INTERDISCIPLINARY RESEARCH IN HEALTH SCIENCES (IRIHS) ANNUAL REPORT 2016

IRIHS is a research unit within the Nuffield Department of Primary Care Health Sciences at the University of Oxford. It is led by Professor Trisha Greenhalgh and Dr Sara Shaw. IRIHS aims to undertake excellent research and teaching across disciplinary boundaries, in particular bringing together approaches and methodologies from medicine, epidemiology (including evidence-based medicine), sociology, psychology, computer science, management studies, philosophy and social policy.

Main achievements in 2016

- 1. EXPANSION OF ACADEMIC STAFF. We have expanded from 7 academic staff to 11 plus one associate.
- 2. RESEARCH: Research income for new research studies included a £6.5M Biomedical Research Centre theme. We are named co-investigators on > £10M in additional grants.
- 3. PUBLICATION AND DISSEMINATION: We published over 40 peer-reviewed academic articles. We gave a number of high-profile keynote lectures, conference presentations and policy briefings. One senior researcher was appointed Special Adviser to a House of Commons Select Committee.
- 4. TEACHING: We contributed to various MSc courses at Oxford and developed a new MSc module.
- 5. DOCTORAL STUDENTS. We have 10 doctoral students, one has passed Confirmation of Status in the last year and two more have submitted their CoS reports.
- STAFF DEVELOPMENT. We now have two NIHR In-Practice Fellows, two Academic Clinical Fellows and three early career fellows who are applying for personal fellowships. One early career researcher gained fellowship of the Higher Education Academy.

Staff in post in December 2016 (see also doctoral students below)

Name		Job title	Specialty	FTE
STAFF IN POST AT OXFORD				
Christine	A'Court	Researcher	GP	40%
Luke	Allen	Academic Clinical Fellow	GP/public health	20%
Joseph	Barker	Academic Foundation Programme	F2 doctor	20%
Eleanor	Barry	NIHR In-Practice Fellow	GP/public health	50%
Nick	Fahy	Senior Researcher	Health policy	40%
Alexander	Finlayson	Academic Clinical Fellow	GP	40%
Trisha	Greenhalgh	Professor / Co-director of Unit	GP / sociology	100%
Sue	Hinder	Research consultant	Sociology / evaluation	20%
Linnemore	Jantjes	Personal Assistant to TG	Admin (maternity leave)	80%
Chrysanthi	Papoutsi	Researcher	Social sciences	100%
Sara	Shaw	Senior Researcher / Co-Director	Health policy / sociology	80%
Julian	Treadwell	NIHR In-Practice Fellow	GP/public health	50%
Geoff	Wong	Senior Researcher	GP	50%
Joe	Wherton	Senior Researcher	Psychology / computing	100%
VISITING FELLOWSHIPS AT OXFORD				
Jay	Shaw	Visiting Research Fellow (from University of Toronto)	Health policy/social theory	

Higher degree students

- 1. **H McMullen** (QMUL, FT). 2011-. [Greenhalgh, Griffiths]. NIHR Doctoral Fellowship. *Health care innovations from policy to practice: A case study of rapid HIV testing in general practice.* 3 papers published since start of PhD. Passed PhD with minor corrections October 2016.
- 2. **N Fahy** (Oxford, PT). 2012- [Greenhalgh, Shaw]. *Incorporating psychological theory into the diffusion of innovations model in healthcare.*. Self funded. CoS passed Mar 16.
- 3. **G Hughes** (Oxford, PT) 2012-. [Greenhalgh, Shaw]. *Integrated care in practice: a study of health and social care for adults with complex needs considered to be at high risk of hospital admission*. Part funded by Wellcome SCALS grant. 9-month upgrade passed at QMUL April 2014 CoS viva December 2016.
- 4. J Russell (Oxford, PT). 2011-. [Greenhalgh, Shaw]. Self funded. The rationality of rationing: a rhetorical policy analysis of deliberations about resource allocation in the NHS. 18-month upgrade passed at QMUL October 2014; ToS passed at Oxford April 15. 8 papers published since start of PhD. CoS report submitted November 2016.
- 5. **D Hurst** (Oxford, PT) 2012- [Greenhalgh, Mickan]. *General Dental Practitioners' knowledge encounters*. ToS passed June 2015. One paper provisionally accepted; two in pipeline. CoS planned for early 2017.
- 6. **S Roberts** (Oxford, PT) 2015- [Greenhalgh, Airoldi] Part-funded by North London CLAHRC and UCL Partners. *Managing pre-diabetes: Optimising commissioning of multi-agency interventions*. ToS documents submitted November 2016.
- 7. **A Rohrbasser** (Oxford, PT). 2013- [Wong, Harris, Mickan]. *Exploring why Quality Circles work in Primary Health Care: A realist approach about how, why and under what circumstances they work.*
- 8. **T Stephens** (QMUL, PT) 2015- [Pearse, Shaw]. What influences sustainability of quality improvement in acute healthcare settings? 9-month review passed at QMUL February 2016.
- 9. **S Wieringa.** (Oxford, PT). 2016- . [Greenhalgh, Engebretsen]. *Mindlines in guideline development.* Funded by University of Oslo. Commenced May 2016.
- **10. C Pilbeam. (Oxford, FT). 2016-.** [Greenhalgh, Potter]. *Wellbeing and assisted living solutions.* Funded by Wellcome Trust. Commenced October 2016.

