

Kathrin M. Cresswell

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Profile

A dedicated, dynamic and ambitious scholar with an established interest and proven track-record in developing evaluation methods of digital innovations in health and care settings.

Education and Qualifications

- 09/08-12/11 PhD (funded through an MRC Studentship, passed without corrections): The University of Edinburgh, Title: *Implementation and adoption of the first national electronic health record: a qualitative exploration of the perspectives of key stakeholders in selected English care settings drawing on sociotechnical principles*; Supervisors: Prof Aziz Sheikh, Dr Allison Worth; Examiners: Prof Amanda Amos, Prof Judith Cantrill and Prof Carl May
- 09/05-08/06 MSc Health Psychology, Queen Margaret's University, Edinburgh, Distinction, Dissertation Title: *'You feel like you're handcuffed' - A qualitative study investigating experiences of asylum seekers and refugees in Edinburgh*, Supervisor: Dr Chris McVittie
- 09/01-06/04 BSc Psychology, Goldsmiths College, University of London, First Class Honours Degree, Dissertation, Title: *Sleep Paralysis, Hallucinations and Reality Monitoring*, Supervisor: Prof Christopher French
- 09/00-06/01 Coleg Menai, Bangor, North Wales Certificate in Advanced English (UCLES; Grade: A); NVQ English Language Level 3; IT Integrated Business Technology (CLAIT)
- 01/97-06/00 Abitur (equivalent to A-Level), Sankt Josef (Girl School), Germany, Main subjects: English, Maths, Art and Education Sciences

Employment History

- 08/21-present Senior Lecturer (tenured), Usher Institute, The University of Edinburgh, UK
- 11/15-08/21 Chancellor's Fellow & Chief Scientist Office of the Scottish Government Post-doctoral Fellow, Usher Institute, The University of Edinburgh, UK
- 11/14-11/15 Senior Research Fellow, Centre for Population Health Sciences and The School of Health in Social Science, The University of Edinburgh, UK
- 08/12-11/14 Chancellor's Fellow, The School of Health in Social Science, The University of Edinburgh, UK
- 10/11-08/12 Research Fellow, Centre for Population Health Sciences, The University of Edinburgh
- 03/11-10/11 Research Associate, Centre for Population Health Sciences, The University of Edinburgh

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| 09/08-03/11 | Project Co-ordinator, Centre for Population Health Sciences, The University of Edinburgh |
| 08/06-09/08 | Research Associate, Division of Community Health Sciences, The University of Edinburgh |

Teaching Experience

- Co-Lead of a six week module in the NHS Digital Academy teaching a cohort of over 400 national and international eHealth leaders about Technology Strategy and Health Information Systems Implementation (leading on all aspects including development, delivery and assessment)
- Guest lecturer, MSc in Translational Health Sciences, University of Oxford
- Supervising PhD (currently five) and MSc students, The University of Edinburgh
- Line managing two members of staff and mentoring three members of staff (all post-doctoral)
- PhD examiner: Hadi Daneshvar Farzanegan, School of Informatics, University of Edinburgh; Bey-Marrié Schmidt, Public Health and Family Medicine, University of Cape Town; Abdullah Alshahrani, Robert Gordon University, Aberdeen.
- Course Organiser for Telehealth and Supervised Reading on the MSc in Advanced Clinical Skills
- Helping to develop the Masters of Nursing in Clinical Research and MSc by Research in Nursing, The University of Edinburgh
- Lectures to 2nd year Nursing students, The University of Edinburgh
- Lectures on patient safety to 3rd year medical students, The University of Edinburgh
- Seminars for 2nd year BSc Psychology students, Queen Margaret University Edinburgh

Administrative Experience

- Previous Board Member and Director of Innovation, Usher Institute of Population Health Sciences and Informatics, University of Edinburgh (2016-2022)
- Board Member, College of Medicine and Veterinary Medicine Translation and Commercialisation Board, University of Edinburgh
- Equality and Diversity Committee member, Usher Institute, University of Edinburgh
- Previous Board Member, Internet of Things Programme Board, University of Edinburgh
- Chair, Innovation Strategy Group, Usher Institute of Population Health Sciences and Informatics, University of Edinburgh (2016-2022)
- Member Strategy Planning Group (including research, impact, partnerships, innovation and data), Usher Institute of Population Health Sciences and Informatics, University of Edinburgh

