

This is a repository copy of *Hospital surgical volumes and mortality after coronary artery bypass grafting: using international comparisons to determine a safe threshold*.

White Rose Research Online URL for this paper:

<https://eprints.whiterose.ac.uk/id/eprint/111939/>

Version: Submitted Version

---

**Article:**

Gutacker, Nils orcid.org/0000-0002-2833-0621, Bloor, Karen Elizabeth orcid.org/0000-0003-4852-9854, Cookson, Richard Andrew orcid.org/0000-0003-0052-996X et al. (6 more authors) (2017) Hospital surgical volumes and mortality after coronary artery bypass grafting: using international comparisons to determine a safe threshold. Health services research. pp. 863-878. ISSN: 1475-6773

<https://doi.org/10.1111/1475-6773.12508>

---

**Reuse**

Items deposited in White Rose Research Online are protected by copyright, with all rights reserved unless indicated otherwise. They may be downloaded and/or printed for private study, or other acts as permitted by national copyright laws. The publisher or other rights holders may allow further reproduction and re-use of the full text version. This is indicated by the licence information on the White Rose Research Online record for the item.

**Takedown**

If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing [eprints@whiterose.ac.uk](mailto:eprints@whiterose.ac.uk) including the URL of the record and the reason for the withdrawal request.

---

**Fwd: Health Services Research - Manuscript HSR-15-0214.R1**

1 message

---

**Sandi Newby** <sandi.newby@york.ac.uk>  
To: Sandi Newby <sandi.newby@york.ac.uk>

25 February 2016 at 09:41

----- Forwarded message -----

From: &lt;psromano@ucdavis.edu&gt;

Date: 18 January 2016 at 06:20

Subject: Health Services Research - Manuscript HSR-15-0214.R1

To: karen.bloor@york.ac.uk

Cc: kevin.schulman@duke.edu, damon.seils@duke.edu, psromano@ucdavis.edu, rcampbell@aha.org

18-Jan-2016

RE:HSR-15-0214.R1/Hospital surgical volumes and mortality after coronary artery bypass grafting: using international comparisons to determine a safe threshold

Dear Dr. Bloor:

We are pleased to inform you that your manuscript has been accepted for publication in Health Services Research. Congratulations and thanks from all of the editorial staff at HSR for sending us your work.

HSR has a "paperless" process for accepted manuscripts. Below is a detailed description of all remaining steps to publish your paper. Please review them carefully.

Please email the following files to HSR Senior Journal Editor Robin Campbell, at [rcampbell@aha.org](mailto:rcampbell@aha.org):

1) TWO FILES OF YOUR FINAL, NON-ANONYMOUS, ACCEPTED MANUSCRIPT; one in Microsoft Word format, and the other in PDF format. If you make any [and only minor] changes to the text or figures of your accepted manuscript before sending it to us, please be sure to describe these changes in your email.

Please be sure that your title page includes the authors' names as they are to appear in print. Do not include degrees or addresses on this page. Please note your manuscript number at the top of the title page.

On a separate page PRECEDING the title page of your manuscript, please list the full name, degree, affiliation and complete contact information (address, phone and e-mail) for each author. Please indicate the corresponding author. This information enables Wiley-Blackwell Publishing to send the corresponding author one free issue of the Journal in which the article appears and a free PDF offprint of the article and to have alternate contacts in the event the corresponding author cannot be reached.

2) If you have TABLES, they must be in fully editable Word format, rather than image files.

3) If you have ARTWORK OF MATHEMATICAL EQUATIONS, attach a separate file for these. Please save line artwork (vector graphics) as Encapsulated PostScript (EPS) and bitmap files (halftones or photographic images) as Tagged Image Format (TIFF), with a resolution of at least 300 dpi at final size. Do not send native file formats. More information on the submission of electronic artwork can be found at <http://authorservices.wiley.com/bauthor/illustration.asp>. Be sure to describe each file in your transmittal email and indicate clearly in the text where each item should be placed. Please avoid use of color if possible. HSR does not use color in the print journal; the electronic version can use color. If color is not avoidable, use shadings or symbols that can be distinguishable in the printed black and white copy.

