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# BAPM's Neonatal Service Quality Indicators – what are they and how should they be used?

There is a lot of interest in the concept of quality improvement in neonatal care and yet limited resources are available to help professionals:

- understand what quality improvement is
- acquire the necessary skills
- know what to try to measure up to.

The new publication *Neonatal Service Quality Indicators: Standards Relating to Structures and Processes Supporting Quality and Patient Safety in Neonatal Services*<sup>1</sup> (FIGURE 1) is the result of work by the British Association of Perinatal Medicine (BAPM) to address one of its strategic aims – to help deliver high quality perinatal care. The publication aims to help healthcare professionals by addressing the question: with regard to quality improvement and patient safety, what does best practice in neonatal services look like?

The document is endorsed by Bliss, the charity for babies born premature or sick, which provided significant input into its development towards the shared goal of improving the outcomes of babies and the experience of their families.

## Background

In 2007, surgeon Lord Darzi was asked to conduct a review of health services in England. He suggested that while the health service had gone some way to modernising by increasing capacity and driving down waiting times, quality and outcomes needed to be improved. Key to delivering this would be improved information on clinical performance, greater choice and control for patients, and strengthened incentives for providers.

Lord Darzi set out a definition of good quality care as care that is:<sup>2</sup>

- safe, ie avoids harm
- effective, ie delivers good outcomes
- associated with a positive patient and family experience.

At the same time the National Audit Office published a report highlighting variation in the delivery of neonatal services around the UK<sup>3</sup> and subsequently the Department of Health commissioned an NHS taskforce to spell out how to monitor the quality of neonatal services.<sup>4</sup> Since then, the Francis Report into failings in care at the Mid-Staffordshire NHS Foundation Trust<sup>5</sup> reiterated the importance of monitoring the quality of care in health services, and the report of the Morecambe Bay review pointed to the difficulty of accessing information on quality of care.<sup>6</sup>

Quality of health care has been identified as important by several respected organisations (TABLE 1) and highlighted in three UK neonatal standards documents:

1. the Department of Health's *Toolkit for High-quality Neonatal Services*<sup>4</sup>
2. the National Institute for Health and Care Excellence's *Specialist Neonatal Care Quality Standard*<sup>7</sup>
3. the Scottish Government's *Neonatal Care in Scotland: A Quality Framework*.<sup>8</sup>

## Quality of care and quality improvement: what are they?

It is recognised that healthcare providers need to have systems in place to scrutinise their performance and undertake continuous quality improvement, but what does this mean? Quality improvement has been defined as “a formal approach to the analysis of performance and systematic efforts to improve it”<sup>9</sup> and “the combined and unceasing efforts of everyone – healthcare professionals, patients and their families, researchers, payers, planners and educators – to make the changes that will lead to better patient outcomes (health), better system performance (care) and better professional development.”<sup>10</sup>

Quality improvement needs to be distinguished from audit and research. Thus, research tries to generate new knowledge and audit is the process of testing local practice against a professionally accepted standard based either on research evidence or professional consensus. Quality improvement is the process of attempting to improve the proportion of time in which such a standard is achieved. It involves scrutiny of the detail of the local processes involved in delivering



**FIGURE 1** The service quality indicators define the features of a high quality neonatal service.

Nuffield Trust	<a href="http://www.nuffieldtrust.org.uk/our-work/quality">www.nuffieldtrust.org.uk/our-work/quality</a>
Health Foundation	<a href="http://www.health.org.uk">www.health.org.uk</a>
Healthcare Improvement Scotland	<a href="http://healthcareimprovementscotland.org">http://healthcareimprovementscotland.org</a>
National Quality Board	<a href="http://www.england.nhs.uk/ourwork/part-rel/nqb">www.england.nhs.uk/ourwork/part-rel/nqb</a>
Quality Watch	<a href="http://www.qualitywatch.org.uk">www.qualitywatch.org.uk</a>
The King's Fund	<a href="http://www.kingsfund.org.uk/topics/quality-care">www.kingsfund.org.uk/topics/quality-care</a>

**TABLE 1** Organisations that have documented the importance of quality of care.

care (which nearly always requires multi-professional involvement) to identify potential for improvement, and then a change process with frequent review of progress.

