

CURRICULUM VITAE

Name: Charlie Welch	
Research interests: The design, analysis and conduct of randomised controlled trials, causal and statistical inference	
Present appointment: Research Fellow (Statistician, Grade 7), York Trials Unit, University of York	
Address: York Trials Unit, Department of Health Sciences, University of York Heslington, York, YO10 5DD	
Telephone number: 07772 891830	Email address: charlie.welch@york.ac.uk
Qualifications: MMath Mathematics (1 st class), University of Exeter (2012 – 2016)	
Previous and other appointments	
<ul style="list-style-type: none">• Research Fellow (Statistician, Grade 6), York Trials Unit, (Feb 2020 – Mar 2024)• Trainee Statistician (Grade 5), York Trials Unit, (Sep 2017 – Jan 2020)• Laboratory assistant, Kalon Biological, (Sep 2016 – Jul 2017)	
Research experience: Design and analysis of experiments, Statistical modelling and inference, Causal inference	
Research training	
<ul style="list-style-type: none">• Structural Equation Modelling and Causal Inference (Nov 2023)• Multi-Arm Multi-Stage (MAMS) platform clinical trials workshop (Nov 2021)• RCTs meeting causal inference: principal stratum strategies and beyond (Sep 2020)• Practical use of multiple imputation to handle missing data in Stata (Feb 2019)• Independent Data Monitoring Committees (Oct 2018)• Joint modelling of longitudinal and time to event data in clinical research (Oct 2018)	
Presentations	
<u>Presenter</u>	
<ul style="list-style-type: none">• <i>Bayesian value-adaptive designs for clinical trials</i>, Workshop delivered as part of the Economics of Adaptive Clinical Trials (ENACT) project, (September 2023)• <i>Retrospective application of a Bayesian value-based sequential design to the HERO trial</i>, 6th International Clinical Trials Methodology Conference, (October 2022)• <i>Value-based Adaptive Trial Design</i>, UKCRC Statistics Operational Group Meeting, (April 2021)• <i>Incorporating estimated correlation between baseline and follow-up measurements into sample size calculations of randomised trials: Efficient design or type 2 error risk?</i>, 5th International Clinical Trials Methodology Conference, (October 2019)	
<u>Contributor</u>	
<ul style="list-style-type: none">• <i>Findings of Children Learning About Second-hand Smoke III (CLASS-III)</i>, Healthy Futures: Preventing NCDs in Young Hearts and Minds (June 2024)• <i>Collagenase injection compared with limited fasciectomy for moderate Dupuytren's contracture: The DISC non-inferiority randomized controlled trial</i>, European Federation of National Associations of Orthopaedics and Traumatology Annual Congress (May 2024)• <i>Agreement between photographic and goniometric measurements of Dupuytren's contracture – A DISC substudy</i>, European Federation of National Associations of Orthopaedics and Traumatology Annual Congress (May 2024)• <i>The EXTEND Trial: EXTENDED Antibiotics to Improve Outcomes in Patients with Complicated Intra-Abdominal Infection</i>, AsiT Surgical Conference (March 2022)• <i>Is appendicectomy associated with an increased risk of cancer? A systematic review and meta-analysis of epidemiological studies</i>, National Cancer Research Institute Virtual Showcase, (November 2020)• <i>Timing of text reminders to increase trial participant response to postal questionnaires: an embedded randomised trial</i>, 5th International Clinical Trials Methodology Conference, (October 2019)	
Research papers (peer reviewed)	
<ul style="list-style-type: none">• Welch C., Forster M., Ronaldson S., et al., <i>The performance of a Bayesian value-based sequential clinical trial design in the presence of an equivocal cost-effectiveness signal: Evidence from the HERO trial</i>, BMC Med. Res. Methodol. (accepted May 2024)• Dias J., Tharmanathan P., Arundel C., Welch C., et al., <i>Collagenase injection versus limited fasciectomy for Dupuytren's Contracture</i>, New England Journal of Medicine (accepted April 2024)• Siddiqi K., Welch C., Huque R., Iqbal R., et al., <i>The Effect of Adult Smoking Behavior on Children's Exposure to Secondhand Smoke. An Analysis Based on Salivary Cotinine Levels Among Children in Dhaka and Karachi</i>, Nicotine & Tobacco Research, 2024, doi:10.1093/ntr/ntae130• Clark M.M, Cooper S., Naughton F., et al., <i>Smoking, nicotine and pregnancy 2 (SNAP2) trial: protocol for a randomised controlled trial of an intervention to improve adherence to nicotine replacement therapy during pregnancy</i>, BMJ Open, 2024;14:	

