

## **ABSTRACT**

The number of students with specialised health needs attending state schools in Queensland has increased over the past decade. This trend is attributed to a combination of advances in medical treatment, and changes in educational philosophies and legislative mandates. School staff are frequently asked to assist in the delivery of health procedures for students in educational settings. Education Queensland (EQ) employs registered nurses in some state schools to assist school staff supporting students with specialised health needs. However nurses are not routinely available to provide support to all students with specialised health needs in all state school settings.

This paper will report on a project conducted in 2004 to pilot a model for the provision of nursing services to provide training and ongoing supervision and support to school staff assisting students who require health procedures whilst attending school. During the pilot study, registered nurses employed by EQ provided student specific training for school staff regarding health procedures, assisted staff in developing health plans and emergency health plans for students with specialised health needs, and provided ongoing support, supervision and skills assessment. The results of the pilot indicate that the provision of training, ongoing supervision and support and input into the development of health and emergency health plans by nurses is extremely valuable, minimising the risk to students, supporting inclusive education practices and improving competence and confidence of school staff providing assistance to students with specialised health needs.

## **BACKGROUND**

Students with specialised health needs, as defined by EQ, are those who require the following procedures to be delivered during school hours:

- Gastrostomy tube feeding
- Nasogastric tube feeding
- Catheterisation
- Ileostomy/colostomy care
- Oral suction
- Continuous administration of oxygen
- Tracheostomy care

The number of students requiring health procedures in Queensland state schools has increased from 40 in 1991 to 385 in 2004. In addition to the increase in number of students requiring specialised health procedures, there has been an increase in the number of these students enrolling in mainstream school settings. In 1991 all 40 students identified as requiring a specialised health procedure were enrolled in special schools where nursing services were available. In 2004 there were 236 students identified as requiring a specialised health procedure who were enrolled in state schools where nursing services were not available.

Students with specialised health needs are now accessing learning across a range of state school settings. There is evidence to suggest that school staff do not always have the basic skills or knowledge necessary to create safe, healthy environments for these students (Heller, Fredrick, Best, Dykes and Cohen, 2000: p173). In some Queensland state schools, nurses are available to work collaboratively with school staff to assist them in providing support to students with specialised health needs in the classroom.

EQ nursing services are currently restricted to special education facilities to which registered nurses are attached. Nursing services are not available full time in all settings. There are twenty-one (21) schools with access to nursing services across the state with 18.3 full time equivalent (FTE) nursing positions allocated to those sites. In schools with nurses, school personnel who are trained by the registered nurse, take responsibility for the delivery of specialised health procedures for students in the absence of the nurse.

The Queensland Nursing Council (QNC) *Scope of Nursing Practice Decision Making Framework* (October 1998) provides for the training of unregulated care providers by registered nurses and requires ongoing supervision of these workers by registered nurses. Supervision may be either direct or indirect. The training provided to school staff by EQ nurses is delivered using these professional guidelines, including the provision of ongoing supervision and regular assessment of school staff for credentialing purposes. Agencies such as Blue Care provide training in some schools that do not have access to EQ nursing services, but they are reluctant to continue this practice due to the supervision requirements outlined in the QNC document.

The release of the QNC *Scope of Nursing Practice Decision Making Framework* (October 1998) led to the development of an EQ document which provides guidelines regarding the standards for training school staff supporting students with specialised health procedures in schools.