Consultancy

- Associate at Tektology (Healthcare Management Consultancy): Worked with the Tony Blair Institute on developing electronic health record strategy for African countries, worked with NHS England to develop strategy surrounding the separation of data from applications
- Consulted for the Scottish Science Advisory Council
- Consulted for the World Health Organization East Mediterranean Office on developing quality indicators for primary care in the Eastern Mediterranean Region and in establishing global research priorities to better understand the burden of iatrogenic harm in primary care as part of the WHO Patient Safety Programme
- Evaluated the Safety, Quality, Informatics and Leadership Program at Harvard Medical School

Markers of Esteem

- Member of the RSE Young Academy of Scotland since 2016

- Expert WHO/ITU Focus Group “AI for Health” Working Group on Clinical Evaluation Clinical evaluation of AI for health
- Member of the Digital Health Expert Advisory Group *Creating a partnership for the establishment of a National Digital Health Evidence Generator Hub*
- Member of the CDS Programme as Transformation and Programme Management Group led by NHSX
- Member of the AI-Club supported by the Digital Health Society (DHS) and the European Institute for Innovation through Health Data(I~HD)
- Impact case study “Creation and implementation of the world’s first medical informatics leadership programme: the NHS Digital Academy” to be submitted under UoA20 for REF2021
- International Advisory Board Member for the Health Research Board of Ireland
- Member of Programme Steering Committee of an NIHR Programme Grant for Applied Research investigating care for people with Sexually Transmitted Infections and their sex partners in a digital NHS (PI: Claudia Estcourt).
- Member of Independent Study Steering Committee for an NIHR funded project: Development, deployment and evaluation of digitally-enabled, remote supported rehabilitation for people with Long COVID (PI: Elizabeth Murray, UCL).
- Recipient of the 2011 Yvonne Carter Award for Outstanding New Researcher
- Member of the 2020 UKRI Sandpit on Digital Technologies for Health and Care
- Co-chair of the International Medical Informatics Association (IMIA) and European Federation of Medical Informatics Evaluation Working Groups
- Editor for a special issue on patient safety in the Health Informatics Journal
- Editorial Board of the 2018 IMIA Yearbook of Medical Informatics has selected article (Cresswell et al 2017) for listing in the 2018 edition of the Yearbook as one of the best articles published in 2017 in the ‘Human Factors and Organizational Issues’ subfield of medical informatics
- Visiting Lecturer, MSc in Healthcare Quality, Queen’s University, Canada.
- Previously Academic Editor for PLOS ONE and PeerJ
- Peer reviewing for journals (British Medical Journal, Lancet, JAMIA, Milbank Quarterly, International Journal of Medical Informatics, JAMA Network Open, Journal of Patient Safety, PLOS ONE, British Journal of Nursing, BMC Medical Informatics and Decision Making, International Journal of Pharmacy Practice, Applied Clinical Informatics, Health Informatics Journal, Information & Management, Journal of Medical Internet Research)
- Peer reviewer for the Wellcome Trust, Health Research Council of New Zealand, the National Institute for Health Research, the UK Department of Health Policy Research Programme, The Netherlands Organisation for Health Research and Development
- Paper (Robertson et al) short-listed for the RCGP 2010 Research Paper of the Year Award
- Paper (Cresswell et al) won RCGP Research Paper of the Year 2012 Award in the Mental Health category
- Paper (Mozaffar et al) won the Diana Forsythe 2019 Award presented by the American Medical Informatics Association

Grants

Co-Investigator on Grants

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| 2008-2011 | NHS Connecting for Health Evaluation Programme: An evaluation of the adoption of the NHS Care Record in secondary care. £1.8M (PI: Aziz Sheikh, Edinburgh) |
| 2008-2011 | NHS Connecting for Health Evaluation Programme: An evaluation of the effect of IT on interactions between healthcare workers and patients. £0.45M (PI: Hilary Pinnock, Edinburgh) |

