in resources, areas/topics not currently covered, access to resources, availability of resources.*

.....

.....

.....

.....

---

## Section C: Staff Development and Education

### 10. Allocation of Funding for Professional Links

- a. The Neonatal Professional Links Sub-Committee discussed the following options for expenditure of the funding for the establishment of professional links. Please rank in order of priority (1,2 3 etc) which of the following activities would best meet the educational and professional needs of the medical/nursing staff in your SCN. You do not need to put a number in each box.

Production of Videos on Topics Relevant to L2s

Provision of Infrastructure for Telemedicine

Improving Educational Technology of L2s and L3s

Production of a Handbook on Issues Relevant to L2s

Establishing a Central Website

Staff Rotations Between L2 and L3 Nurseries

Other (*specify*): .....

Other (*specify*): .....

### b. Additional Comments

*Prompts: reason/s for selection/s, activities which would not have any beneficial impact.*

.....

.....

.....

.....

### 11. Further Comments

Are there any additional comments you wish to make?

.....

.....

.....

.....

.....