Powered mobility interventions for very young children with mobility limitations to aid participation and positive development: the EMPOWER evidence synthesis

Nathan Bray,1,2* Niina Kolehmainen,3,4 Jennifer McAnuff,3 Louise Tanner,3 Lorna Tuersley,2 Fiona Beyer,3 Aimee Grayston,5 Dor Wilson,3 Rhiannon Tudor Edwards,1,2 Jane Noyes1 and Dawn Craig3

1School of Health Sciences, Bangor University, Bangor, UK
2Centre for Health Economics and Medicines Evaluation, Bangor University, Bangor, UK
3Population Health Sciences Institute, Newcastle University, Newcastle upon Tyne, UK
4Newcastle upon Tyne Hospitals NHS Foundation Trust, Newcastle upon Tyne, UK
5Children’s Services, Leeds Community Healthcare NHS Trust, Leeds, UK

*Corresponding author n.bray@bangor.ac.uk

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Plain English summary

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The aim of this study was to find out the benefits and costs of providing very young children, aged < 5 years, with powered mobility devices. Examples of powered mobility devices are electrically powered wheelchairs and modified ride-on toys.

We looked at many research papers about children and powered mobility. We found many benefits of powered mobility. We then combined all of the information to see if using powered mobility before the age of 5 years had any specific benefits for children.

The evidence tells us that powered mobility has a positive effect on children’s movement, and it can boost children’s social interactions with other people, and their independence. Children using powered mobility were able to go to their friends by themselves, move around a play space as they wanted and take part in physical activities and games.

We found that the fit between the child, the powered mobility device and the child’s everyday environment was important. When the fit was not good, children experienced a lot of problems. Some children and families felt that powered mobility did not suit their needs, leading to children using a manual wheelchair instead and thereby missing out on education, social opportunities and play. Barriers to powered mobility were found in the physical environment (e.g. inaccessible buildings) and the social environment (e.g. adults supervising children too closely) and often affected children’s independence.

We found that the advantages and disadvantages of powered mobility were similar in younger and older children, even though the activities they took part in were different. We also found that each year the NHS spends < 2% of its wheelchair service budget on powered mobility for very young children.

In conclusion, powered mobility can benefit very young children, but it requires a good fit with the child’s environment.
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This report

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