- 2011-2016 NIHR Programme Grants for Applied Research: Investigating the implementation, adoption and effectiveness of ePrescribing systems in English hospitals: a mixed methods national evaluation. £2M (PI: Aziz Sheikh, Edinburgh)
- 2013-2014 Chief Scientist Office: Developing a UK taxonomy and framework for facilitating health policy deliberations on maximising secondary uses of healthcare data: a mixed methods study. £118,000 (PI: Aziz Sheikh, Edinburgh)
- 2016-2017 Digital Health Institute. Assisted Qualitative Data Analysis Project (AQuA). £44,000 (PI: Daniel Turner)
- 2017 Chief Scientist Office: Identifying strategies to overcome critical roadblocks towards provisioning of near-real time healthcare and administrative data to create a learning health system for asthma in Scotland. £20,000 (PI: Aziz Sheikh, Edinburgh)
- 2017-2022 National Institute for Health Research. NIHR Global Respiratory Health (RESPIRE) Unit. £7M (PI: Aziz Sheikh, Edinburgh)
- 2017-2021 NHS England. Digital Health Academy. £6M (PI: Ara Darzi, Imperial)
- 2018-2019 NHS England. ePrescribing Toolkit. £39,000 (PI: Aziz Sheikh, Edinburgh)
- 2018-2023 NIHR Programme Grants for Applied Research: Development and evaluation of a complex ePrescribing-based Antimicrobial Stewardship (ePAMS+) intervention for hospitals. £2.5M (PI: Aziz Sheikh, Edinburgh)
- 2019-2024 Co-director of External Engagement. EPSRC Centre for Doctoral Training in Biomedical Artificial Intelligence. £8.3M (PI: Guido Sanguinetti, Edinburgh)
- 2021-2024 Health Education England. NHS Digital Academy. 5M (PI: Ara Darzi, Imperial)
- 2022-2027 Horizon Europe. Developing and implementing innovative Patient-Centred Care Pathways for cancer patients. EUR6.5M (PI: Stein Kaasa, Oslo University; Cresswell: Implementation Science Lead)
- 2022-2024 NES Education for Scotland. Development and Delivery of an Academically Accredited Digital Health and Care Transformation Leaders Programme. 700k (PI: Aziz Sheikh, Edinburgh; Cresswell: Module Lead)

Principal Investigator on Grants

- 2014-2015 Edinburgh & Lothians Health Foundation: Electronic medicines management systems in NHS Scotland. £10,000
- 2015-2018 Chief Scientist Office of the Scottish Government Post-doctoral Fellowship: Envisioning the next generation of integrated health and care information technology infrastructure: an interdisciplinary investigation of stakeholder perspectives, technological feasibility, and implications for policy. £172,645
- 2017-2021 NHS England. National Evaluation of Global Digital Exemplar hospitals. £1.5M (co-PI with Robin Williams, Edinburgh)

2018-2019	Wellcome Trust – The University of Edinburgh. Institutional Strategic Support Fund. Accelerating technological innovation in healthcare – lessons from national and international innovation hubs. £4920
2018	Proximity to Discovery (P2D). Integrating person/patient-generated data with electronic health records. £4554
2018	Medical Research Council Proximity to Discovery (P2D). Robotics in healthcare: current issues and future trends. £6030 (co-PI with Hajar Mozaffar, Edinburgh)
2018	Medical Research Council Proximity to Discovery (P2D). Exploring the innovation landscape for health & technology series: Technology for community health. £5397 (co-PI with Steve Earl, Edinburgh)
2018	Medical Research Council Proximity to Discovery (P2D). Exploring the innovation landscape for health & technology series: Internet of Things (IOT) and Health. £5397 (co-PI with Steve Earl, Edinburgh)
2018	Medical Research Council Proximity to Discovery (P2D). Exploring the innovation landscape for health & technology series: Mobility and active healthcare. £5397 (co-PI with Steve Earl, Edinburgh)
2018-2019	Digital Health Institute. Creating and applying an evaluation framework for the National Decision Support Programme in Scotland. £47,652
2020	Innovate UK. MyDiabetesMyWay - Investigating Impact in India. £90,000
2022-2023	NHSX: Qualitative evaluation of Aidence Veye Lung Nodules AI-based computer-aided detection/diagnosis (CADe/x) tool in routine screening. £100,000
2022-2023	ConnectCare Project Iris. Formative evaluation of a medicines management solution for adults discharged from hospital. Part of the Innovate UK Healthy Ageing Challenge. £30,000

