

# Preventing disease and saving resources: the potential contribution of increasing breastfeeding rates in the UK

POLICY DOCUMENT

## Summary of report findings

- Low breastfeeding rates in the UK lead to an increased incidence of illness that has a significant cost to the health service.
- Calculations from a mere handful of illnesses where breastfeeding is thought to have a protective effect revealed potential annual savings to the NHS from a moderate increase in breastfeeding rates of about £40 million per year.  
**The true cost savings are likely to be much higher.**
- Investment in effective services to increase and sustain breastfeeding rates is likely to provide a return within a few years, possibly as little as one year.
- Research into the extent of the burden of disease associated with breastfeeding rates is hampered by data collection methods. This can be addressed by investment in good quality research.

## Background

UNICEF UK commissioned the report *Preventing disease and saving resources: the potential contribution of increasing breastfeeding rates in the UK* from a multi-academic university team in order to determine the cost to the NHS of low breastfeeding rates in the UK.

The aim was to produce evidence to show whether investing in good quality breastfeeding support services would be a cost-effective policy option so that, as the NHS reshapes itself and makes tough financial decisions, we can advocate for the best interests of the mother and child to be upheld.

Breastfeeding protects babies and mothers against many illnesses. Improving care in the NHS has led to more women starting to breastfeed, but care is still patchy and a lack of support across society means that many breastfeeding mothers encounter problems that force them to stop before they want to.

Most of the barriers that prevent mothers from breastfeeding for as long as they want could be removed with access to well-trained health professionals, good quality social support in the community, a widespread understanding of the profound benefits of breastmilk, and an acceptance within society that breastfeeding is normal.

When breastfeeding goes wrong, as well as causing distress and misery for the families involved, our collective failure to support women has economic implications – more illnesses for babies, children and adults, more trips to the GP, and more hospitalisation.

*Preventing disease and saving resources: the potential contribution of increasing breastfeeding rates in the UK* report makes a strong financial case for investing in better support services for women, to enable them to start breastfeeding and continue for as long as they want to.

## Harrow case study

Harrow Community Services and Northwick Park Hospital are examples of where joint investment in support services for women has translated into higher breastfeeding rates and reduced illness in babies. Work towards the UNICEF UK Baby Friendly Standards started in 2005, when the breastfeeding initiation rate was 67% and only 33% of mothers were still exclusively breastfeeding at 6–8 weeks. Multidisciplinary training was rolled out for midwives, health visitors and GPs across the acute trust and community services, so that women experienced a joined-up consistent level of care. A widespread network of trained peer supporters has been set up who work with mothers in hospital and in the community and run breastfeeding support groups on every weekday. Harrow now has a breastfeeding helpline, website, Facebook page and Twitter profile, all run by peer supporters.

In 2012, 90% of mothers are initiating breastfeeding and 50% of mothers exclusively breastfeed at 6–8 weeks. Along with some other London boroughs, Harrow is seeing a reduction of children under the age of 1 being admitted to hospital with gastroenteritis, and these

rates are 16% lower than the current UK average for health authorities. Breastfeeding has become the normal way to feed babies in Harrow.



## Analysis of findings

Because data around the protective effects of breastfeeding are not always collected at the level of detail needed, the team identified **four categories of diseases or conditions** with different levels of evidence currently available. Reliable costs could only be modelled for a handful of the many illnesses where breastfeeding is thought to have a protective effect, so the figures are likely to be a fraction of the potential savings.

**However, it is clear – even taking a conservative view<sup>1</sup> – that investing in services to support women to breastfeed for longer would provide a rapid financial return, with higher breastfeeding rates leading to greater savings.**

*Note: All the figures and targets below refer to shifting behaviour across a population, and do not apply to every single woman. What an individual mother needs to know is that any breastfeeding will provide some protection against illness, and more breastfeeding will provide a greater protective effect.*

<sup>1</sup> The report is conservative because of two factors: that is, it looks at a small number of illnesses and because it assumes realistic scenarios about increases in breastfeeding

For the **first category** of illnesses, where evidence was strongest, the authors produced quantitative economic models around **five illnesses** (breast cancer in the mother and gastroenteritis, respiratory infections, middle ear infections and necrotising enterocolitis in the baby), showing how **moderate increases** in breastfeeding would translate into cost savings for the NHS:

- If half of those mothers who currently do not breastfeed were to do so for up to 18 months of their lifetime, there would be:
  - **865 fewer cases of breast cancer**
  - With cost savings to the NHS of over £21 million
  - Improved quality of life equating to more than £10 million<sup>2</sup>

for each annual cohort of first-time mothers.

