

Research using NJR data

Cumulative longlist of published papers that use NJR data, to better understand surgical practice to improve patient outcomes.

Published papers April 2020- March 2021

Patients Receiving a Primary Unicompartmental Knee Replacement Have a Higher Risk of Revision but a Lower Risk of Mortality Than Predicted Had They Received a Total Knee Replacement: Data From the National Joint Registry for England, Wales, Northern Ireland, and the Isle of Man. Hunt LP, Blom AW, Matharu GS, Kunutsor SK, Beswick AD, Wilkinson JM, Whitehouse MR *J Arthroplasty*. 2021 Feb;36(2):471-477 DOI: [10.1016/j.arth.2020.08.063](https://doi.org/10.1016/j.arth.2020.08.063)

Revision and 90-day mortality following hip arthroplasty in patients with inflammatory arthritis and ankylosing spondylitis enrolled in the National Joint Registry for England and Wales. Miller LL, Prieto-Alhambra D, Trela-Larsen L, Wilkinson JM, Clark EM, Blom AW, MacGregor AJ. *Hip Int*. 2021 Feb. doi: [10.1177/1120700021990592](https://doi.org/10.1177/1120700021990592) .

The Mid- to Long-Term Outcomes of the Lateral Domed Oxford Unicompartmental Knee Replacement: An Analysis From the National Joint Registry for England, Wales, Northern Ireland, and the Isle of Man. Mohammad HR, Matharu GS, Judge A, Murray DW. *The J Arthroplasty*. 2021 Jan;36(1):107-111. doi: [10.1016/j.arth.2020.07.031](https://doi.org/10.1016/j.arth.2020.07.031).

Choice between implants in knee replacement: protocol for a Bayesian network meta-analysis, analysis of joint registries and economic decision model to determine the effectiveness and cost-effectiveness of knee implants for NHS patients-The Knee Implant Prostheses Study (KNIPS). Marques EMR, Dennis J, Beswick AD, Higgins J, Thom H, Welton N, Burston A, Hunt L, Whitehouse MR, Blom AW. *BMJ Open*. 2021 Jan 6;11(1):e040205. DOI: [10.1136/bmjopen-2020-040205](https://doi.org/10.1136/bmjopen-2020-040205)

Similar risk of complete revision for infection with single-dose versus multiple-dose antibiotic prophylaxis in primary arthroplasty of the hip and knee: results of an observational cohort study in the Dutch Arthroplasty Register in 242,179 patients. Veltman ES, Lenguerrand E, Moojen DJF, Whitehouse MR, Nelissen RGHH, Blom AW, Poolman RW. *Acta Orthop*. 2020 Dec;91(6):794-800. doi: [10.1080/17453674.2020.1794096](https://doi.org/10.1080/17453674.2020.1794096).

High mortality following revision hip arthroplasty for periprosthetic femoral fracture. Khan T, Middleton R, Alvand A, Manktelow ARJ, Scammell BE, Ollivere BJ. *Bone Joint J*. 2020 Dec;102-B(12):1670-1674. doi: [10.1302/0301-620X.102B12.BJJ-2020-0367.R1](https://doi.org/10.1302/0301-620X.102B12.BJJ-2020-0367.R1).

Personalized estimation of one-year mortality risk after elective hip or knee arthroplasty for osteoarthritis. Trela-Larsen L, Kroken G, Bartz-Johannessen C, Sayers A, Aram P,

McCloskey E, Kadirkamanathan V, Blom AW, Lie SA, Furnes ON, Wilkinson JM. *Bone Joint Res.* 2020 Nov;9(11):808-820. DOI: [10.1302/2046-3758.911.BJR-2020-0343.R1](https://doi.org/10.1302/2046-3758.911.BJR-2020-0343.R1)

What are the inpatient and day case costs following primary total hip replacement of patients treated for prosthetic joint infection: a matched cohort study using linked data from the National Joint Registry and Hospital Episode Statistics. Garfield K, Noble S, Lenguerrand E, Whitehouse MR, Sayers A, Reed MR, Blom AW. *BMC Med.* 2020 Nov 18;18(1):335 DOI: [10.1186/s12916-020-01803-7](https://doi.org/10.1186/s12916-020-01803-7)

Costs of joint replacement in osteoarthritis: a study using the National Joint Registry and Clinical Practice Research Datalink datasets. Leal J, Murphy J, Garriga C, Delmestri A, Rangan A, Price A, Carr A, Prieto-Alhambra D, Judge A. *Arthritis Care Res (Hoboken).* 2020 Oct 1. doi: [10.1002/acr.24470](https://doi.org/10.1002/acr.24470).

Provision of revision knee surgery and calculation of the effect of a network service reconfiguration: An analysis from the National Joint Registry for England, Wales, Northern Ireland and the Isle of Man. Kalson NS, Mathews JA, Miles J, Bloch BV, Price AJ, Phillips JRA, Toms AD, Baker PN; British Knee. 2020 Oct;27(5):1593-1600. doi: [10.1016/j.knee.2020.07.094](https://doi.org/10.1016/j.knee.2020.07.094).