The quality of care agenda includes both quality improvement and patient safety (the identification of the potential to avoid harm), and these can be seen as two aspects of the same concept. Assessment of the quality of care requires measurement and analysis of:

- outcomes and important processes
- parent/carer views
- adverse events.

Each of these should form part of local quality work.

Neonatal services are increasingly being scrutinised through national audit and mortality surveillance, as part of the commissioning process, and in peer reviews and invited reviews of services. While previous professional standards documents have talked about high quality care, they have not directly addressed the specific structures and processes that relate to continuous quality improvement, although the Institute for Healthcare Improvement has published a detailed description of the features of a high quality healthcare organisation.<sup>11</sup>

### The BAPM neonatal service quality indicators

The neonatal service quality indicators define the features of a high quality neonatal service; they relate to the structure and delivery of services. They are different from clinical quality indicators, which relate to the quality of care of individual patients.

There are 19 neonatal service quality indicators grouped under broader subject headings to make self-assessment and improvement planning easier for units (TABLE 2). Each service quality indicator is linked with a number of quality measures, which neonatal services can assess themselves against without incurring a significant burden of additional data collection. These, like all professional standards, are what neonatal services should aspire to and work towards. Most neonatal services will not be able to say that they are achieving all of these standards and there is no intention to suggest that sanctions should be imposed for failure to achieve them. Rather, units and networks should have mechanisms in place to review their own service, identify any shortfall and make available information about what they are doing to address this as part of their quality improvement strategy.

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### References

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2. **Darzi A.** High quality care for all: NHS next stage review final report. 2008; The Stationery Office: London.
3. **National Audit Office.** Caring for vulnerable babies: the reorganisation of neonatal services in England. 2007; National Audit Office: London.
4. **Department of Health.** Toolkit for high quality neonatal services. 2009. Online at: [www.bliss.org.uk/toolkit-for-high-quality-neonatal-services](http://www.bliss.org.uk/toolkit-for-high-quality-neonatal-services)
5. **Francis R.** Report of the Mid Staffordshire NHS Foundation Trust public inquiry. 2013; The Stationery Office: London.
6. **Kirkup DB.** The report of the Morecambe Bay investigation. 2015; The Stationery

<b>Evidence-based care</b>	
NSQI 1	Care guidelines supported by audit
<b>Team working and communication</b>	
NSQI 2	Team communication
NSQI 3	Staff safety culture
NSQI 4	Pathways of care and referral for high-risk babies
NSQI 5	Collaborative multidisciplinary care for babies with complex conditions
<b>Parental partnership in care</b>	
NSQI 6	Family facilities
NSQI 7	Family involvement in care planning and delivery
NSQI 8	Parent information
NSQI 9	Parent feedback
NSQI 10	Parent involvement in service development
<b>Benchmarking</b>	
NSQI 11	Adherence to other neonatal service standards
NSQI 12	Engagement in national and international audit and benchmarking
<b>Patient safety</b>	
NSQI 13	Adverse event review
NSQI 14	Death and serious adverse event review
<b>Quality improvement</b>	
NSQI 15	Structure and resources for quality improvement
NSQI 16	Annual quality strategy and quality report
<b>Education and training</b>	
NSQI 17	Training for quality and patient safety
NSQI 18	Engagement in shared learning about quality of care
<b>Research</b>	
NSQI 19	Engagement in research

TABLE 2 The 19 neonatal service quality indicators (NSQIs).

Office: London.

7. **NICE.** Neonatal specialist care. Quality standard (QS4). 2010. Online at: [www.nice.org.uk/guidance/qs4](http://www.nice.org.uk/guidance/qs4)
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9. **Department of Community and Family Medicine.** Duke University Medical Centre patient safety – quality improvement. 2014 online at: [http://patientsafetyed.duhs.duke.edu/module\\_a/introduction/introduction.html](http://patientsafetyed.duhs.duke.edu/module_a/introduction/introduction.html)
10. **Batalden PB, Davidoff F.** What is 'quality improvement' and how can it transform healthcare? *Qual Saf Health Care* 2007;16:2-3.
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A webinar will be held on Thursday 29 March at 13.00 in which the President of BAPM and the CEO of Bliss will discuss and take questions about *Neonatal Service Quality Indicators*. You can join this from any device with internet access and if you wish to submit a question you can do so during the session or in advance via email. Book online at [www.bapm.org/events](http://www.bapm.org/events)