



Sophia Warren-Knott

AUTHORS

Penny Bond, BSc, RGN, is senior nurse, NHS Quality Improvement Scotland; **Dawn Moss, BSc, RGN, RSCN, CCN (SPQ)**, is community children's nursing coordinator, NHS Dumfries & Galloway

ABSTRACT

Bond, P., Moss, D. (2003) Best practice in nasogastric and gastrostomy feeding in children. *Nursing Times*; 99: 33, 28-30. Nasogastric and gastrostomy tube feeding in children was highlighted by the Scottish Community Children's Nursing Network as an area in which there were shared concerns over inconsistencies in practice. This led to the development of a best practice statement.

Best practice in nasogastric and gastrostomy feeding in children

NHS QUALITY Improvement Scotland (NHSQIS) was established as a special health board in January 2003. Its purpose is to improve the quality of health care by setting standards, monitoring performance and providing NHS Scotland with advice and support on effective clinical practice and service improvements.

NHSQIS brings together five clinical effective organisations for Scotland, including the former Scottish Nursing and Midwifery Practice Development Unit (Box 1). SNMPDU produced a series of five best practice statements offering guidance and encouraging a consistent and cohesive approach (Hotchkiss, 2002). In March 2003 NHSQIS issued two further best practice statements on caring for the patient with a tracheostomy and on nasogastric and gastrostomy tube feeding for children being cared for in the community (Box 2).

Best practice in tube feeding

Following the development and dissemination of a best practice statement on home oxygen therapy for children being cared for at home (Moss and Bond, 2002), the Community Children's Nursing Network consulted colleagues across Scotland on priorities for developing practice. Nasogastric and gastrostomy tube feeding was highlighted as an area in which there were shared concerns over inconsistencies in practice.

Townsley and Robinson (2000) highlighted the range of problems experienced by children who require enteral tube feeding at home (Box 3).

The two aims of the statement are:

- To offer guidance to nurses, midwives and health visitors on best practice in the care of children in the community who are nasogastric or gastrostomy tube-fed;
- To promote a consistent approach to practice and to ensure seamless care delivery to children and their families between hospital and the community.

Format of the statement

The statement covers children from birth right through to transition to adult services. This transition varies among areas but usually occurs between the ages of 14 and 19. Neonatal and community children's nursing services are both incorporated in the statement. The importance of information sharing between services is key to ensuring best practice in the care of these children. The statement also emphasises the involvement of parents or carers in all aspects of care. Children are central to the statement; information provided to them should be appropriate to their age and level of understanding.

The eight sections of the statement cover:

- Assessment and support of children and their parents or carers;

- Planning and coordination of care prior to the child's discharge from hospital;
- Equipment and supplies;
- Care of the gastrostomy tube and site;
- Oral hygiene;
- Nasogastric or gastrostomy feeding at school;
- Holistic development of the child;
- Follow-up care of the child.

In addition to statements of best practice, each section looks at the reasoning behind these statements and the best methods of achieving them. Key points and the challenges presented by each statement are also included with appendices describing specific procedures. An overview of each section is provided below.

Assessment and support

Ongoing assessment of the child and parents' or carers' ability to cope with nasogastric or gastrostomy feeding at home is a key aspect of the child's care. The type of feeding used should be the most appropriate for the child and

BOX 1. NHS QUALITY IMPROVEMENT SCOTLAND

- NHS Quality Improvement Scotland (NHSQIS) was established on 1 January 2003
- Its aim is to improve the quality of health care in Scotland
- It sets standards and monitors performance
- It provides advice, guidance and support to NHS Scotland regarding effective clinical practice and service improvements

The following organisations were joined together to form NHSQIS and their core activities continue:

- **Clinical Resource and Audit Group**
Clinical audit, collecting and publishing clinical performance data, support for clinical effectiveness/governance staff;
- **Clinical Standards Board for Scotland**
Setting clinical and non-clinical standards, reviewing and monitoring performance;
- **Health Technology Board for Scotland**
Assessing the clinical and cost-effectiveness of health care interventions;
- **Nursing and Midwifery Practice Development Unit**
Publishing best practice statements, supporting implementation of clinical governance;
- **Scottish Health Advisory Service**
Reviewing and monitoring of services for people with a mental illness, a learning disability or physical disability, and frail older people.

This article follows a Clinical Update by Bond et al (*Nursing Times*; 99: 30, 24-25) which discussed best practice in the care of patients with a tracheostomy.

