

Toolkit for High-quality Neonatal Services

The Toolkit for High-Quality Neonatal Services was published by the Department of Health in 2009, as guidance to help the NHS improve neonatal care. Eight principles cover the major areas of the neonatal pathway. There is a family-centred focus aiming to ensure the psychological and physiological needs are considered. The challenge now is for the NHS to implement this at a time of financial constraint.

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The Department of Health (DH) Toolkit for High Quality Neonatal Services was launched by Professor Ann Keen MP, Parliamentary Under-Secretary of State for Health on 4th November 2009¹. The launch took place in London at the launch of the Bliss 30th Birthday Baby Report “Three Decades and Counting²”.

The toolkit was developed by a Neonatal Taskforce which was established in January 2008. The Taskforce Chair was Sir Bruce Keogh, NHS Medical Director and membership consisted of professionals from across the NHS neonatal community, as well as a representative from Bliss, and was supported by DH personnel. The aim of the Taskforce was to support the NHS in identifying and delivering real improvements to neonatal services and consider the recommendations made by both the National Audit Office (NAO)³ report, published in December 2007 and the Public Accounts Committee hearing report⁴ published in June 2008. The Taskforce divided its work programme into four streams: workforce, transfers, surgery and data for commissioning. Stakeholder events were held, surveys conducted and comments on the draft documents obtained via the web.

Contents of the toolkit

This work programme, together with stakeholder input, formulated the Toolkit for High Quality Neonatal Services which contains four main elements:

- **A commissioning framework** – a resource for commissioners and providers to plan, deliver and quality assure neonatal services.
- **Eight principles for high quality**

neonatal services – eight topics that cover the major areas of activity within the neonatal care pathway supported by evidence, including family-centred care, workforce and transfers.

- **Appendices/resources** including sources of data and information, example specifications, neonatal nursing career pathway.
- **A CD** – containing examples of tools for local adaptation/use, including patient pathways, service specifications, perinatal clinical dashboard, nursing workforce calculator.

These tools have been developed to facilitate the delivery of equitable care through a transparent auditable service.

Commissioning framework

The toolkit is designed to support both commissioners and service providers to meet the challenges involved in improving neonatal services. It outlines a vision for neonatal services, stating that the way to achieve the best quality care, with the highest quality outcomes is through a managed clinical network, with strong leadership and engagement (**FIGURE 1**). Emphasis is placed upon the requirement for partnerships and excellent communication, where commissioners and providers work together to deliver a whole neonatal pathway, which is integrated with other pathways such as maternity and paediatrics.

A key challenge for neonatal networks that the toolkit focuses on is that of the commissioning process. Historically intensive care, provided in tertiary neonatal units, has been under the remit of Specialised Commissioning Groups, while

Keywords

neonatal taskforce; neonatal toolkit; commissioning; commissioning framework; quality standards

Key points

- Howard M.** Toolkit for High-quality Neonatal Services *Infant* 2010; 6(2): 48-51.
1. The toolkit for High-quality Neonatal Services was launched in 2009.
 2. The Toolkit contains a commissioning framework and eight principles for neonatal service, designed to help the NHS improve neonatal care.
 3. Challenges to implementing the toolkit include shortage of staff, lack of resources and the need for financial investment to achieve the desired goals.

care delivered in District General Hospitals is commissioned locally by PCT commissioners. The toolkit suggests that either the Specialised Commissioning Group or PCT Collaborative Groups should be responsible for the whole perinatal pathway and ensure other integrated services are commissioned as part of that pathway. This whole systems approach should include: maternity, neonatal surgery, allied health professional support, discharge and community, end-of-life care, immunisation programmes, long-term follow-up, safeguarding and more. Resources within commissioning, whether specialised or local, are under pressure in the current economic climate, as they are generally within the NHS. Formulating this whole system joined-up approach to the neonatal pathway and developing all the required links, it must be recognised will not be an easy task. Current working practices will require innovative changes in order for it to be successfully achieved.

