

# Cochrane Quality and Productivity topics

## Behavioural and cognitive interventions with or without other treatments for the management of faecal incontinence in children

NICE has developed the Cochrane Quality and Productivity topics to help the NHS identify practices that could be significantly reduced or stopped completely, releasing cash and/or resources without negatively affecting the quality of NHS care. Each topic has been derived from a Cochrane systematic review that has concluded that the evidence shows that the practice is harmful or ineffective and should not be used, or that there is insufficient evidence to support widespread use of the practice.

Unless otherwise stated, the information is taken with permission from the Cochrane systematic review.

### **NICE summary of Cochrane review conclusions**

Evidence shows that biofeedback for treating functional faecal incontinence is not effective in children and should not be used. NICE has previously recommended against the use of biofeedback to treat functional constipation; but biofeedback also demonstrates no efficacy in non-retentive functional incontinence.

It is appropriate to focus resources on interventions for which there is evidence of efficacy, including other behavioural interventions and laxative use.

### **The 'Implications for practice' section of the Cochrane review stated:**

'The data available suggest that biofeedback does not provide any additional benefit to conventional treatment (laxative, toilet training, dietary advice) for the management of children with functional faecal incontinence. There is a suggestion that children with pelvic floor dyssynergia receiving biofeedback are more likely to achieve normal defaecation dynamics in the short-term. This achievement, however, is not associated with a clinical improvement in continence status and the evidence available indicates that it is not maintained in the long-term. There is not enough evidence on which to assess the effects of biofeedback for the treatment of organic faecal incontinence. There is no evidence that anorectal manometry (i.e. manometric evaluation of anorectal function) plays a therapeutic role in constipated children. No trials have yet attempted to weigh the costs of biofeedback against its putative benefits.

There is some evidence, albeit weak, that the addition of behavioural interventions (toilet training, incentive scheme, dietary advice) to laxative therapy produces higher success rates in children with faecal incontinence associated with constipation.'

## Details of Cochrane review

### **Cochrane review title**

Behavioural and cognitive interventions with or without other treatments for the management of faecal incontinence in children

### **Citation**

[Brazzelli M, Griffiths PV, Cody JD, Tappin D. Behavioural and cognitive interventions with or without other treatments for the management of faecal incontinence in children. Cochrane Database of Systematic Reviews 2011, Issue 12. Art. No.: CD002240. DOI:](#)

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[10.1002/14651858.CD002240.pub4](https://doi.org/10.1002/14651858.CD002240.pub4).

When the review content was assessed as up to date

28 October 2011

## Quality and productivity category

Right care and safe care

Relevant codes	OPCS	ICD10	HRG
	N/A	F98.1, K59.1	N/A

## Programme budget:

Gastrointestinal system problems

## Evidence

### Relevance to the NHS

Faecal incontinence in children is often secondary to functional constipation. Conventional management is based on both medical and behavioural interventions. In particular, softening agents and laxatives together with increasing daily fibre intake to promote the evacuation of retained stool. Behavioural approaches aim to restore normal bowel habits and provide support to the child. This review focussed on biofeedback, which has been employed to teach children how to control and relax their sphincter muscles, particularly children who have been diagnosed with pelvic floor dyssynergia (anismus). There is some evidence that this is helpful in adults who suffer from such paradoxical contraction of pelvic floor muscles.

The Cochrane review included 18 studies but these lacked homogeneity. The majority of these studies examined the use of biofeedback in constipation-induced faecal incontinence, and only two very small trials included participants with organic faecal incontinence.

Nine trials examined conventional treatments (laxatives, dietary changes and toilet training) compared with conventional treatment plus biofeedback. Eight of these trials examined children with functional faecal incontinence. No difference was seen between the arm using biofeedback together with conventional treatments and the arm using conventional treatments alone. In particular, biofeedback had no long term effects on children with pelvic floor dyssynergia. Anorectal manometry was also investigated and found not to be beneficial over conventional treatment alone.

