

Article Text

Article menu



Original article



# Economic implications of multiple births: inpatient hospital costs in the first 5 years of life

J Henderson <sup>1</sup>, C Hockley <sup>1</sup>, S Petrou <sup>1</sup>, M Goldacre <sup>2</sup>, L Davidson <sup>3</sup>

Correspondence to:

J Henderson

National Perinatal Epidemiology Unit, Old Road Campus, University of Oxford, Old Road, Headington, Oxford OX3 7LF, UK; jane.hendersonperinat.ox.ac.uk

## Abstract

**Objectives:** To estimate long term health service costs for hospital stays associated with singleton, twin, and higher order multiple births up to 5 years of age.

**Design:** Costs from specialty based data from the English Department of Health's NHS Trust Financial Returns were applied to admissions recorded in the Oxford record linkage study during 1970–1993.

**Setting:** Oxfordshire and West Berkshire, United Kingdom.

**Subjects:** A total of 276 897 children, of whom 270 428 were singletons, 6284 were twins, and 185 were higher order multiple births.

**Main outcome measures:** Duration of hospital admissions during the first 5 years of life. Costs, expressed in £ sterling and valued at 1998–1999 prices, of hospital inpatient services.

**Results:** The total duration of hospital admissions for twins and triplets were respectively twice and eight times that for singletons, once duration of life had been taken into account. Inpatient costs were significantly higher for multiple births than for singletons, with the cost differences concentrated in the first year of life. Over the first 5 years of life, the adjusted mean cost was estimated at £1532 (95% confidence interval (CI) £1516 to £1548) for singletons, £3826 (95%CI £3724 to £3929) for twins, and £8156 (95%CI £7559 to £8754) for higher order multiple births ( $p < 0.0001$ ).

**Conclusions:** Multiple births contribute disproportionately to hospital inpatient costs, especially during the children's first year of life.

<https://doi.org/10.1136/adc.2003.043851> [Cookie policy](#)

**We and our partners process data to provide:**

Use precise geolocation data. Actively scan device characteristics for identification. Store and/or access information on a device. Personalised advertising and content, advertising and content measurement, audience research and services development.

**Request Permissions**

**Cookies and privacy**

We and our partners store and access personal data, like browsing data or unique identifiers, on your device.

Selecting I Accept enables tracking technologies to support the purposes shown under we and our partners process

content and ads you see may not be as relevant to you. You can resurface this menu to change your choices or

withdraw consent at any time by clicking the Cookie settings link on the bottom of the webpage . Your choices will

have effect within your Website. For more details refer to our Privacy Policy. [Cookie policy](#)

I Accept

Reject All

[Manage preferences](#)

If you wish to reuse any or all of this article please use the link below which will take you to the Copyright Clearance Center’s RightsLink service. You will be able to get a quick price and instant permission to reuse the content in many different ways.

Request permissions

View Full Text

Footnotes

Read the full text or download the PDF:

Buy this article (£53)

Subscribe

Log in

Cookies and privacy

We and our 201 partners store and access personal data, like browsing data or unique identifiers, on your device. Selecting I Accept enables tracking technologies to support the purposes shown under we and our partners process data to provide. Selecting Reject All or withdrawing your consent will disable them. If trackers are disabled, some content and ads you see may not be as relevant to you. You can resurface this menu to change your choices or withdraw consent at any time by clicking the Cookie settings link on the bottom of the webpage . Your choices will have effect within our Website. For more details, refer to our Privacy Policy. [Cookie policy](#).

We and our partners process data to provide:

Use precise geolocation data. Actively scan device characteristics for identification. Store and/or access information on a device. Personalised advertising and content, advertising and content measurement, audience research and services development.

I Accept

Reject All

[Manage preferences](#)



**Specialty Registrar LAT (ST1-ST4) in Paediatrics/Neonatology**  
**Aberdeen, Aberdeenshire | (£45,504 - £71,550)**

Applications are invited for appointment to Locum Appointment for Training. Post is available to accommodate Doctors at ST1, ST2, ST3 & ST4 level.

Recruiter: NHS Grampian

[Apply for this job](#)

**Consultant Neonatologist**  
**Coventry | £109,725 to £145,478 per annum**

Applications are invited for 2 Consultant Neonatologists, to start as soon as possible, to join the neonatal team

Recruiter: University Hospitals Coventry and Warwickshire NHS Trust

[Apply for this job](#)

**Locum Neonatal Consultant**  
**Aberdeen, Aberdeenshire | £107,144 - £142,369**

Applications are invited for the position of a Locum Consultant Neonatologist in the Neonatal Unit, Aberdeen Maternity Hospital

Recruiter: NHS Grampian

[Apply for this job](#)

**Locum Consultant Neonatologist**  
**Coventry | £109,725 to £145,478 Per Annum**

Applications are invited for a Locum Consultant Neonatologist, to start as soon as possible for an initial period of 12 months

Recruiter: University Hospitals Coventry and Warwickshire NHS Trust



**Cookies and privacy**

We and our **201** partners store and access personal data, like browsing data or unique identifiers, on your device. Selecting I Accept enables tracking technologies to support the purposes shown under we and our partners process data to provide. Selecting Reject All or withdrawing your consent will disable them. If trackers are disabled, some content and ads you see may not be as relevant to you. You can resurface this menu to change your choices or withdraw consent at any time by clicking the Cookie settings link on the bottom of the webpage . Your choices will have effect within our Website. For more details, refer to our Privacy Policy. [Cookie policy](#).

**We and our partners process data to provide:**  
Archive

Use precise geolocation data. Actively scan device characteristics for identification. Store and/or access information on a device. Personalised advertising and content, advertising and content measurement, audience research and services development.

Most read articles

Responses

I Accept

Reject All

[Manage preferences](#)

JOURNAL

About

Editorial board

Thank you to our reviewers

Sign up for email alerts

Subscribe

AUTHORS

Instructions for authors

Submit an article

Editorial policies

Open Access at BMJ

BMJ Author Hub

HELP

Contact us

Reprints

Permissions

Advertising

Feedback form



Website Terms & Conditions

Privacy & Cookies

Cookies and privacy

We and our partners store and access personal data, like browsing data or unique identifiers, on your device. Selecting I Accept enables tracking technologies to support the purposes shown under we and our partners process data to provide. Selecting Reject All or withdrawing your consent will disable them. If trackers are disabled, some content and ads you see may not be as relevant to you. You can resurface this menu to change your choices or withdraw consent at any time by clicking the Cookie settings link on the bottom of the web page. Your choices will have effect within our Website. For more details, refer to our Privacy Policy. [Cookie policy](#).

We and our partners process data to provide:

Use precise geolocation data. Actively scan device characteristics for identification. Store and/or access information on a device. Personalised advertising and content, advertising and content measurement, audience research and services development.

I Accept

Reject All

[Manage preferences](#)

Online ISSN: 1468-2052

Print ISSN: 1359-2998

Copyright © 2025 BMJ Publishing Group Ltd & Royal College of Paediatrics and Child Health. All rights including for text and data mining, AI training, and similar technologies, are reserved.