EQ nurses provide support to students with specialised health needs and training for school staff for specialised health procedures in schools where they are currently based, in accordance with QNC guidelines. In schools without access to EQ nursing services, appropriate training for school staff is problematic. The current understanding of the role of nurses in EQ does not allow for nursing services to be available to schools other than those in which they are based. In addition, the role of the nurse in providing a service to students with specialised health needs and to school staff working with these students is not clearly defined. It was recognised that there was a gap in the way Education Queensland was meeting the health needs of students. The project *Provision of Outreach Nursing Services – meeting the specialised health needs of students within an Inclusive Framework* evolved from the identification of this gap. The desired outcomes of this project included:

- That nursing services be available to all students with specialised health needs across a range of state school settings
- To create a skilled workforce and utilise professional expertise
- To define the role of nursing services in Education Queensland

## LITERATURE REVIEW

A review of Australian and international literature focusing on school aged students with health care needs and the role of nurses in providing support to these students was undertaken prior to the formulation of the project plan. The literature has identified that there are increasing numbers of students with health care needs attending schools (Heller et al., 2000: 173; Moore, McConkey and Duffy, 2003: 772; Notaras et al., 2002: 297). Much of the literature explores the needs of students with specialised health requirements with regards to the ability of school staff to meet those unique needs. The literature examines the level of knowledge of school staff required to support students with specialised health needs. While it is recognised that children with specialised health needs present complex challenges to those responsible for their education, there is little evidence in the literature to suggest how health professionals and school staff may be best equipped to meet the needs of these children in schools (Esperat, Moss, Roberts, Kerr and Green, 1999: 169; Williams and McCarthy, 1995: 234).

The role nurses have in supporting students with specialised health needs in schools, whether providing direct care to students, or providing a liaison or training role for school staff who take responsibility for the specialised health needs of these students, appears to be determined by local nursing practice acts or guidelines or by local organisational expectations (Heller et al., 2000: 174; Salmon, 1994: 137; Wolfe and Selekmán, 2002: 405). There are a number of different models of nursing service delivery for students with specialised health needs being used in both Australia, the U.K. and the U.S.A. that are reported in the literature. There is a growing trend for nurses to not only to be involved in direct care for these students, but also to provide education and training to school staff that are supporting these students. However, there have been no studies to identify whether these models result in improved outcomes for students with specialised health needs.

## PROJECT

The aim of the project *Provision of Outreach Nursing Services – meeting the specialised health needs of students within an Inclusive Framework* was to pilot an outreach model of nursing service provision in order to meet the needs of students with specialised health requirements across a range of state school settings.

For the purposes of the project, students with specialised health needs were defined as those students who required the following health procedures whilst attending school:

- Gastrostomy tube feeding
- Catheterisation
- Oral suctioning
- Tracheostomy care
- Nasogastric tube feeding
- Ileostomy/colostomy care
- Continuous administration of oxygen

The pilot was implemented in four (4) EQ districts, in Term 3 and Term 4 2004. These districts were chosen based on the number of students with specialised health requirements identified in the 2003 data collection, the location of students, location of

EQ nurses and geographical location. Two metropolitan districts and two regional districts were chosen to participate in the pilot.

Nurses located in the four (4) pilot districts remained located in their base schools and provided outreach services to other state schools within their district at which students with specialised health needs were enrolled. In order to receive an outreach nursing service, schools were asked to complete a request for nursing services form if they required an outreach service for a student with a specialised health needs.

Nursing services provided to schools during the pilot focused on:

- Training school staff who are required to deliver specialised health procedures including gastrostomy tube feeding, nasogastric tube feeding, catheterisation, colostomy/ileostomy care, tracheostomy care, oral suction.
- Ongoing indirect support and supervision for staff members assigned to deliver specialised health procedures.
- Assisting schools in the development of Individual Health Plans and Emergency Health Plans in collaboration with the student, parents and teaching staff.

## **METHOD**

A two-phased process of data collection was undertaken. The method of data collection was through questionnaires.