BOX 2. SNMPDU BEST PRACTICE STATEMENTS

- Nutritional assessment and referral of adults in hospital
- Continence assessment in adults in primary and secondary care
- Pressure ulcer prevention (hospital, home and nursing home)
- Nutrition for physically frail older people
- Oxygen therapy for children being cared for within the community
- Caring for the patient with a tracheostomy
- Nasogastric and gastrostomy tube feeding for children being cared for in the community

These statements can be downloaded from the NMPDU website and can be shared with colleagues.

the family's lifestyle. The paediatrician, nursing team and dietitian should all be involved in planning the child's care. Other professionals involved in this process may include a speech and language therapist, a psychologist, a pharmacist and other community health professionals.

Prior to the start of enteral feeding the child should receive a full nutritional, physical and psychological assessment. This ensures that nasogastric or gastrostomy feeding is an appropriate treatment and identifies the most beneficial method of administration for the child.

Professionals should provide information to support all those involved in making the decision to commence nasogastric or gastrostomy feeding (Sidey and Torbet, 1995). Beginning enteral feeding should be considered as a supplement to oral feeding and ongoing support should be provided to help maintain and improve dietary intake by oral feeding.

Planning prior to hospital discharge

Education of parents and carers should begin in hospital as an integral part of discharge planning. Appendices to the statement include checklists for supporting the child's named nurse in hospital in the coordination of appropriate education for parents and carers.

A key worker should be identified in the child's community to manage discharge arrangements, to coordinate care and to act as the first point of contact for families (Townsend and Robinson, 2000). In order for the child to be cared for at home, the child, or a parent or carer, must demonstrate that they can understand the need for nasogastric or gastrostomy feeding, can carry out safe tube feeding, are able to recognise problems and can take appropriate action should they arise.

An important part of the key worker's role will be to ensure that those involved are confident and competent to undertake the procedures they have been taught. These include, for example:

- Passing and caring for the child's nasogastric tube;
- Caring for the child's gastrostomy;

- Administering nasogastric or gastrostomy feeds;
- Preparation and storage of feed;
- Cleaning of equipment.

The amount of time and supervision required before individuals can demonstrate safe practice varies. The statement stresses the value of a supportive relationship, which enables parents or carers to learn the skills needed to care for their child and seek practical advice.

Comprehensive discharge planning and an open system of communication is integral to ensuring that the child is able to go home to a safe environment. Each child should have a care plan that can be used by all community professionals, which includes the child's feeding regime and individual requirements.

Equipment and supplies

The equipment used should suit the child's lifestyle, allow mobility and reflect the preference of the child and the family.

Difficulties in accessing equipment in the community have been highlighted (Townsend and Robinson, 2000) and the statement identifies the child's dietitian as key to liaising with the GP and feed or equipment supplier and ensuring that information is shared.

The individual responsible for ordering supplies for the child in the community should be identified before the child is discharged from hospital. The care plan needs to document: feed type; amount; method of administration; feeding regime and equipment required (including details on how to order).

Parents or carers should be aware of the systems in place for home delivery or collection of supplies and should have a contact telephone number in case of equipment failure.

The statement advises providing information on single-use items (Medical Devices Agency, 2000). It also recommends ensuring that those involved know how to dispose of clinical waste safely.

Care of the gastrostomy tube and site

Caring for the area surrounding the gastrostomy site is essential to maintain healthy skin and prevent infection, excoriation and breakdown. The most effective way of achieving this is by keeping the area clean and dry (Hagelgans and Janusz, 1994). Parents or carers should be advised on how to prevent infection and how to identify and respond to signs of infection.

BOX 3. PROBLEMS EXPERIENCED BY CHILDREN WHO REQUIRE ENTERAL TUBE FEEDING AT HOME

- Families lack information about the effect of tube feeding on their child and the rest of the family
- Problems regarding the supply of feeds and equipment after discharge from hospital
- Lack of support for families to deal with problems arising from the care of the child
- Support services are generally poorly coordinated

REFERENCES

- Hagelgans, A., Janusz, H. (1994) Paediatric skin care issues for the home care nurse: part 2. *Paediatric Nursing*; 20: 1, 69-76.
- Heywood-Jones, I. (1994) Gastrostomy. *Community Outlook*; October, 26-27.
- Hotchkiss, R. (2002) Clinical column. *Nursing Times*; 98: 27, 33.
- Huband, S., Trigg, E. (2000) *Practices in Children's Nursing: guidelines for hospital and community*. Edinburgh: Churchill Livingstone.
- Medical Devices Agency (2000) *Single Use Medical Devices: implications and consequences for re-use*. London: MDA.
- Moss, D., Bond, P. (2002) Best Practice Statements, Part 4: Home oxygen therapy for children being cared for in the community. *Nursing Times*; 98: 30, 37-38.