- Providing a resource to assess need within networks
- Providing a model of service specification
- Suggesting metrics to measure quality
- Identifying areas in need of improvement.

competencies are considered from a neonatal network perspective outlining the skills and behaviours networks will require to deliver a high-quality service. This provides a strong basis for neonatal networks and commissioners to align work programmes and set goals to achieve a joined-up approach.

In order to assess services robust data collection and analysis is essential. Many networks are utilising the same data collection tool and provide data to the National Neonatal Audit Programme (NNAP). Locally however data

The toolkit defines three categories of neonatal care as per the British Association of Perinatal Medicine (BAPM) Standards⁵ 2001 and refers to these standards for greater detail. The three types of unit however are named differently from that in the BAPM standards⁵ and referred to as:

- This helps to alleviate the issue of neonatal care and type of unit both being labelled by numbers, but it will take some getting used to for those who are well versed with using numbers. The names depict the care delivered and are easier to explain to families. Another difference from the BAPM standards⁵ within the toolkit is the gestational cut off for LNU activity from 28 weeks in BAPM standards,⁵ to 27 weeks in the toolkit. It is noted that there are always exceptions around the gestation at which babies will require long-term rather than short-term intensive care and therefore this is a guide only, however it is a very useful guide when considering the necessity for antenatal transfers.

The eight principles within the toolkit are:

- Each principle can be used to measure and evaluate the quality of neonatal services and is supported by markers of good practice, measurable indicators and audit indicators. Achieving these principles will again provide many challenges for