- Murphy S., Bell K., Cook E.J., et al., *Enhancing Pragmatic Language skills for Young children with Social communication difficulties (E-PLAYS-2) trial: study protocol for a cluster-randomised controlled trial evaluating a computerised intervention to promote communicative development and collaborative skills in young children*, BMC Psychol, **12**, 266 (2024)
- Wang H. I., Bell K., Blackwell J., Welch, C., et al., *Cost-utility analysis of Social Stories™ for children with autism spectrum disorder in mainstream primary schools: results from a randomised controlled trial*, BJPsych open, 2024 10(4)
- Arundel C., Welch C., Tharmanathan P., Dias J., *Study within a trial 119: The effectiveness of a thank you card to improve trial follow up; a randomised study within a trial*, Research Methods in Medicine & Health Sciences, 2024;0(0)
- Mooney K., Welch. C., Crossley. K., et al., *Is it feasible to nest a Trial within a Cohort Study (TwiCS) to evaluate an early years parenting programme? A Born in Bradford's Better Start study protocol*, Pilot and Feasibility Studies **10**, 19 (2024)
- Arundel C.E., Welch C., Saramago P., et al., *A randomised controlled trial of compression therapies for the treatment of venous leg ulcers (VenUS 6): study protocol for a pragmatic, multicentre, parallel-group, three-arm randomised controlled trial*, Trials, 2023 **24** 357
- Huque R., Siddiqi K., Khokhar M. et al., *Children Learning About Secondhand Smoke (CLASS III): a protocol for a cluster randomised controlled trial of a school-based smoke-free intervention in Bangladesh and Pakistan*, BMJ open, 2023 13(7)
- Tracey L., Torgerson Dysart E., et al., *Efficacy trial of the ParentChild+ programme*, Education Endowment Foundation, <https://educationendowmentfoundation.org.uk/projects-and-evaluation/projects/parentchild>
- Coleman T., Clark M., Welch C., et al., *Effectiveness of offering tailored text message, self-help smoking cessation support to pregnant women who want information on stopping smoking: MiQuit3 randomised controlled trial (RCT) and meta-analysis*, Addiction, 2021; 1-16
- Dias J., Arundel C., Tharmanathan P., et al., *Dupuytren's interventions surgery versus collagenase (DISC) trial: study protocol for a pragmatic, two-arm parallel-group, non-inferiority randomised controlled trial*, Trials, 2021; 22:671
- Flett L., Adamson J., Brealey S., et al., *A multicentre, randomised, parallel group, superiority study to compare the clinical and cost-effectiveness of external frame versus internal locking plate for complete articular pilon fracture fixation in adults: protocol for the ACTIVE randomised controlled trial*, Bone and Joint Open, 2021; 2(3): 150-163
- Murphy S., Donald L., Radley J., et al., *Evaluating "Enhancing Pragmatic Language skills for Young children with Social communication impairments" (E-PLAYS): A feasibility cluster-randomised controlled trial*, Pilot and Feasibility Studies, 2021 7:5
- Cochrane A., Welch C., Fairhurst C., et al., *An evaluation of a personalised text message reminder compared on a standard text message on postal questionnaire response return rates: an embedded randomised controlled trial*, F1000Research, 2020 9:154
- Murphy S., Joffe V., Messer D., et al., *Evaluating "Enhancing Pragmatic Language skills for Young children with Social communication impairments" (E-PLAYS): protocol for a feasibility randomised controlled trial*, Pilot and Feasibility Studies, 2019 5:75

Research grants (co-applicant)

Awarded

- *The EXTEND trial: EXTENDED antibiotic durations compared to standard antibiotic durations for patients with complicated intra-abdominal infection*, Jan 2022 – Jul 2026, NIHR Health Technology Assessment (£1,889,700)

Under review

- *Strengthening childcare centres for improved early childhood health and development in informal settlements: real world hybrid trial and implementation research in Nairobi Kenya*, UKRI Early childhood development within applied global health research (applied for £1,742,158)

Teaching activities

I currently contribute to the following postgraduate teaching activities within the Department of Health Sciences

- Epidemiology (lecturing, leading seminars and marking)
- Introduction to Health Statistics (tutorial facilitator)
- Master's dissertations (supervision and marking)
- Introduction to regression analysis (marking)
- Advanced regression analysis (tutorial facilitator and marking)