Publications in Peer-reviewed Journals

Original Research

- Avery T, Rodgers S, Cantrill J, Armstrong S, Elliott R, Howard R, Kendrick D, Morris C, Murray S, Prescott R, **Cresswell K**, Sheikh A. Protocol for the PINCER trial: a cluster randomised trial comparing the effectiveness of a pharmacist-led IT-based intervention with simple feedback in reducing rates of clinically important errors in medicines management in general practices. *Trials* 2009; 10: 28.
- Robertson A, **Cresswell K**, Takian A, Petrakaki D et al. Implementation and adoption of nationwide electronic health records in secondary care in England: qualitative analysis of interim results from a prospective national evaluation. *British Medical Journal* 2010; 341: c4564.
- Crowe S, **Cresswell K**, Avery A, Slee A, Coleman J, Sheikh A. Planned implementations of ePrescribing systems in NHS hospitals in England: a questionnaire study. *JRSM Short Reports* 2010, 1: 33.

- **Cresswell K**, Worth A, Sheikh A. Actor-Network Theory and its role in understanding the implementation of information technology developments in healthcare. *BMC Medical Informatics and Decision Making* 2010; 10: 67.
- Black AD, Car J, Pagliari C, Anandan C, **Cresswell K**, et al. The impact of eHealth on the quality and safety of healthcare: a systematic overview. *PLoS Medicine* 2011; 8: e1000387.
- Sheikh A, Cornford T, Barber N, Avery A, Takian A, Lichtner V, Petrakaki D, Crowe S, Marsden K, Robertson A, Morrison Z, Klecun E, Prescott R, Quinn C, Jani Y, Ficociello M, Voutsina K, Paton J, Fernando B, Jacklin A, **Cresswell K**. Implementation and adoption of nationwide electronic health records in secondary care in England: final qualitative results from a prospective national evaluation in "early adopter" hospitals. *British Medical Journal* 2011; 343: d6054.
- Zachariah M, Phansalkar S, Seidling H, Neri P, **Cresswell K**, Duke J, Bloomrosen M, Volk L, Bates D. Development and validation of an instrument assessing implementation of human factors principles in medication-related decision support systems. *Journal of the American Medical Informatics Association* 2011; 18 Suppl 1: i62-72.
- **Cresswell K**, Worth A, Sheikh A. Implementing and adopting electronic health record systems: how Actor-Network Theory can support evaluation. *Clinical Governance: An International Journal* 2011; 16: 320-336.
- Avery A, Rodgers S, Cantrill J, Armstrong S, **Cresswell K**, Eden M, Elliott R, Howard R, Kendrick D, Morris C, Prescott R, Swanwick G, Turner T, Sheikh A. Pharmacist-led information technology-enabled intervention for reducing medication errors: multi-centre cluster randomised controlled trial and cost-effectiveness analysis (PINCER Trial). *Lancet* 2012; doi:10.1016/S0140-6736(11)61817-5.
- **Cresswell K**, Worth A, Sheikh A. Integration of a nationally procured electronic health record system into user work practices. *BMC Medical Informatics and Decision Making* 2012; 12: 15.
- **Cresswell K**, Morrison Z, Crowe S, Robertson A, Sheikh A. Anything but...engaged: user involvement in the context of a national electronic health record implementation. *Informatics in Primary Care* 2012 19(4):191-206.
- **Cresswell K**, Sadler S, Rodgers S, Avery A, Cantrill J, Murray S, Sheikh A. An embedded longitudinal multi-faceted qualitative evaluation of a complex cluster randomised controlled trial aiming to reduce clinically important errors in medicines management in general practice. *Trials* 2012; 13:78.
- Thomson F, Milne H, Hayward J, Pinnock H, **Cresswell K**, Fernand B, Huby G, Williams R, Sheikh A. Understanding the impact of information technology on interactions between patients and healthcare professionals: the INTERACT-IT study. *Health Services Journal* 2012: 46-51.
- **Cresswell K**, Kalra D, Morrison Z, Sheikh A. The coding of clinical data on depression in electronic health records. *PLoS ONE* 2012; 7(8):e43831.
- **Cresswell K**, Majeed A, Bates D, Sheikh A. Computerised decision support systems for healthcare professionals: an interpretative review. *Informatics in Primary Care* 2012;20:115.
- **Cresswell K**, Sheikh A. Organizational issues in the implementation and adoption of health information technology innovations: an interpretative review. *International Journal of Medical Informatics* 2013;82:e73–e86.
- **Cresswell K**, Coleman J, Slee A, Williams R, Sheikh A, et al. Investigating and Learning Lessons from Early Experiences of Implementing ePrescribing Systems into NHS Hospitals: A Questionnaire Study. *PLoS ONE* 2013;8:e53369.