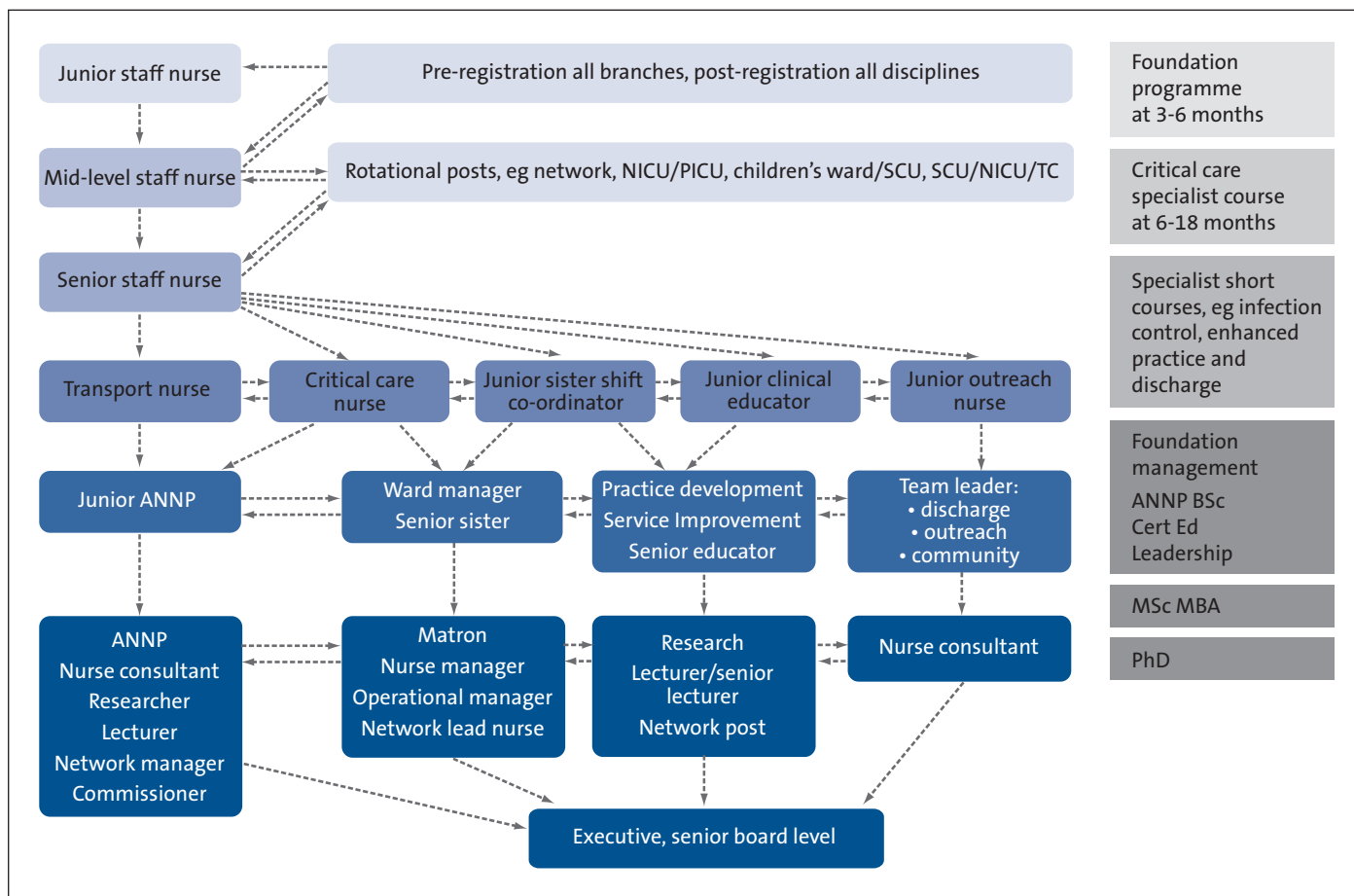


FIGURE 2 Example of neonatal nursing career pathway. Department of Health Crown copyright.

both providers and commissioners. The importance placed on the family experience is good to see acknowledged and some networks have engaged well with users to develop services, while for others it is yet to be achieved. A method for networks to truly measure families' experiences is necessary for providers, commissioners and users benefit. Bliss is currently co-ordinating a piece of collaborative work to establish a national neonatal user satisfaction survey. This will provide a very useful tool and benchmarking opportunity, however making the changes to service delivery within current resources will remain an issue. Trust policies to provide financial support for families during long-term admission or long-term transfer, providing one parent room per intensive care cot and additional rooms for counselling, sibling play areas etc, where these do not currently exist, will place further strain on already stretched resources.

The workforce presents many issues in neonatal services from financial, recruitment and development perspectives. There is a shortage of medical trainees within the service, which can have cost and

service implications. Nationally there are nursing gaps where establishments do not meet the required ratios for nurse to patient ratios. The ratios within the BAPM standards⁵ have been referred to at times as aspirational, yet 1:1 is accepted for adult and paediatric intensive care patients. The toolkit states at least 1:1 for intensive care and this now needs to be acknowledged and implemented nationally. Experienced neonatal nurses are a scarce resource and it will take time to develop the skilled workforce required but it is essential that plans are put in place to create a supply that will meet the demands of the service. The toolkit contains an example of the neonatal nursing career pathway, shown in **FIGURE 2**.

Transport services are developing at varying rates and using an array of models to meet local requirements. Though transportation of neonates has always been undertaken, the provision of dedicated services creates a totally new area from a funding perspective. Some areas have developed a tariff for external network activity while others thus far have not. It is understandable how this has occurred considering the variance in service

provision where some network transport teams feel the pressure from others not covered with an appropriate service. Once there is national coverage of 24-hour dedicated neonatal transport services, it would be advisable to establish an equitable approach to transport charges across all networks.

Babies requiring surgical services should receive equitable care to those receiving medical care and the toolkit as a marker of good practice states that future specialist neonatal surgical service provision should be on the same site as maternity, neonatal intensive care and paediatric specialist services. This could take a very long time to achieve where paediatric services are provided in stand alone sites or women's and children's hospitals exist.

In order to address some of these issues and achieve these principles the taskforce recognised that there would be different challenges amongst networks. To implement the toolkit it is likely areas will need to invest to improve the service and commissioning capabilities. Strategic reviews and gap analysis will identify the resources required, but within the changing economic climate of the NHS

proposed changes will need to be questioned. This presents an ideal opportunity to focus on improving quality and productivity, being innovative and preventing waste to create and maximise value.