4) If you have APPENDICES TO BE PUBLISHED IN HSR, attach a separate file for these. HSR has the ability to include three kinds of supplementary materials in the electronic version of the journal on the publisher's web page: appendices, color figures or maps, and databases for tables or analyses. Except in unusual situations, these materials will not be copyedited or typeset and will be converted directly into a PDF format. The editors reserve the right to make the final judgment on inclusion of these materials. If accepted, they will appear with your article on Wiley InterScience. A boilerplate line will be added to the end of your article directing readers to the website to see the posted supporting information.

In general, appendices will be used for material that is important to some, but not the majority of the readers of the article. For example, the manuscript may include just the key coefficients of a set of regressions, with the appendices showing the full models to allow interested readers to compare the results with other results in the literature. Not all additional material, however, is appropriate for appendices. For example, reviewers may have suggested alternative functional forms or regressions with additional control variables but, if these prove to be qualitatively similar to the ones in the manuscript, this finding might be noted in the text and there is no need to include them in an appendix. Likewise, the detailed wording of a section of a survey might be important to a few readers wishing to build upon the study. Such material may be made available by the authors directly.

NOTE: Your manuscript will appear in print in black and white; the electronic version will retain any colors used. Color figures and maps will generally not be accepted if they just offer a prettier version of the black and white figures. On the other hand, color may sometimes provide significant additional information that cannot be readily conveyed in black and white. Simple black and white conversion of color is often ineffective, so some thought should be given to using different symbols (cross-hatching, etc.) that will also be clear in black and white.

We are also interested in making available other types of information on the website that is helpful to the research community and our readership. If we have asked you to include such materials on the electronic-only version, please include these files with your submission and indicate in your transmittal email what you are including. If you would like to include some information we have not requested, please contact us first directly.

5) A COPYRIGHT FORM signed by the corresponding author on behalf of all authors is required. We now accept digital signatures in the form of a scanned copyright form. This signed form should be emailed to [rcampbell@aha.org](mailto:rcampbell@aha.org) as an email attachment when sending us all final files. You can locate the copyright form using this link: <http://mc.manuscriptcentral.com/societyimages/hsr/HSR%20copyright%20assignment%20form.pdf>

This form is also on the [hsr.org](http://hsr.org) webpage in the "Information for Authors". If you need to send the original copyright form by "snail mail" please send the signed form by US mail or FedEx to the address at the bottom of the form. Your manuscript WILL NOT be scheduled for publication and forwarded to Wiley-Blackwell for copyediting until the signed copyright form (and an approved disclosure form as described in #6 below) have been received.

6) A Completed DISCLOSURE FORM by the corresponding author on behalf of and after corresponding with all authors is required.

Since 2002, Health Services Research has subscribed to the joint policy on disclosure of prior dissemination of work submitted to peer reviewed journals in the field. We request that authors disclose prior dissemination—including at national meetings or on web-pages—to the editors at initial submission. In most cases, such disclosures do not preclude our consideration for publication but we expect full disclosure. A copy of this policy is located in the instructions section of our ManuscriptCentral website called "HSR Authorship Responsibility, Disclosures, and Acknowledgments.doc" and at [HSR.org](http://hsr.org). If, after reviewing this policy, you have any disclosures about prior dissemination to add to what you disclosed initially, please submit this information with your final files.

Beginning in 2007, Health Services Research has implemented a policy about disclosing and sometimes publishing: a) potential conflicts of interest—either involving financial or advocacy roles and b) authors' and other major contributors' roles in the submitted work and c) sponsors/funders—including a description of any requirements by funders or employers to review work prior to submission. Under this policy, we require that the corresponding author communicate with all authors and then fill out and submit electronically the disclosure form and authorship information. Corresponding authors in most cases should have initiated this process upon being invited to revise and resubmit for review by the editors and now should submit the final and approved form at the same time as submitting the final manuscript. Note: The authorship form will be published as an electronic-only appendix; the joint disclosure/acknowledgment statement will appear in both the printed and electronic version of the manuscript.

