Routine chest physiotherapy for pneumonia in adults

NICE has developed the Cochrane Quality and Productivity (QP) topics to help the NHS identify practices which 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.

Summary

**NICE summary of review conclusions**

Chest physiotherapy should not be recommended as a routine adjunctive treatment for pneumonia in adults as it is not supported by sufficient good quality evidence. Consideration could be given to using it only within the context of a research or audit project.

The effect of reducing or stopping routine chest physiotherapy for pneumonia in adults is difficult to ascertain but is not likely to be detrimental to the quality of patient care. It is likely to result in productivity savings by allowing physiotherapists to focus on those patients more likely to benefit.

**The ‘Implications for practice’ section of the Cochrane review stated:**

‘There is limited evidence indicating that osteopathic manipulative treatment and positive expiratory pressure may reduce the mean duration of hospital stay. Osteopathic manipulative treatment could also reduce the duration of antibiotic treatment, while positive expiratory pressure could reduce the duration of fever. However, based on current evidence, chest physiotherapy should not be recommended as a conventional adjunctive treatment for pneumonia in adults.’

Details of Cochrane review

**Cochrane review title**

Chest physiotherapy for pneumonia in adults

**Citation**


**When the review content was assessed as up to date**

11 August 2009

**QIPP category**

Right care
Evidence

Relevance to the NHS
The Cochrane review included six randomised controlled trials, which appraised four types of chest physiotherapy compared with no physiotherapy or placebo in adult participants (older than 18 years of age) of either gender, with any type of pneumonia. None of these techniques reduce mortality. For three of the techniques (conventional chest physiotherapy, active cycle of breathing techniques and osteopathic manipulative treatment) no evidence supports a better cure rate in comparison with no physiotherapy or placebo.

Limited evidence indicates that positive expiratory pressure (versus no physiotherapy) and osteopathic manipulative treatment (versus placebo) can slightly reduce the duration of hospital stay. Additionally, positive expiratory pressure (versus no physiotherapy) can slightly reduce the duration of fever, and osteopathic manipulative treatment (versus placebo therapy) might reduce the duration of antibiotic use. No severe adverse events were found.

Relevant NICE guidance
Respiratory tract infections: prescribing of antibiotics for self-limitting respiratory tract infections in adults and children in primary care – NICE clinical guideline 69
(Published: July 2008, expected review date: July 2012)
No specific recommendations were made on this intervention

Potential productivity savings

Estimate of current NHS use
In 2009–10, Hospital Episode Statistics indicated that more than 200,000 hospital episodes had a primary diagnosis of pneumonia. How many of these patients currently receive chest physiotherapy is unclear.
Primary care data not available.

Level of productivity savings anticipated
Cannot be quantified

Type of saving
No impact on cash, but resources are freed up that can be used for other activity

Any costs required to achieve the savings
No additional resources required
### Potential impact on quality of NHS care

<table>
<thead>
<tr>
<th>Impact on clinical quality</th>
<th>Clinical quality will be improved by reducing the use of unproven therapies</th>
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<tbody>
<tr>
<td>Impact on patient safety</td>
<td>Not anticipated to have any impact on patient safety</td>
</tr>
<tr>
<td>Impact on patient and carer experience</td>
<td>Potential risk of adverse effect on patient and carer experience due to reduced contact with healthcare professionals</td>
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### Likely ease of implementation

| Time taken to implement       | Can be achieved in the medium term: 3 months to 1 year                      |
| Healthcare sectors affected   | Affects a whole organisation across a number of teams or departments        |
| Stakeholder support           | Likely to get a mixed reception                                             |