Research activity in 2016

Research studies on which we are Principal Investigators:

- 1. **Partnerships for Health, Wealth and Innovation** (Biomedical Research centre theme). NIHR, £6.5M. April 2017 March 2022 with set-up period from Oct 2016. (TG, with NF).
- 2. **Studies in Co-creating Assisted Living Solutions (SCALS).** £1.053M Wellcome Trust Senior Investigator Award plus £27K Public Engagement Award. July 2015 June 2020. (TG, with JW, SS, SH).
- 3. Interventions to improve antimicrobial prescribing in doctors in training: a realist review. NIHR HS&DR, £188K. (GW, with CP). July 2015 Dec 2016.
- 4. **Virtual Online Consultations: Advantages and Limitations (VOCAL).** £497K. NIHR HS&DR. March 2015 July 2017. (TG, with SS, JW and NHS partners from Barts Health).
- 5. Co-producing socio-technical solutions for people living with complex multi- morbidity: developing methodology and assessing pros and cons of a RCT. NIHR Programme Development Grant; £90K. July 2015 Nov 2016. (TG, JW and NHS partners from East London Foundation Trust).
- 6. Realising the potential of realist research for improving the delivery of health services (RAMESES II). NIHR HS&DR, £242K. Feb 2015 Jan 2017. (GW, TG and partners from Leeds and Liverpool).

Research studies on which we are named co-investigators:

- 7. Living With Feeling: Emotional Health in History, Philosophy and Experience. Wellcome Trust Collaborative Award, £1.6M. Nov 2015 Oct 2020. (TG, Co-I to T Dixon at QMUL).
- 8. Understanding how frontline staff use patient experience data for service improvement an exploratory case study evaluation and national survey. NIHR HS&DR. £787K, Oct 2015 Sept 2017. (TG, Co-I to L Locock).
- 9. Developing a framework for a novel multi-disciplinary, multi-agency intervention(s), to improve medication management in older people on complex medication regimens resident in the community. £196,272.55. HS&DR Project: 15/137/01. March 2016 Nov 17 (GW, Co-I to I Maidment at Aston University).
- 10. Can group clinics offer a better way to meet the complex health and social care needs of young adults with diabetes in an ethnically diverse, socioeconomically deprived population (TOGETHER study)? NIHR HS&DR. £420k, Dec 2016 Nov 2019. (TG, Co-I to S Finer and D Hargreaves at QMUL, with CP as lead qualitative researcher).
- 11. The Interdisiplinary Laboratory: Facilitating new forms of knowledge in contemporary life sciences. Wellcome Trust / QMUL Life Sciences Initiative Small Grants Fund, £10K, Jun 2015 May 2016. (SS, Co-I to D Swinglehurst).
- 12. Genomic and lifestyle predictors of foetal outcome relevant to diabetes and obesity and their relevance to prevention strategies in South Asian peoples (GIFTs). European Framework 7, €2.99M, Oct 2011 Sept 2016. (TG, Co-I to G Hitman at QMUL).
- 13. **Olympic Regeneration in East London (ORIEL).** NIHR Programme grant held by Steve Cummins in Dept of Geography. £2M, April 2011 March 2016. (TG, Co-I to S Cummins at LSHTM).
- 14. **Optimising pharmacist-based treatment for smoking cessation (STOP).** NIHR Programme Grant, £1.35M, July 2011 June 2017 (TG, Co-I to R Walton at QMUL)
- 15. Chronic viral hepatitis in ethnic minorities: Strategies to prevent the predicted increase in mortality (HepFREE). NIHR Programe Grant. £2M, March 2011 Sept 2016. (TG, Co-I to G Foster at QMUL).

Main teaching achievements

- Oxford MSc courses. We have taught on the MSc in Evidence-Based Health Care (TG, GW, CP, SS), MSc in International Health (Nuffield Department of Medicine, TG), MSc in Policy Evaluation (Blavatnik, SS). TG is co-lead on the Knowledge to Action Module in MSc in EBHC. GW has developed and leads the new MSc module in Realist Evaluation and Review. We plan to develop further MSc modules (see Strategy).
- **2. Undergraduate teaching.** AF is a Doll Fellow at Green Templeton College. TG and AF have taught on the undergraduate medicine course at Oxford and, along with SS, have mentees at Green Templeton.

Staff and student development

Allen: Started as Academic Clinical Fellow in Primary Care, and continues as Expert Consultant to World Health Organisation.

Barry: Continues on NIHR In-Practice Fellowship; applying for doctoral fellowship.

Finlayson: Continues as Academic Clinical Fellow in Primary Care and Doll Fellow at Green Templeton, established as Director and Co-Founder of The Hill (Digital Health Lab and Incubator)

Papoutsi: Gained Fellowship of Higher Education Academy.

Shaw: Elected to Fellow of Green Templeton College and appointed Co-Director of IRIHS.