- Hayward J, Thomson F, Milne H, Buckingham S, Sheikh A, Fernando B, **Cresswell K**, Huby G, Williams R, Pinnock H. “Too much, too late”: mixed methods multi-channel video recording study of computerised decision support systems and GP prescribing. *Journal of the American Medical Informatics Association* 2013; doi:10.1136/amiajnl-2012-001484.
- **Cresswell K**, Howe A, Steven A et al. Patient safety in healthcare preregistration educational curricula: multiple case study-based investigations of eight medicine, nursing, pharmacy and physiotherapy university courses. *BMJ Qual Saf* 2013;0:1–12.
- McLean S, **Cresswell K**, Pagliari C, Sheikh A. The impact of tele-health on the quality and safety of healthcare: a systematic overview. *PLoS ONE* 2013;8:e71238.
- Morrison Z, Marsden K, **Cresswell K**, Fernando B, Sheikh A. Utilizing a Discourse-Based Understanding of Organizational Change to Explore the Introduction of National Electronic Health Records in England. *Journal of Change Management* 2013;13(3).
- Sheikh A, Nurmatov U, **Cresswell K**, Bates D. Investigating the cost-effectiveness of health information technologies: a systematic review protocol. *BMJ Open* 2013;3(12):e003737.
- **Cresswell K**, Coleman J, Slee A, Morrison Z, Sheikh A. A toolkit to support the implementation of electronic prescribing systems into UK hospitals: preliminary recommendations. *J R Soc Med* published online 9 October 2013. DOI: 10.1177/0141076813502955
- **Cresswell KM**, Panesar SS, Salvilla SA, Carson-Stevens A, Larizgoitia I, et al. Global research priorities to better understand the burden of iatrogenic harm in primary care: an international delphi exercise. *PLoS Medicine* 2013;10(11):e1001554.
- **Cresswell KM**, Slee A, Coleman J, Williams R, Bates DW, et al. Qualitative analysis of round-table discussions on the business case and procurement challenges for hospital electronic prescribing systems. *PLoS ONE* 2013;8(11):e79394.
- Morrison Z, Fernando B, Kalra D, **Cresswell K**, Sheikh A. National evaluation of the benefits and risks of greater structuring and coding of the electronic health record: exploratory qualitative investigation. *J Am Med Inform Assoc* 2013. doi:10.1136/amiajnl-2013-001666.
- **Cresswell K**, Williams R, Morrison Z, Slee A, Coleman J, Robertson A, Sheikh A. Evaluation of medium-term consequences of implementing commercial computerized physician order entry and clinical decision support prescribing systems in two 'early adopter' hospitals. *J Am Med Inform Assoc* 2014, doi:10.1136/amiajnl-2013-002252.
- Lee L, **Cresswell K**, Slee A, Slight S, Coleman J, Sheikh A. Using stakeholder perspectives to develop an ePrescribing toolkit for NHS Hospitals: a questionnaire study. *Journal of the Royal Society of Medicine Open* 2014;5(10):1–9.
- Morrison Z, Fernando B, Kalra D, **Cresswell K**, Robertson A, Sheikh A. The collection and utilisation of patient ethnicity data in general practices and hospitals in the United Kingdom: a qualitative case study. *Inform Prim Care* 2014;21(3):118–131.
- Fernando B, Morrison Z, Kalra D, **Cresswell K**, Sheikh A. Approaches to Recording Drug Allergies in Electronic Health Records: Qualitative Study. *PLoS ONE* 2014;9(4):e93047.
- Mozaffar H, Williams R, **Cresswell K**, Morrison Z, Slee A, Sheikh A. Product Diversity and Spectrum of Choice in Hospital ePrescribing Systems in England. *PLOS ONE* 2014;9(4):e92516.
- Milne H, Thomson F, Hayward J, Buckingham S, Sheikh A, Fernando B, **Cresswell K**, Huby G, Williams R, Pinnock H. “A nice visual aide” Is the EHR presented on the computer screen a tool for patient involvement? *Health Expectations* 2014; DOI: 10.1111/hex.12320.
- **Cresswell K**, Lee L, Slee A, Coleman J, Bates D, Sheikh A. Qualitative analysis of vendor discussions on the procurement of Computerized Physician Order Entry and Clinical Decision Support systems in hospitals. *BMJ Open* 2015;5:e008313.
- Mozaffar H, Williams R, **Cresswell K**, Sheikh A. The evolution of the market for commercial computerized physician order entry and computerized decision support systems for prescribing. *Journal of the American Medical Informatics Association* 2015;ocv095.