In phase 1, data was collected prior to the provision of outreach nursing services, from both schools with nurses and other state schools in the districts through questionnaires. Questions were designed to identify:

- Number of students with specialised health procedures
- Number of students receiving nursing services
- Staff members responsible for performing specialised health procedures in schools
- Availability of training and ongoing supervision and support for staff performing procedures in schools
- Students' access to learning

In phase 2, data was collected following the implementation of the pilot schools with nurses, other state schools in the districts and from Principal Education Officers (PEOs) in district offices through questionnaires. All state schools received the same questionnaire with a different questionnaire used for gathering information from districts. In addition to identifying the number of students receiving nursing services, questions related to four (4) main themes:

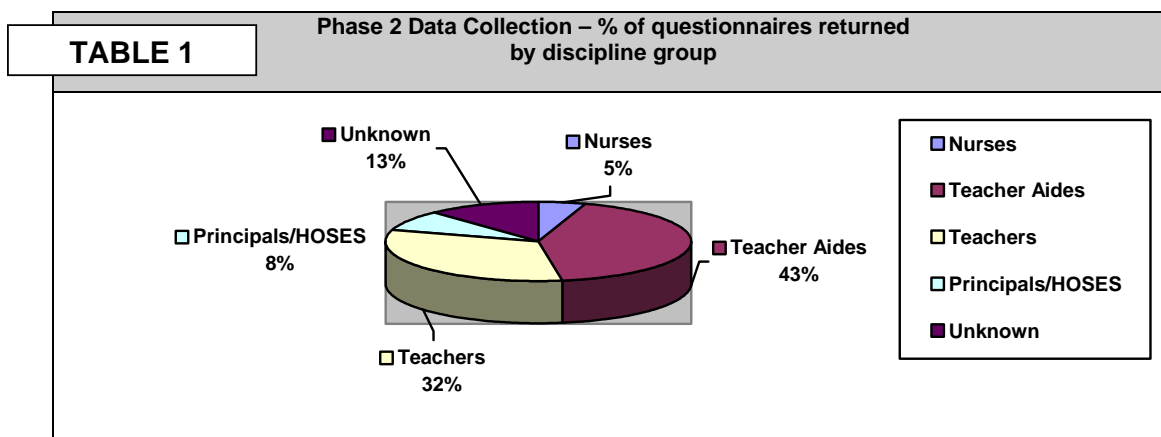
- Inclusive practices
- Building local capacity
- Recognition of professional expertise
- Minimisation of risk

In phase 2, a total of 77 questionnaires were sent out to state schools in the four pilot districts, with 65 returned (84% return rate). Of those returned, 6 questionnaires were

not included in the final data analysis as respondents had completed a draft version of the questionnaire form. Questionnaires included in the final data collection were received from Nurses (N=3), Teacher Aides (N=25), Teachers (N=19), Principals/HOSES (N=5), with 12% (N=7) unknown (See Table 1).

A total of 6 questionnaires were sent out to Principal Education Officers, Student Services (PEOs) in Bayside, Far North, Murrumba and Toowoomba/Darling Downs districts, with 3 (50%) returned.

Members of the Project Team also visited each of the schools with nurses in the pilot districts in Term 3 and Term 4, following the implementation of the pilot, to gather information from nurses regarding the impact of implementation of the pilot.



## RESULTS

### PHASE 1 (Prior to implementation of Pilot) DATA ANALYSIS

The number of students enrolled in schools with nurses who were identified as having a specialised health requirement varied between 1 and 20 students per school. In other state schools in the pilot districts, between 1 and 5 students per school were identified as having a specialised health requirement.

Data collected prior to the implementation of the pilot identified that there were inconsistencies in nursing service provision in schools with nurses. In four (4) of the eight (8) schools with access to nursing services in the pilot districts, all students received a nursing service while in the others, only students with specialised health procedures received nursing services.

Teachers, teacher aides and nurses in schools were performing specialised health procedures. In schools with nurses on-site, nurses trained school staff to perform specialised health procedures for students and provided ongoing support and supervision to those staff.

Schools without access to EQ nursing services accessed a wide range of support personnel including Blue Care nurses, medical staff, Advisory Visiting Teachers, community health nurses, hospital specialist staff (i.e.: stoma clinic nurse) and parents to support school staff performing specialised health procedures. Ongoing supervision and support is not routinely provided by these agencies. Time allowed for training provided by these agencies varied (from a 1/2hr session, to a 4hr session), as did the costs involved (no cost to \$200 per year for some schools) indicating possible inconsistencies in the quality and quantity of training being accessed by schools.