- If 45% of babies were exclusively breastfed for four months, and if 75% of babies in neonatal units were breastfed at discharge, each year there would be:

<sup>2</sup> This figure was calculated using the standard measure of quality-adjusted life years (QALYs); the benefit is to the individual

- **3,285 fewer babies hospitalised with gastroenteritis and 10,637 fewer GP consultations, saving more than £3.6 million**
- **5,916 fewer babies hospitalised with respiratory illness, and 22,248 fewer GP consultations, saving around £6.7 million**
- **21,045 fewer ear infection GP visits, saving £750,000**
- **361 fewer cases of the potentially fatal disease NEC, saving more than £6 million**

For the **second category** of conditions where the evidence was good but not strong enough to run full economic models, the authors conducted narrative analyses on three conditions – cognitive outcomes, childhood obesity and Sudden Infant Death Syndrome (SIDS) – to predict the likely impact of increasing breastfeeding rates. They estimate that:

- ❖ If the number of babies receiving any breastmilk at all rose by 1% this could lead to a small increase in IQ that, across the entire population, could result in more than £278 million gains in economic productivity annually<sup>3</sup>
- ❖ A very modest increase in exclusive breastfeeding rates could lead to at least three fewer cases of Sudden Infant Death Syndrome annually, avoiding the loss of life and profound consequences for families and saving around £4.7 million in monetary costs.
- ❖ Increasing breastfeeding rates could lead to around a 5% reduction in childhood obesity, which would save around £1.6million each year.

In the **third category** are illnesses where research indicates it is plausible or likely that breastfeeding reduces incidence, but where the evidence is not in the form required to model reliably. For example, although raised blood pressure and cholesterol levels in childhood are markers of future adult cardiac disease that are related to not being breastfed, it is not possible to calculate the costs of cardiac disease based on these markers alone.

Significantly, the list contains diseases that severely affect quality of life and that are responsible for a significant bulk of the NHS budget, so if it were possible to reduce these illnesses through breastfeeding – even by only 2% – it would have a considerable economic impact.

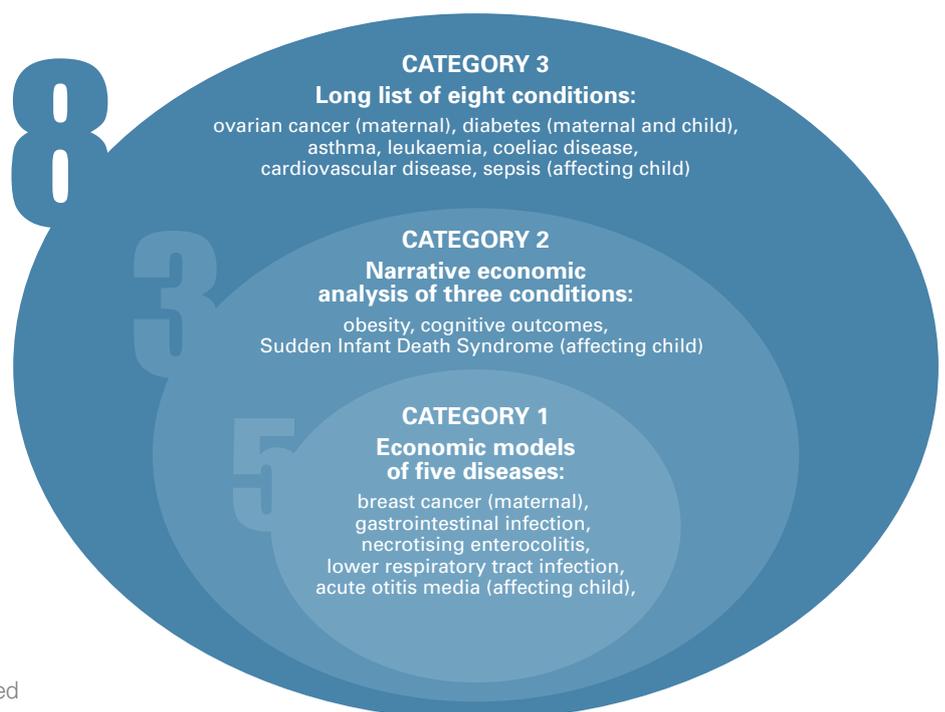
The list of illnesses in this category include: diabetes (Type 2 for mothers and mainly Type 1 for children), cardiovascular disease, ovarian cancer, asthma, leukaemia, coeliac disease, and neonatal sepsis.