For related articles on this subject and links to relevant websites see www.nursingtimes.net

REFERENCES

- Scottish Executive (2001) *The Administration of Medicines in Schools*. Edinburgh: The Stationery Office.
- Scottish Office (1995) *Oral Health Strategy for Scotland*. Edinburgh: The Stationery Office.
- Sidey, A., Torbet, S. (1995) Enteral feeding in community settings. *Paediatric Nursing*; 7: 6, 21–24.
- Townsley, R., Robinson, C. (2000) *Food for Thought? Effective support for families caring for a child who is tube fed*. Bristol: Norah Fry Research Centre.

BOX 4. OTHER ASPECTS OF PHYSICAL, SOCIAL AND EMOTIONAL DEVELOPMENT

- Consider the child's preference with regard to his or her physical appearance, for example the way a nasogastric tube is secured
- Feed children at the meal table and encourage them to play with feeding utensils, thereby promoting normal socialisation
- Encourage children to eat if they are able to take some oral diet
- Encourage children (where age appropriate) to use their mouth in play, for example blowing, kissing, touching their mouth, putting their fingers in their mouth (Huband and Trigg, 2000)

Guidelines on caring for the skin surrounding the child's gastrostomy site are provided as an appendix and can be adapted for individual use. Parents or carers should be aware of the problems that may occur with their child's gastrostomy tube and need to know what action to take if problems arise.

Oral hygiene

Regular oral hygiene should be maintained in children who are not being fed orally (Heywood-Jones, 1994). The frequency and type of this hygiene are determined by assessing the individual child's needs.

All children should be registered with and attend the dentist for six-monthly check-ups and treatment because dental caries cause pain and discomfort as well as loss of teeth (Scottish Office, 1995).

Tube feeding at school

Provision should be made for children to receive their feeds at school if necessary. The statement recommends discussion between the school health service and teachers, parents or carers and the child regarding his or her needs at school.

Each child should have a School Health Care Plan (Scottish Executive, 2001), which includes guidelines for administering feeds.

School staff require appropriate assessment before undertaking any procedures. Training for teachers and other school-based employees should be provided on storage of feed, cleaning of equipment, infection control and risk assessment.

Guidelines should also be available outlining what to do if the child's nasogastric or gastrostomy tube needs to be replaced.

Holistic development of the child

Nasogastric or gastrostomy feeding can be tailored to fit in with other aspects of the child's lifestyle and should not dictate it (Sidey and Torbet, 1995). A number of suggestions for addressing other aspects of the child's physical, social and emotional development are included in this section (Box 4).

Follow-up care

The child's care should be reviewed every six months by the community children's nurse, a dietitian, a speech and language therapist, and a paediatrician. In addition to a review of the child's feeding regime, follow-up assessment should include growth measures appropriate to the child's age and stage of development. A record of the review and measures taken should be documented in the child's growth chart. The importance of long-term planning for children receiving nasogastric or gastrostomy feeding is stressed.

Conclusion

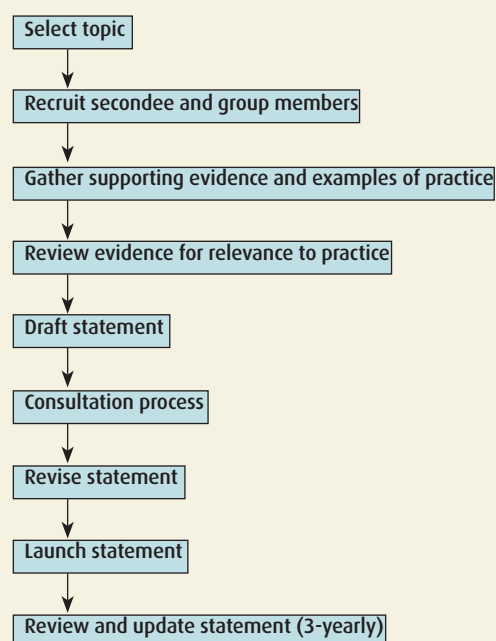
Communication is fundamental to good practice (Fig 1) and ensuring that every child is treated as an individual whose needs and circumstances are taken into account. The statement focuses on the involvement of the child and parents or carers in the development of a care plan for use in all situations.

One of the main challenges highlighted by the statement is the need to extend training to staff in wider social care settings and to facilitate interagency and cross-boundary working in the care of children with complex needs. The importance of ensuring a smooth transition to adult services by developing good working relationships with professionals in this area is also stressed.

The statement provides a tool for the 'what, when and how' of caring for children who receive nasogastric or gastrostomy tube feeding.

It aims to ensure that children and their families benefit from a cohesive approach, regardless of whether they are being cared for in hospital or in the community. ■

FIG 1. KEY STAGES IN THE DEVELOPMENT OF BEST PRACTICE STATEMENTS



USEFUL WEBSITES

NHS Quality Improvement Scotland:
www.nhsquality.org

The full statement is available at: www.nmpdu.org/projects/tubefeeding.html

All seven best practice statements are available in full at: www.nmpdu.org/projects/bestpractice.html