In schools without access to EQ nursing services, some students missed school because of issues relating to management of their specialised health procedures at school, however students “seldom” or never” missed school for this reason in schools where nurses were based.

**PHASE 2 (Following implementation of the Pilot) DATA ANALYSIS**

The number of students identified as having a specialised health procedure in each school (both schools with nurses and outreach schools) varied between 1 and 18 students. The number of students that received an outreach nursing service varied from 6 in one district to 17 in another.

Nurses in 3 of the pilot districts received requests to provide a service to students who did not require a specialised health procedure (as defined for the purposes of the project). Services provided for these students included assisting staff with the development of emergency health plans and individual health plans and training school staff in the management of:

- Seizures
- Anaphylaxis
- Diabetes

The responses to questions from the questionnaires is illustrated in the following tables and is broken down to show information collected from outreach schools, schools with nurses and from district offices.

**TABLE 2: Phase 2 Data Collection from Outreach Schools**

*N = 44 (Total number of questionnaires received from outreach schools)*

	Yes (%)	No (%)	Unsure (%)	Improved (%)	Not Improved (%)	Extremely Valuable (%)	Valuable	Not Valuable (%)	Not Applicable (%)	N = *
Participation in learning has been enhanced	29 (80%)	1 (3%)	6 (17%)	-	-	-	-	-	-	36
Students miss learning due to management of SHP	16 (38%)	26 (62%)	-	-	-	-	-	-	-	42
Access to training has	-	-	1 (2%)	36 (88%)	2 (5%)	-	-	-	2 (5%)	41
Involvement of nurse in health plan development is	-	-	1 (3%)	-	-	35 (85%)	5 (12%)	0	-	41
Involvement of nurse in emergency health plan development is	-	-	1 (3%)	-	-	31 (86%)	4 (11%)	0	-	36
Ongoing support and supervision has been	-	-	0	-	-	31 (77%)	9 (23%)	0	-	40
I feel competent in performing the SHP after training	39 (97%)	0	1 (3%)	-	-	-	-	-	-	40
I feel better able to meet learning needs of students with SHP	41 (91%)	1 (2.5%)	0	-	-	-	-	-	1 (2.5%)	43

\* N = number of staff who provided response to question

SHP = Specialised health procedures

**TABLE 3: Phase 2 Data Collection from Schools with Nurses**

*N = 15 (Total number of questionnaires received schools with nurses)*

	Yes (%)	No (%)	Unsure (%)	Improved (%)	Not Improved (%)	Extremely Valuable (%)	Valuable	Not Valuable (%)	Not Applicable (%)	N = *
Participation in learning has been enhanced	11 (100%)	0	0	-	-	-	-	-	-	11
Students miss learning due to management of SHP	3 (20%)	12 (80%)	-	-	-	-	-	-	-	15
Involvement of nurse in health plan development is	-	-	0	-	-	11 (92%)	1 (8%)	0	-	12
Involvement of nurse in emergency health plan development is	-	-	0	-	-	11 (92%)	1 (8%)	0	-	12
Ongoing support and supervision has been	-	-	0	-	-	9 (90%)	1 (10%)	0	-	10
I feel competent in performing the SHP after training	9 (82%)	0	2 (18%)	-	-	-	-	-	-	11

\* N = number of staff who provided response to question

SHP = Specialised health procedures

**Table 4: Phase 2 Data Collection from District Offices**  
*N = 3 (Total number of questionnaires received from District Offices)*

Access to training for school staff (since the start of the pilot) has  
 Support for students with specialised health requirements in this district has  
 The capacity of school staff to manage the needs of students with SHP has been enhanced  
 Access to learning across a range of inclusive settings (for students with SHP) has improved  
 This district supports the continuation of an outreach nursing service for students with SHP