More research is urgently needed to establish how significant a role breastfeeding could play in reducing the incidence of these major chronic diseases.

The **fourth category** identified a list of 45 conditions where there is some evidence of breastfeeding providing protection, but where the authors considered current data unreliable. This list also forms an agenda for future research.

**Figure 1**

Diagrammatic representation of the costs resulting from disease and developmental deficit resulting from low rates of breastfeeding in the UK (illustrative, not representative). Conceptually, the costs from category 1 conditions are likely to be a small subset of the real NHS costs associated with low breastfeeding rates.



<sup>3</sup> This is a standard measure and is calculated over the lifetime of each annual cohort

# Conclusion

## This research shines a spotlight on the protective effects that breastfeeding provides to both mother and child.

It is evident that putting health service resources into supporting women to breastfeed successfully would provide a rapid return on investment, as well as improving the quality of life for many thousand of babies and mothers through reduced illness.

The UK has some of the lowest breastfeeding rates in the world, and, within that, breastfeeding rates tend to be particularly low in lower socio-economic groups. Therefore investing in support for mothers to breastfeed would also make a significant contribution to reducing health inequalities.

Professor Mike Kelly, Director of the Centre for Public Health Excellence at NICE, who produced the Foreword for the report, writes: "This report makes refreshing reading. The authors present an argument which, in a nutshell, promises to make considerable savings for the health services, produce long run health benefits, and is a mechanism for changing the differences in health outcomes across social groups. The idea is of course simplicity itself; improving the rates of the initiation and the continuation of breastfeeding."

## Need for action

"We know that 90% of women who stop breastfeeding in the first six weeks report giving up before they wanted to.

"As a society we are failing these mothers and babies, and this new report shows that the resulting low breastfeeding rates in the UK are costing the NHS millions of pounds each year – as well as causing untold distress and suffering for families.

"We want to see breastfeeding recognised as a major public health issue from government level through to local children's centres, and appropriate investment and legislation to give mothers a better experience of breastfeeding. The good news for commissioners is that our research shows that money invested to help women breastfeed for longer would provide a rapid financial return."

UNICEF UK Executive Director David Bull

## In the light of the findings of this report, UNICEF UK asks that the UK Government and policy makers recognise that:

- Breastfeeding is a major public health issue
- Low breastfeeding rates results in significant costs to the NHS

And respond accordingly by

### 1 Ensuring public services are fit for purpose, including:

- a. Policy  
Breastfeeding to be a priority action for all Health and Wellbeing Boards / Local Health Boards/ Local Health and Social Care Trusts / Local NHS Boards.
- b. Practice
  - Effective implementation of Baby Friendly Initiative standards in maternity, neonatal, health visiting and children's centre services.

- Development of pre-registration curriculums across health and early years to support the implementation of evidence practice for breastfeeding across health and early years services.
  - c. Information  
Ensure that evidence-based information about the important impact of breastfeeding on the health of mothers and babies is readily available in the public domain including in the schools curriculum.
- ### 2 Strengthening legislation to protect breastfeeding, including:
- Full implementation of the International Code of Marketing of Breast-milk Substitutes and subsequent resolutions.
- ### 3 Supporting further research into:
- The impact of breastfeeding on health, in particular the extent of the burden of disease associated with low breastfeeding rates.

This report is part of UNICEF UK's ongoing, not-for-profit Baby Friendly programme work, which has been taking place in the UK for 16 years to improve care around infant feeding in the NHS and reduce health inequalities. It is funded through charging for the training and tools that we provide. No donor money to UNICEF was used to fund this research.

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