- Schofield B, **Cresswell K**, Westbrook J, Girling A, Slee A, Shah S, Coleman J, Sheikh A. The impact of electronic prescribing systems on pharmacists' time and workflow: protocol for a time-and-motion study in English NHS hospitals. *BMJ Open* 2015;5:e008785.
- Hayward J, Thomson F, Milne H, Buckingham S, Sheikh A, Fernando B, **Cresswell K**, Huby G, Williams R, Pinnock H. How long does it take?" A mixed methods evaluation of computer-related work in GP consultations. *Journal of Innovation in Health Informatics* 2015;22:409-25.
- Panesar S, Carson-Stevens A, **Cresswell K**, Salvilla S, Thusu S, Patel B, Slight S, Ghani R, Yohannes Y, Wang K, Audera Lopez MC, Netuveli G, Larizgoitia I, Donaldson L, Bates D, Sheikh A. Global burden of unsafe primary care: a systematic review and meta-analysis. *BMJ Quality & Safety* 2016.
- **Cresswell K**, Mozaffar H, Lee L, Williams R, Sheikh A. Safety risks associated with the lack of integration and interfacing of hospital health information technologies: a qualitative study of hospital electronic prescribing systems in England. *BMJ Quality & Safety* 2016. Online first. doi:10.1136/bmjqs-2015-004925
- Mozaffar H, **Cresswell KM**, Lee L, Williams R, Sheikh A. Taxonomy of delays in the implementation of hospital computerized physician order entry and clinical decision support systems for prescribing: a longitudinal qualitative study. *BMC Medical Informatics and Decision Making* 2016;16(1):1.
- **Cresswell K**, Mozaffar H, Shah S, Sheikh A. Approaches to promoting the appropriate use of antibiotics through hospital electronic prescribing systems: a scoping review. *International Journal of Pharmacy Practice*, 2016.
- **Cresswell KM**, Mozaffar H, Lee L, Williams R, Sheikh A. Workarounds to hospital electronic prescribing systems: a qualitative study in English hospitals. *BMJ Qual Saf* 2016. Published Online First. doi:10.1136/bmjqs-2015-005149
- **Cresswell K**, Coleman J, Smith P, Swainson C, Slee A, Sheikh A. Qualitative analysis of multi-disciplinary round-table discussions on the acceleration of benefits and data analytics through hospital electronic prescribing (ePrescribing) systems. *Journal of Innovation in Health Informatics* 2016;23(2):501-9.
- **Cresswell K**, Smith P, Swainson C, Timoney A, Sheikh A. Establishing data-intensive healthcare: the case of Hospital Electronic Prescribing and Medicines Administration systems in Scotland. *Journal of Innovation in Health Informatics* 2016 Oct 4;23(3):572-9.
- Robertson A, Nurmatov U, Sood H, Smith P, **Cresswell K**, Sheikh A. Tightrope walking towards maximising secondary uses of digitised health data: a qualitative study. *Journal of Innovation in Health Informatics* 2016;23(3):591-9.
- Robertson A, Nurmatov U, Sood H, Smith P, **Cresswell K**, Sheikh A. A systematic scoping review of the domains and innovations in secondary uses of digitised health-related data. *Journal of Innovation in Health Informatics* 2016;23(3):611-9.
- **Cresswell K**, Lee L, Mozaffar H, Williams R, Sheikh A. Sustained User Engagement in Health Information Technology: The Long Road from Implementation to System Optimization of Computerized Physician Order Entry and Clinical Decision Support Systems for Prescribing in Hospitals in England. *Health Services Research* 2016 Oct 1.
- Enseldo-Carrasco E, Suarez-Ortegon MF, Carson-Stevens A, **Cresswell K**, Bedi R, Sheikh A. Patient Safety Incidents and Adverse Events in Ambulatory Dental Care: A Systematic Scoping Review. *Journal of Patient Safety* 2016 Sep 21.
- **Cresswell K**, Cunningham-Burley S, Sheikh A. Creating a climate that catalyses healthcare innovation in the United Kingdom—learning lessons from international innovators. *Journal of Innovation in Health Informatics* 2017;23(4):772-82.
- **Cresswell K**, Slee A, Sheikh A. A survey exploring National Health Service ePrescribing Toolkit use and perceived usefulness amongst English hospitals. *Journal of Innovation in Health Informatics* 2017;24(2):247–251.
- **Cresswell K**, Cunningham-Burley S, Sheikh A. Health Care Robotics: Qualitative Exploration of Key Challenges and Future Directions. *J Med Internet Res* 2018;20(7):e10410.