	Yes (%)	No (%)	Unsure (%)	Improved (%)	Not Improved (%)	N = *
Access to training for school staff (since the start of the pilot) has	-	-	-	3 (100%)	-	3
Support for students with specialised health requirements in this district has	-	-	-	3 (100%)	-	3
The capacity of school staff to manage the needs of students with SHP has been enhanced	3 (100%)	-	-	-	-	3
Access to learning across a range of inclusive settings (for students with SHP) has improved	3 (100%)	-	-	-	-	3
This district supports the continuation of an outreach nursing service for students with SHP	3 (100%)	-	-	-	-	3

\* N = number of staff who provided response to question

SHP = Specialised health procedures

### IMPACT OF PILOT ON SCHOOL STUDENTS

School staff in outreach schools were asked whether they felt that student participation in learning, had been enhanced following the implementation of the pilot. From the responses received, 82% (N=29) felt that participation in learning for these students had been enhanced (See Table 2). Delivery of health procedures in class limited disruption to programs and time spent away from the teaching/learning environment. One respondent stated, “Access to community (had been) enhanced due to (staff having) greater confidence in emergency plan procedures”.

All school staff in “N” coded schools reported that participation in learning activities for students with specialised health procedures was enhanced by the presence of a nurse on-site (See Table 3).

Despite the majority of respondents reporting improvement in student’s access to learning following implementation of the pilot, 16 (38%) of respondents reported that students continued to miss class or lesson time as a result of management of their specialised health procedure. In some cases this was as a result of the type of procedure required by the student (eg: catheterisation). Staff members from one school reported that whole of class activities required modification due to the requirements of the student with the specialised health procedure, while in other schools; students were required to withdraw from class for their procedure, interrupting opportunities for learning. Outreach schools continued to report higher numbers of students missing class or learning when compared with “N” coded schools both prior to and following the implementation of the pilot.

### IMPACT OF PILOT ON SCHOOL STAFF

Respondents from outreach schools reported improved access to training for specialised health procedures after the commencement of the pilot, with 90% (N=39) indicating that they were now receiving ongoing supervision and support for the provision of specialised health procedures for students. Access to training for health procedures remained the same for staff in schools with nurses indicating no adverse effects of change in service delivery.

When asked whether they felt competent in performing a specialised health procedure for a student after receiving training from a registered nurse, 97% (N=39) of school staff agreed. 95% (N=41) of respondents also described feeling better able to meet the learning needs of student with specialised health procedures in the classroom after receiving a nursing service for that student (see Table 2). 82% (N=9) of school staff in schools with nurses reported feeling

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confident and competent in performing specialised health procedures following the completion of training.

Over 85% (N=35) of school staff in both outreach schools and in schools with nurses, felt that involvement of an EQ registered nurse in the development of health and emergency health plans for students was extremely valuable (see Table 2).

100% of school staff in both outreach schools and schools with nurses felt that ongoing supervision and support from a registered nurse was valuable or extremely valuable.

### **IMPACT OF PILOT ON DISTRICTS**

Districts reported that access to training for school staff regarding specialised health procedures has improved and the capacity of school staff to manage the needs of these students is enhanced.

Respondents reported that support for students with specialised health needs had improved as had the ability of these students to access learning across a range of inclusive settings, following implementation of the pilot.

Districts strongly support the continuation of an outreach nursing service for students with specialised health procedures (See Table 4). It was stated that having access to this service “enhanced the process of inclusion” in districts.

### **DISCUSSION**

The ability of students with specialised health needs to access and participate in learning improved with increased availability of an EQ nursing service. Students in schools with nurses were less likely to miss out on learning as a result of management of their specialised health procedure. Participation in learning for students with specialised health procedures in outreach schools improved following access to an EQ nursing service.

The level of confidence and competence of school staff in managing students with specialised health needs has increased with access to EQ nursing services. Ongoing support and advice from nurses has been highly valued in building staff confidence, knowledge and understanding.