Therefore, there is no evidence that biofeedback training adds any benefit to conventional treatment in the management of functional faecal incontinence in children. Biofeedback appears to be ineffective in incontinence that is secondary to constipation, as well as non-retentive faecal incontinence. Despite some evidence of utility in adults with dyssynergia, biofeedback does not appear useful for this indication in children. There was not enough evidence on which to assess the effects of biofeedback for the management of organic faecal incontinence.

This builds on the recommendations of NICE clinical guideline 99, which recommended not using biofeedback for ongoing treatment in children and young people with idiopathic constipation.

### Relevant NICE guidance and products

[Constipation in children and young people: diagnosis and management of idiopathic childhood constipation in primary and secondary care, NICE clinical guideline 99](#)

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## Psychological interventions

1.6.1 Do not use biofeedback for ongoing treatment in children and young people with idiopathic constipation.

## Other accredited guidance and products

[Constipation in Children, Clinical Knowledge Summaries](#) May 2014 (March, 2017)

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## Potential productivity savings

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### Estimate of current NHS use

Approximately 2.8% (Loening-Baucke, 2001) of 4 year olds, 1.5% (Loening-Baucke, 2007) of 7–8 year olds and 1.6% (Van Ginkel et al, 2003) of 10–11 year olds have faecal incontinence.

Biofeedback therapy is an outpatient service and patients are seen for up to four or five sessions at four to six weekly intervals with the same therapist (Burch, 2010). Treatment is likely to take four to five sessions at a cost that ranges from £412 to £515. This is based on a cost of £103 (National Schedule of Reference Costs Year: 2010/11) per visit to a community and outreach specialist nurse.

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### Level of productivity savings anticipated

Savings are anticipated per patient costs of providing biofeedback treatment. This is compared with no treatment, because there is no benefit compared with placebo.

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### Type of saving

The savings are likely to be cash releasing.

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### Any costs needed to achieve the savings

There is not likely to be a cost barrier to change.

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### Other information

This saving is likely to benefit NHS provider trusts and community prescribing budgets.

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## Potential impact on quality of NHS care

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### Impact on clinical quality

Concentrating on evidence-based behavioural interventions will result in better clinical outcomes for patients.

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### Impact on patient safety

Improved patient safety, such as reducing the risk of adverse events, is anticipated.

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### Impact on patient and carer experience

Improved patient and carer experience anticipated.

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# Cochrane Quality and Productivity topics

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## Likely ease of implementation

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### Time taken to implement

Can be achieved quickly: 0–3 months.

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### Healthcare sectors affected

Affects multiple organisations within the NHS, such as working across a health economy.

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### Stakeholder support

Likely to achieve good buy-in from key influencers.

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## References

Burch J (2010) Using biofeedback to treat constipation, faecal incontinence and other bowel disorders *Nursing Times*; 106: early online publication.

[Clinical Knowledge Summaries \(2017\) Constipation in Children](#)

Loening-Baucke V. Constipation and encopresis. In: *Pediatric Gastroenterology and Nutrition in Clinical Practice*, Lifschitz CH (Ed), Marcel Dekker, New York 2001. p.551

Loening-Baucke, V. (2007). Prevalence rates for constipation and faecal and urinary incontinence. *Arch Dis Child*. 92 (6) 486-489

[National Institute for Health and Care Excellence \(2010\) CG99 Constipation in children and young people: diagnosis and management of idiopathic childhood constipation in primary and secondary care](#)

National Schedule of Reference Costs Year: 2010/11 – NHS trusts and PCTs combined community and outreach nursing services: specialist nursing. Currency code CN204CF Band 4 – Continence services: child: face to face.

Van Ginkel R, Reitsma JB, Buller HA, *et al*. Childhood constipation: longitudinal follow-up beyond puberty. *Gastroenterology* 2003; 125:357-363