JointCalc: A web-based personalised patient decision support tool for joint replacement. Zotov E, Hills AF, de Mello FL, Aram P, Sayers A, Blom AW, McCloskey EV, Wilkinson JM, Kadirkamanathan V. *Int J Med Inform.* 2020 Oct;142:104217 DOI: [10.1016/j.ijmedinf.2020.104217](https://doi.org/10.1016/j.ijmedinf.2020.104217)

A Comparison of the Surgical Practice of Potential Revision Outlier Joint Replacement Surgeons With Non-outliers: A Case Control Study From the National Joint Registry for England, Wales, Northern Ireland and the Isle of Man. Penfold CM, Whitehouse MR, Sayers A, Wilkinson JM, Hunt L, Ben-Shlomo Y, Judge A, Blom AW. *J Arthroplasty.* April 2021 [Epub ahead of print Oct 2020] DOI: [10.1016/j.arth.2020.10.026](https://doi.org/10.1016/j.arth.2020.10.026)

Association between surgical volume and failure of primary total hip replacement in England and Wales: findings from a prospective national joint replacement register. Sayers A, Steele F, Whitehouse MR, Price A, Ben-Shlomo Y, Blom AW. *BMJ Open.* 2020 Sep 14;10(9):e033045. doi: [10.1136/bmjopen-2019-033045](https://doi.org/10.1136/bmjopen-2019-033045).

A higher degree of polyethylene irradiation is associated with a reduced risk of revision for aseptic loosening in total hip arthroplasties using cemented acetabular components: an analysis of 290,770 cases from the National Joint Registry of England, Wales, Northern Island and the Isle of Man. Davis ET, Pagkalos J, Kopjar B. *Bone Joint Res.* 2020 Sep 20;9(9):563-571. doi: [10.1302/2046-3758.99.BJR-2020-0135.R1](https://doi.org/10.1302/2046-3758.99.BJR-2020-0135.R1).

Risk Factors for Revision of Polished Taper-Slip Cemented Stems for Periprosthetic Femoral Fracture After Primary Total Hip Replacement. Lamb JN, Jain S, King SW, West RM,

Pandit HG. *J Bone Joint Surg Am.* 2020 Sep 16;102(18):1600-1608. doi: [10.2106/JBJS.19.01242](https://doi.org/10.2106/JBJS.19.01242).

Analysis of change in patient-reported outcome measures with floor and ceiling effects using the multilevel Tobit model: a simulation study and an example from a National Joint Register using body mass index and the Oxford Hip Score. Sayers A, Whitehouse MR, Judge A, MacGregor AJ, Blom AW, Ben-Shlomo Y. *BMJ Open.* 2020 Aug 27;10(8):e033646. DOI: [10.1136/bmjopen-2019-033646](https://doi.org/10.1136/bmjopen-2019-033646)

Factors associated with implant survival following total hip replacement surgery: A registry study of data from the National Joint Registry of England, Wales, Northern Ireland and the Isle of Man. Evans JT, Blom AW, Timperley AJ, Dieppe P, Wilson MJ, Sayers A, Whitehouse MR *PLoS Med.* 2020 Aug 31;17(8):e1003291. DOI: [10.1371/journal.pmed.1003291](https://doi.org/10.1371/journal.pmed.1003291)

The effect of surgical approach in total hip replacement on outcomes: an analysis of 723,904 elective operations from the National Joint Registry for England, Wales, Northern Ireland and the Isle of Man. Blom AW, Hunt LP, Matharu GS, Reed MR, Whitehouse MR. *BMC Med.* 2020 Aug 6;18(1):242. doi: [10.1186/s12916-020-01672-0](https://doi.org/10.1186/s12916-020-01672-0).

A matched comparison of revision rates of cemented Oxford Unicompartmental Knee Replacements with Single and Twin Peg femoral components, based on data from the National Joint Registry for England, Wales, Northern Ireland and the Isle of Man. Mohammad HR, Matharu GS, Judge A, Murray DW. *Acta Orthop.* 2020 Aug;91(4):420-425. doi: [10.1080/17453674.2020.1748288](https://doi.org/10.1080/17453674.2020.1748288).

Is aspirin as effective as the newer direct oral anticoagulants for venous thromboembolism prophylaxis following total hip and knee replacement? An analysis from the National Joint Registry for England, Wales, Northern Ireland and the Isle of Man. Matharu G, Garriga C, Whitehouse N, Rangan A, Judge A. *J Arthroplasty* May 2020 Volume 35, Issue 9, 2631 - 2639. e6 doi.org/[10.1016/j.arth.2020.04.088](https://doi.org/10.1016/j.arth.2020.04.088)

Effect of Bearing Surface on Survival of Cementless and Hybrid Total Hip Arthroplasty. Davis E, Pagkalos, J, Kopjar, B. *JBJS Open Access:* April-June 2020 - Volume 5 - Issue 2 - p e0075 doi: [10.2106/JBJS.OA.19.00075](https://doi.org/10.2106/JBJS.OA.19.00075)



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