As a review, these are the elements that HSR expects the corresponding author, on behalf of all authors, to address in the joint acknowledgment/disclosure statement:

As appropriate,

- acknowledge funding support (please include the formal name of the funder and any identifying information about the grant title and number) and any other sponsors of the research or major providers of data;
- acknowledge contributors other than authors by name and their role; (please do not acknowledge editors at HSR);

- note any conflicts of interest including but not limited to financial interests and sponsor requirements for oversight of scientific reporting of results that should be published;
- add disclaimer statements required by your employer or funder.

Please refer to our policy with respect to disclosure and authorship. If you have not already disclosed all information in your disclosure form, need to update the form, e.g., to reflect authorship roles during revisions, or have not yet received approval of your joint disclosure statement, please bring it to our attention. Note that this (approved) information is required before we can submit your manuscript to the publisher for copyediting.

This process is explained more fully in the form, which may be downloaded from the Instructions section of the Manuscript Central website or HSR.org or at [http://mc.manuscriptcentral.com/societyimages/hsr/Disc%20Form\\_FINAL.pdf](http://mc.manuscriptcentral.com/societyimages/hsr/Disc%20Form_FINAL.pdf)

7) HSR expects its authors to be in compliance with Human Subjects Protection regulations or Quality Improvement standards when submitting their work to the Journal for potential publication. While we do not require that this information be included in the joint disclosure statement, if necessary, we expect that the appropriate investigator has obtained any and all such approvals before conducting the research.

The information (items 1-6 above) about your manuscript will be sent to Wiley-Blackwell Publishers, which publishes HSR for HRET. You will receive copyedited page proofs via e-mail from Wiley-Blackwell.

To view your proofs, you will need Adobe Acrobat PDF Reader on your computer. If you click on the PDF icon and nothing happens, you can download an Adobe Acrobat PDF reader for free by going to <http://www.adobe.com/products/acrobat/readstep.html> and following the steps on the website.

If you have the full version of Adobe Acrobat (not just the Reader) you can indicate those changes in the electronic version. Alternatively, you may identify the changes to be made in an e-mail to Wiley-Blackwell or print out the pages and make minor editorial corrections and mail or fax them to the publisher. Note that correspondence with respect to proof corrections should be with the copyeditor whose contact information will be sent with your proofs.

HSR is currently operating with just a few weeks' of turnaround to publishing online in EarlyView and a few months' turnaround time from receipt of accepted materials to their publication in print. Your manuscript is considered to be 'published' when it appears in EarlyView; use the doi when citing it in lieu of the volume, issue and page numbers until published in print.

We are constantly working on improving the production process, and you are strongly encouraged to help us accomplish this rapid turnaround for your manuscript by returning all requested materials as soon as possible at each step of the process. **NOTE: WE DO NOT SUBMIT MANUSCRIPTS TO THE PUBLISHER FOR COPYEDITING AND PROCESSING UNTIL ALL INFORMATION IS RECEIVED INCLUDING THE COPYRIGHT AND DISCLOSURE FORMS, AND WE DO NOT HOLD UP SPECIAL ISSUES FOR LATE ARRIVING REQUIRED FILES.**

Please invite all other authors to create user files for themselves in our on-line submission software at <http://hsr.manuscriptcentral.com/>. They should be aware that this system is used to select reviewers for manuscripts under review as well as to submit new manuscripts. It is also used to communicate with authors and so it is very helpful to have their full contact information recorded in this system.

Please honor an embargo of accepted manuscripts until their publication online in EarlyView. If you wish to disseminate this research prior to its publication (only limited direct dissemination is allowed in any event), please use only the version prior to the beginning of our editorial review and indicate that a subsequent version has been accepted for publication in HSR. We will notify you well in advance of the publication date, should you wish to develop a press release or other types of dissemination to coincide with publication.

Finally, our policy is to try to shorten titles as much as possible by removing words that do not help the reader know the content. Please examine your title to try to eliminate unnecessary words and be aware that the editors may make changes to titles.

Thank you for your interest in HSR and for the opportunity to publish your manuscript.