- Ensaldo-Carrasco E, Carson-Stevens A, **Cresswell K**, Bedi R, Sheikh A. Developing agreement on never events in primary care dentistry: an international eDelphi study. *British Dental Journal* 2018;224(9):733.
- Mozaffar H, Williams R, **Cresswell K**, Sheikh A. Anglicization of Hospital Information Systems: Managing diversity alongside particularity. *International Journal of Medical Informatics* 2018;119:88-93..
- Westbrook JI, Li L, Shah S, Lehnbohm EC, Prgomet M, Schofield B, **Cresswell K**, Slee A, Coleman JJ, McCloughan L, Sheikh A. A cross-country time and motion study to measure the impact of electronic medication management systems on the work of hospital pharmacists in Australia and England. *International Journal of Medical Informatics*. 2019 Jun 18.
- Sheikh A, Rudan I, **Cresswell K**, Dhingra-Kumar N, Tan ML, Häkkinen ML, Donaldson L. Agreeing on global research priorities for medication safety: an international prioritisation exercise. *Journal of Global Health*. Available from: <http://jogh.org/documents/issue201901/jogh-09-010422.htm>.
- Williams R, Mozaffar H, Wiegel V, King A, **Cresswell K**, Sheikh A. A systematic analysis of the optimization of computerized physician order entry and clinical decision support systems: a qualitative study in English hospitals. *Health Informatics Journal* 2019;1460458219868650.
- **Cresswell K**, Callaghan M, Mozaffar H, Sheikh A. NHS Scotland's Decision Support Programme in Scotland: a formative qualitative evaluation. *BMJ Health and Care Informatics* 2019;26(1):e100022.
- **Cresswell K**, Callaghan M, Khan S, Sheikh Z, Mozaffar H, Sheikh A. Investigating the use of data-driven artificial intelligence in computerised decision support systems for health and social care: A systematic review. *Health Informatics Journal* 2020;1 –10.
- Mukherjee M, **Cresswell K**, Sheikh. Identifying strategies to overcome roadblocks to utilising near real-time healthcare and administrative data to create a Scotland-wide learning health system. *Health Informatics Journal*. 2021;27(1):1460458220977579.
- **Cresswell K**, Sheikh A, Franklin BD, Krasuska M, Hinder S, Lane W, Mozaffar H, Mason K, Eason S, Potts HW, Williams R. Theoretical and methodological considerations in evaluating large-scale health information technology change programmes. *BMC Health Services Research* 2020 Dec;20(1):1-6.
- **Cresswell K**, Williams R, Sheikh A. Developing and Applying a Formative Evaluation Framework for Health Information Technology Implementations: Qualitative Investigation. *J Med Internet Res* 2020;22(6):e15068
- Bonten TN, Rauwerdink A, Wyatt JC, Kasteleyn MJ, Witkamp L, Riper H, van Gemert-Pijnen LJ, **Cresswell K**, Sheikh A, Schijven MP, Chavannes NH, EHealth Evaluation Research Group. Online Guide for Electronic Health Evaluation Approaches: Systematic Scoping Review and Concept Mapping Study. *J Med Internet Res* 2020;22(8):e17774.
- Krasuska M, Williams R, Sheikh A, Franklin BD, Heeney C, Lane W, Mozaffar H, Mason K, Eason S, Hinder S, Dunscombe R, Potts, **Cresswell K**. Technological Capabilities to Assess Digital Excellence in Hospitals in High Performing Health Care Systems: International eDelphi Exercise. *Journal of Medical Internet Research*. 2020;22(8):e17022.
- **Cresswell K**, Williams R, Carlile N, Sheikh A. Accelerating Innovation in Health Care: Insights From a Qualitative Inquiry Into United Kingdom and United States Innovation Centers. *J Med Internet Res* 2020;22(9):e19644
- **Cresswell K**, Sheikh A, Dean Franklin B, et al. Formative independent evaluation of a digital change programme in the English National Health Service: study protocol for a longitudinal qualitative study. *BMJ Open* 2020;10:e041275. doi: 10.1136/bmjopen-2020-041275
- Azodo I, Williams R, Sheikh A, **Cresswell K**. Opportunities and Challenges Surrounding the Use of Data From Wearable Sensor Devices in Health Care: Qualitative Interview Study. *J Med Internet Res* 2020;22(10):e19542.
- Mukherjee M, **Cresswell K**, Sheikh A. Identifying strategies to overcome roadblocks to utilising near real-time healthcare and administrative data to create a Scotland-wide learning health