Support for the toolkit

At the launch of the toolkit, Ann Keen, MP, verbalised commitment to the toolkit being implemented and utilised to improve neonatal care. All Strategic Health Authorities (SHAs) were contacted and offered support to hold implementation events. Since then, Sir Bruce Keogh has written asking the SHAs for implementation plans developed from these events. The National Quality Board has referred four clinical areas for NICE quality standards to be developed as pilots and one of them is neonatal care. These quality standards will be developed by a group of clinical and public health experts, appropriate professional groups (including

commissioners), and lay representatives who will form time-limited Topic Expert Groups (TEGs). The first NICE quality standards developed from the pilot process are expected to be published early this year.

Conclusion

With all this input and continued support from the dedicated personnel involved in neonatal services the experience for babies and families should certainly improve in the future, however, there is also the need to have realistic expectations during this financially-challenged time. Strong evidence-based principles and standards provide a focus for those involved in developing, improving and delivering neonatal services. It is essential that these are considered and utilised at all levels, from strategic planning through to local unit delivery, in order to develop and implement the changes required to achieve high-quality services for all babies and their families.

Acknowledgements

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References

1. **DH.** Toolkit for High Quality Neonatal Services. November 2009. <http://www.dh.gov.uk/en/Healthcare/Children/Earlyyears/index.htm>
2. **Bliss 30th Birthday Baby Report** "Three decades and counting." 2009.
3. **National Audit Office Report** – Caring for Vulnerable Babies: The Reorganisation of Neonatal Services in England. 2007.
4. **House of Commons Committee of Public Accounts** – Caring for Vulnerable Babies: The Reorganisation of Neonatal Services in England. 26th Report of Session 2007-08.
5. **British Association of Perinatal Medicine.** Standards for Hospitals Providing Neonatal Intensive and High Dependency Care, 2nd Edition. British Association of Perinatal Medicine. 2001.

Draeger launches Babylog VN500 ventilator

At a press conference in Hamburg last month Draeger unveiled its latest concept in ventilation for neonates, the new Babylog VN500. The ventilator cleverly combines conventional ventilation, high frequency oscillation (HFO), nasal CPAP and oxygen therapy in one device enabling staff to choose which mode of ventilation best suits the baby at any particular time and to change the mode of ventilation at the flick of a switch.

For pressure-controlled ventilation with continuous flow, the Babylog VN500 provides ventilation monitoring which includes the measurement of tidal and minute volumes. Via the Volume Guarantee (VG) option and Mandatory Minute Volume (MMV) mode, the device regularly verifies patient activity and maintains the support at a consistent level.

HFO ventilation is particularly suitable for neonates who do not tolerate conventional ventilation very well. Delivering low tidal volumes at high frequencies can be more effective and also helps to protect the premature lung during development. The Volume Guarantee (VG) option used during HFO automatically adapts the inspiratory pressure to the set high-frequency tidal volume. One of the drawbacks of HFO with other ventilators can be excessive noise, but the Babylog VN500 is really quiet in HFO mode.

The Babylog VN500 provides automatic leakage compensation (ATC) to continuously adapt the trigger

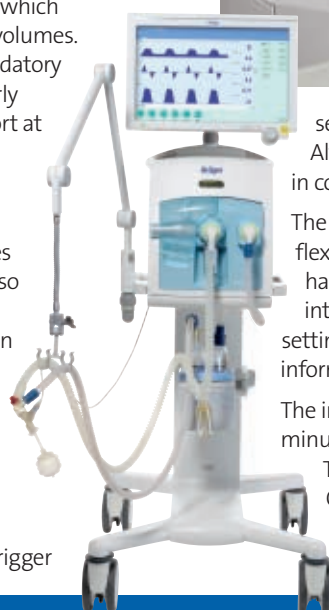


sensitivity to compensate for uncuffed ET-tube leakages. Alternatively, non-invasive ventilation can be performed in combination with the Draeger BabyFlow accessories.

The detachable control panel with 17" touch screen offers flexible device control and lung function monitoring and has been designed with a simplified intuitive user interface. Explanatory text for the different ventilatory settings can be displayed with hyperlinks to access more information from the in-device instruction manual.

The internal batteries of the Babylog VN500 allow for 30 minutes operation independent from central power supply.

The PS500 power supply extends this to 100 minutes. Combined with various solutions for central gas or independent operation, the Babylog VN500 is ready for intra-hospital transports.



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