Sincerely,

Kevin A. Schulman, M.D.  
Senior Associate Editor

and

Patrick S. Romano, MD, MPH  
Co-Editor-in-Chief

\*\*\*\*\*

Health Services Research Journal  
Official Journal of AcademyHealth  
CO-EDITORS:

Patrick S. Romano, M.D., M.P.H. and Jacqueline S. Zinn, Ph.D.

Emeritus: José J. Escarce, M.D., Ph.D. and Ann Barry Flood, Ph.D.

SENIOR ASSOCIATE EDITORS:

Laurence C. Baker, Ph.D.; Andy B. Bindman, M.D.; James F. Burgess, Jr., Ph.D.; Carolyn M. Clancy, M.D.;

Bryan E. Dowd, Ph.D.; Mary L. Fennell, Ph.D.; Robert Rosenheck, M.D.; Kevin A. Schulman, M.D.;

Albert L. Siu, M.D., M.S.P.H.; Alan M. Zaslavsky, Ph.D.

PUBLISHER: Health Research and Educational Trust

Correspondence information:

HSR Journal

Attn: Robin Campbell, Senior Journal Editor, HSR

Health Research & Educational Trust (HRET)

American Hospital Association (AHA)

155 N. Wacker Dr., Suite 400, Chicago, IL 60606

telephone: (312) 422-2075

email: [rcampbell@aha.org](mailto:rcampbell@aha.org)

website: [www.hsr.org](http://www.hsr.org)

new submissions: <http://mc.manuscriptcentral.com/hsr>

Reviewer: 1

I believe the authors have been responsive to the reviews and the paper is ready for acceptance.

Reviewer: 2

The authors present the results of analysis of over 100,000 CABG cases across 5 countries in Europe, with a focus on establishing a volume-outcome relationship threshold (based on in hospital mortality).

This manuscript is well written. Given the lack of data overlap between Spain and England, a statistical limitation exists for their regression model, but the authors address this in the discussion.

Wiley offers authors the option to make their article available to non-subscribers on Wiley Online Library through their OnlineOpen service. This service is also suitable for authors whose funding agency requires grantees to archive the final version of their article. With OnlineOpen, the author, the author's funding agency, or the author's institution pays a fee to ensure that the article is made available to non-subscribers upon publication via Wiley Online Library, as well as deposited in the funding agency's preferred archive. For the full list of terms and conditions, see [http://wileyonlinelibrary.com/onlineopen#OnlineOpen\\_Terms](http://wileyonlinelibrary.com/onlineopen#OnlineOpen_Terms). Any authors wishing to send their paper OnlineOpen will be required to complete the payment form available from our website at: [https://authorservices.wiley.com/bauthor/onlineopen\\_order.asp](https://authorservices.wiley.com/bauthor/onlineopen_order.asp).

—  
Karen Bloor  
Professor of Health Economics and Policy  
Research Champion for Health and Well-being  
Department of Health Sciences  
University of York  
York YO10 5DD  
Tel +44 (0)1904 321369  
[karen.bloor@york.ac.uk](mailto:karen.bloor@york.ac.uk)

—

**Sandi Newby**  
**Group Research Administrator for Health Services & Policy Group/**  
**PA to Professor Ian Watt**

Department of Health Sciences  
Faculty of Science  
University of York  
Area 4, Seebohm Rowntree Building  
Heslington, York, YO10 5DD  
Tel: [01904 321344](tel:01904321344)  
Fax: [01904 321383](tel:01904321383)  
Email: [sandi.newby@york.ac.uk](mailto:sandi.newby@york.ac.uk)

EMAIL DISCLAIMER <http://www.york.ac.uk/docs/disclaimer/email.htm>

---

#### 4 attachments



**Gutacker\_HSR-15-0214\_web\_appendix.pdf**  
935K



**Gutacker\_HSR-15-0214\_Disc Form2.pdf**  
1182K



**Gutacker\_HSR-15-0214 copyright.pdf**  
44K



**Gutacker\_HSR-15-0214\_manuscript.pdf**  
321K