system. *Health Informatics J* 2021;27(1):1460458220977579. doi: 10.1177/1460458220977579.

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- Hinder S, **Cresswell K**, Sheikh A, Franklin BD, Krasuska M, The Nguyen H, Lane W, Mozaffar H, Mason K, Eason S, Potts HW. Promoting inter-organisational knowledge sharing: a qualitative evaluation of England’s Global Digital Exemplar and Fast Follower Programme. *PloS one* 2021;16(8):e0255220.
- **Cresswell K**, Sheikh A, Franklin BD, Krasuska M, Hinder S, Lane W, Mozaffar H, Mason K, Eason S, Potts HW, Williams R. Inter-organisational knowledge sharing to establish digital health learning ecosystems: qualitative evaluation of a national digital health transformation programme in England. *Journal of Medical Internet Research* 2021;23(8):e23372.
- **Cresswell K**, Domínguez Hernández A, Williams R, Sheikh A. Key Challenges and Opportunities for Cloud Technology in Health Care: Semistructured Interview Study *JMIR Hum Factors* 2022;9(1):e31246
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Invited International Presentations

- **Cresswell K.** How to address inequalities in Health technology assessment. EBHC Symposium, October 2022, Poland.
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- **Cresswell K.** The role of Implementation science in the digital transformation of health and care. European Palliative Care Research Center, November 2022, Oslo.
- **Cresswell K.** Formative evaluation of health technology innovations - Independent Evaluation of the Global Digital Exemplar (GDE) Programme. ROSE Graduate Program, May 2021, Osnabruck, Germany.
- **Cresswell K.** Reconceptualising the digital maturity of health systems. Invited presentation at 4Words 2020 - Le parole dell'innovazione in sanità, 29th January 2020, Rome.
- **Cresswell K.** Healthcare robotics – a qualitative exploration of key challenges and future directions. Invited presentation at the European Parliament, 19th February 2019, Brussels, Belgium.
- **Cresswell K.** Technology Strategy and Health Information Systems Implementation. Invited presentation at Harvard Medical School, 5th February 2019, Boston Massachusetts, USA.
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