NHS
National Institute for
Health and Clinical Excellence

Costing statement: donor breast milk banks

The guideline ‘Donor breast milk banks: the operation of donor breast milk bank services’ (NICE clinical guideline CG93) is unlikely to result in a significant change in resource use in the NHS.

The guideline offers best practice advice on the safe and effective operation of donor breast milk bank services. It does not make recommendations on the configuration of services.

This document looks at the resource impact of implementing the NICE guideline ‘Donor breast milk banks’ in England.

Background

Seventeen donor breast milk banks are currently in operation in the UK. Fifteen of which are based in England, one in Northern Ireland and one in Scotland. The banks provide donor milk to babies, including pre-term babies and babies with growth restriction.

The guideline aims to improve the safety of donor breast milk by making evidence-based recommendations on the operation of donor breast milk banks.

Current service provision

Current provision has been estimated using the results of a structured survey[1] which was developed by the technical team at NICE and two members of the Guideline Develpemt Group. The survey was sent to 17 milk banks in the UK, of which 13 returned a completed questionnaire (a 76% response rate).

The survey asked questions on the following topics:

- Rates of donation and use of donor breast milk
- Costs of service provision
- Descriptions of models of service provision
- Results of completed audits
- Further information or research to support the development of services

The findings from the survey suggest that although donor milk banks operate services in different ways, the majority are following the existing 2003 United Kingdom Association for Milk Banking (UKAMB) guidelines[2], which indicates that to a large extent they are already compliant with this guideline..

Resource impact

A number of areas from the guidance were investigated to ascertain if they had significant resource implications resulting in either additional costs or having the potential for savings:

- Quality assurance and staff training
- Screening and selecting donors
- Tracking and tracing

1 NICE (2009) Donor breast milk banks: appendix 4 survey of donor milk banks. Available from www.nice.org.uk/guidance/index.jsp?action=download&o=46432 [accessed December 2009]

2 UKAMB (2003) Guidelines for the establishment and operation of human milk banks in the UK

Quality Assurance and staff training

Data collected in the structured survey indicates that all milk banks (13/13) follow UKAMB guidelines on treating donor milk. There was some variation in the equipment used but all models had monitoring and recording facilities.

The survey also reported that all milk banks provided some staff training; this included food handling, phlebotomy, breast feeding support training, pasteurisation, and support training, general orientation to the milk bank process and ongoing development.

Although all milk banks provide some training anecdotal evidence suggests that additional training above current levels may be required to implement the NICE guidance. It would seem reasonable to assume that the incremental cost of providing as recommended by the NICE guidance is not significant at a national level (>£1 million) but should be investigated by individual milk banks and recipient hospitals.

Screening donors

The guideline does not recommend repeat serological testing while the donor is donating milk, but current UKAMB guidance recommends that ‘ideally’ donors should be retested at 2-monthly intervals.

The findings of the survey indicate that the majority of milk banks (9/12) follow the UKAMB guidelines on screening; some (3/12) did not. Reasons giving for not following the guidelines were that repeat screening during donation was not done (however, the UKAMB recommendation was specified as ‘ideally’).

The cost of screening donors is likely to vary for individual units. For the purpose of this document we contacted a large teaching hospital to enquire about the costs of individual screening tests, we also received costs from a donor milk bank for all tests in a ‘package’ price, see table 1. A midpoint of £58.50 has been used.

Table 1 estimated cost of donor screening per test

Description	Unit cost £	Source
HIV	£6.18	Personal communication
Hep B	£5.28	Personal communication
Hep C	£6.51	Personal communication
HTLV 1/2	£19.93	Personal communication
Syphilis	£3.82	Personal communication
Total	£42.00	
Screening – per patient	£75.00	Donor milk bank
Midpoint	**£58.50**	

Expert opinion indicates that milk banks currently screen donors a maximum of 3 times a year, with some milk banks screening at the time of enrolment and not routinely repeating.

Acknowledging the limited data available, for the purpose of this piece of work we have assumed that currently donors are tested 3 times a year, screening costs can be estimated at approximately £176 per donor. Reducing screening to once per donor would result in annual screening costs of £58.50.

Estimating the potential national saving is challenging and subject to significant uncertainty. The survey reported that the median number of donors per milk bank was 48 (range 7 to 139) as previously reported there are 15 milk banks operating in England, using this data and the costs above the potential annual saving is £84,000 see table 2.

Table 2 estimated national savings through a reduction in screening tests

	Number of milk banks in England	Median donors per bank	Total donors	Annual screening costs £	Total costs £000s
Current	15	48	720	176.00	126
Proposed	15	48	720	58.50	42
	Potential Saving				-84

Acknowledging the large range in the number of donors at individual milk banks the potential savings are likely to vary between individual units.

Tracking and tracing

Data collected in the structured survey indicates that all milk banks (13/13) had processes for tracking and tracing within the milk bank, and between the milk bank and the receiving hospital; however, these differed. Most milk banks reported information recording being manual and storage being in hard copy.

Anecdotal evidence suggests that current processes in some recipient hospitals may not allow the tracing of donated milk to an individual baby or babies. The NICE guideline recommends the receiving hospital or neonatal unit should keep a record of how the milk is used. It should document for each bottle of milk:

- the baby's name, NHS number and date of birth and the date administered
- the batch number and the date was used in the patient record of each baby
- the condition of the milk on arrival following transport
- the storage conditions

Acknowledging the above it would seem reasonable to assume that the NICE recommendations for tracking and tracing may have resource implications for recipient hospitals and possibly some milk banks. The potential incremental costs for individual hospitals may need to be further investigated at a local level.

Conclusion

The available information indicates that the NICE guideline on the operation of donor breast milk services reinforces current good practice, and as such implementation is unlikely to have a significant national impact on NHS resources.

Although the incremental national cost of implementation is thought to be small individual milk banks and recipient hospitals should investigate their own practices against the NICE recommendations.