



<b>Title</b>	<b>A Systematic Review of the Costs and Effectiveness of Different Models of Pediatric Home Care</b>
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<b>Reference</b>	Health Technol Assess 2003; 6(35). Feb 2003. <a href="http://www.ncchta.org/execsumm/summ635.htm">www.ncchta.org/execsumm/summ635.htm</a>

## Aim

To establish: 1) the range and types of pediatric home care (PHC), 2) the effectiveness and costs of PHC, 3) if and how cost-effectiveness differs between different groups of children, 4) the speed of growth of the evidence base, and 5) what recommendations could be made for further research.

## Conclusions and results

Almost 15 000 papers were identified. Ten RCTs (24 papers), 16 economic papers, and 14 non-RCT studies (15 papers) were eventually included. Five main types of PHC were evident for the following: very low birth weight or medically fragile babies; asthma or diabetes; technology-dependent children; children with mental health problems; generic models of PHC. Reporting was limited on clinical or developmental outcomes of earlier discharge, accompanied by home care, for very low birth weight babies. Physical and mental development may be enhanced, but sample sizes were too small to be confident about this. PHC may be cheaper than the alternative, but the costing methods used were weak. Impact on family members was rarely reported. Whether PHC for children with diabetes or asthma affects clinical or 'social' outcomes or costs, for children, their families, or the health service remained unsure. It was concluded that early discharge with home care after diagnosis may reduce parents' costs, largely by reducing children's initial length of hospital stay.

For technology-dependent children, controlled studies were rare, as were studies that measured clinical outcomes, impact on families or children's quality of life. PHC for technology-dependent children may be cheaper for the health service, but little else could be concluded about it. For children with mental health problems, few other effects were reported apart from parents' satisfaction with services. For generic pediatric home care, only one study was identified. No major clinical effects were evident at early followup.

The evidence and methods in this area were weak. Common methodological weaknesses included sample sizes, timing of data collection, objectivity, long-term followup, accurate description of PHC models, impact beyond the hospital, and the ages of children researched. Narrow ranges of children and parents – in terms of socio-economic status, ethnicity, and geographic location – were included in studies. Children's views were largely absent.

## Recommendations

Further research required, see below.

## Methods

Guidelines from the NHS Centre for Reviews and Dissemination were followed. Twenty electronic databases, publication lists, and current research registers were searched. Reference lists, handsearching, personal contact with researchers, and forward citation searching were also used. Analysis was predominantly descriptive, given the heterogeneity of focus, outcome reporting, and quality of the studies.

## Further research/reviews required

Fourteen detailed and specific areas of research required are described in the full report.