It has been difficult for school staff to access appropriate training for the delivery of specialised health procedures, as many agencies (e.g.: Blue Care) and hospital based specialist staff are reluctant to provide training due to the supervision requirements outlined in the *QNC Scope of Nursing Practice Decision Making Framework* (October 1998). EQ nurses provide training and ongoing supervision and support to school staff performing procedures, in line with the *QNC Scope of Nursing Practice Decision Making Framework* (October 1998). The ability of staff to access timely delivery of training in specialised health procedures from EQ nurses during the pilot has resulted in greater numbers of staff acquiring the skills needed to support students with specialised health needs. Input from EQ nurses into the development of health plans and emergency health plans has resulted in school staff having an increased understanding of medical conditions and the curriculum adjustments required to accommodate these.

There are differences in the nursing services provided schools with nurses and in outreach schools. In some instances, all students enrolled in schools with nurses access nursing services irrespective of need. In the absence of any documentation outlining the role of the EQ nurse,

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nurses in their base schools undertake roles that are additional to the provision of training, ongoing support, supervision and development of health/emergency plans. Provision of first aid, assessment, care of sick children and being available in case of emergencies is expected of nurses at base locations. EQ nurses describe difficulties in defining their role within schools.

A small number of outreach schools participating in the pilot requested training and information regarding student management of seizures, anaphylaxis and diabetes. Negotiation at a local level allowed for a small number of these students to receive a nursing service during the pilot. In schools with nurses, school staff can access training in the management of seizures, anaphylaxis and diabetes from nurses based at these locations. EQ does not collect data on the number of students enrolled in state schools with these particular health needs.

## **CONCLUSION**

The evidence collected during the pilot strongly supports the continuation of an outreach model of nursing service delivery for students attending state schools. The development of document clearly defining the role of nursing services in EQ would assist in resolving issues of difference in nursing service provision across different educational facilities.

## REFERENCES

- Esperat, M., Moss, P., Roberts, K., Kerr, L. and Green, A. 1999. Special needs children in the public schools: perceptions of school nurses and school teachers. *Issues in Comprehensive Pediatric Nursing*, 22: 167-182.
- Heller, K., Fredrick, L., Best, S. Dykes, M. and Cohen, E. 2000. Specialised health care procedures in the schools: training and service delivery. *Exceptional Children*, 66 (2): 173-186.
- Moore, G., McConkey, R. and Duffy, M. 2003. The role of the school nurse in special schools for pupils with severe learning difficulties. *International Journal of Nursing Studies*, 40: 771-779.
- Notaras, E., Keatinge, D., Smith, J., Cordwell, J., Cotterell, D. and Nunn, E. 2002. Parents' perspectives of health-care delivery to their chronically ill children during school. *International Journal of Nursing Practice*, 8: 297-304.
- Queensland Nursing Council. 1998. *Scope of Nursing Practice Decision Making Framework*. Retrieved 1<sup>st</sup> March 2005. Brisbane. Available online: [http://www.qnc.qld.gov.au/upload/pdfs/practice\\_standards/Scope\\_of\\_Nursing\\_Practice\\_Decision\\_Making\\_Framework.pdf](http://www.qnc.qld.gov.au/upload/pdfs/practice_standards/Scope_of_Nursing_Practice_Decision_Making_Framework.pdf)
- Salmon, M. 1994. School (health) nursing in the era of health care reform: what is the outlook? *Journal of School Health*, 64 (4): 137-140.
- Williams, J. and McCarthy, A. 1995. School nurses' experiences with children with chronic conditions. *The Journal of School Health*, 65 (6): 234-236.
- Wolfe, L. and Selekmán, J. 2002. School nurses: what it was and what it is. *Pediatric Nurse*, 28 (4): 403-407.

**Meeting the Specialised Health Needs of  
Students Enrolled in Queensland State Schools  
– a pilot project**

A presentation to the  
**10<sup>th</sup> National Conference of the Association for the  
Welfare of Child Health**

Friday 29 April, 2005

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