Treadwell: New NIHR In-Practice Fellowship.

Wherton: Extending existing research and collaborations to support postdoctoral research; Joined Oxford AHSN (Academic Health Science Network) Informatics Oversight Group; Completed LSE Course 'Research Methods for the Online World' (August 2016).

Supporting new DPhil applications:

- Barry: A mixed-method study to improve the success of diabetes prevention programmes in deprived multiethnic areas. In development for NIHR DRF and Wellcome submission.
- Rahmantani: The Role of Online Medical Consultation Apps in Improving Health Literacy in Indonesia, Indonesia Endowment Fund for Education (application in development).
- Stephens: What influences sustainability of quality improvement in acute healthcare settings? NIHR/HEE Clinical Doctoral Fellowship (pending outcome from interview)
- Walumbe: Supporting successful self-management strategies for people living with chronic pain. NIHR/HEE Clinical Doctoral Fellowship (pending outcome from interview)

Academic publications in 2016

Papers potentially returnable in a primary care or social policy submission to 2021 REF are highlighted.

- 1. **Barry E**, Oke J, Normansell R, **Greenhalgh T**. Efficacy and effectiveness of screen-and-treat policies in the prevention of type two diabetes. systematic review and meta-analysis of screening tests and interventions. BMJ 2016 (epub ahead of print); 2017;356: i6538.
- 2. **Greenhalgh T**. Cultural contexts of health: the use of narrative research in the health sector. Copenhagen: WHO Regional Office for Europe; 2016 (Health Evidence Network (HEN) synthesis report 49).
- 3. **Greenhalgh T**, Macfarlane F, Steed L, Walton R. What works for whom in pharmacist led smoking cessation support: realist review. BMC Medicine 2016; 14: 209.
- 4. **A'Court C**, Sheppard J, **Greenhalgh T**. Blood pressure measurement: a call to arms. BJGP 2016; 66: 552-553.
- 5. Bishop DV, Snowling MJ, Thompson PA, **Greenhalgh T**: CATALISE: A Multinational and Multidisciplinary Delphi Consensus Study. Identifying Language Impairments in Children. *PloS One* 2016, 11(7): e0158753.
- 6. Raftery J, Hanney S, **Greenhalgh T**, Glover M, Young A. Models and applications for measuring the impact of health research: update of a systematic review for the Health Technology Assessment programme. Health Technology Assessment 2016; 20 (76), doi 10.3310/hta20760.
- 7. **Wong G**, Westhorp G, Manzano A, Greenhalgh J, Jagosh J, **Greenhalgh T**. RAMESES II reporting standards for realist evaluations. BMC Medicine 2016;**14**(1):96.
- 8. Ovseiko P, **Greenhalgh T** et al. A global call for action to include gender in research impact assessment. Health Research, Policy and Systems 2016; 14: 50.
- 9. Engebretsen E, Heggen K, **Wieringa S**, **Greenhalgh T**. Uncertainty and objectivity in clinical decision making: a clinical case in emergency medicine. Medicine, Health Care and Philosophy 2016 (epub ahead of print).
- 10. Elwyn G, **Wieringa S**, **Greenhalgh T**. Clinical encounters in the post-guidelines era. BMJ 2016; 353: i3200.
- 11. **Greenhalgh T**, Raftery J, Hanney S, Glover M. Research impact: a narrative review. BMC Medicine 2016; 14: 78.
- 12. **Greenhalgh T**, **Shaw S**, Jackson C, Janamain T. Achieving research impact through co-creation in community-based health services: literature review and case study. Milbank Quarterly 2016 94 (2): 392-429.

- 13. Edmunds L, Ovseiko P, Shepperd S, **Greenhalgh T** et al. Why do women choose or reject careers in academic medicine? A narrative review of empirical evidence. Lancet 2016 (epub ahead of print doi:10.1016/S0140-6736(15)01091-0).
- 14. Nyssen O, Taylor S, **Wong G**, Steed E, Bourke L, Lord J, Ross C, Hayman S, Field V, Higgins A, **Greenhalgh T**, Meads C *Does therapeutic writing help people with long-term conditions? Systematic review, realist synthesis and economic considerations.* Southampton, GB, NIHR Journals Library 2016; 410pp. ((HTA) Journal Series, (doi:10.3310/hta20270), 20 27).
- 15. Willis CD, Saul J, Bevan H, Scheirer MA, Best A, **Greenhalgh T**, Mannion R, Cornelissen E, Howland D, Jenkins E et al: Sustaining organizational culture change in health systems. J Health Organ Manag 2016, 30(1):2-30.
- Greenhalgh T, Shaw S, Wherton J, Hughes G, Lynch J, A'Court C, Hinder S, Fahy N, Byrne E, Finlayson A et al: SCALS: a fourth-generation study of assisted living technologies in their organisational, social, political and policy context. BMJ Open 2016, 6(2): e010208.
- 17. **Greenhalgh T**, Annandale E, Ashcroft R, Barlow J, Black N, Bleakley A, Boaden R, Braithwaite J, Britten N, Carnevale F et al: An open letter to The BMJ editors on qualitative research. Bmj 2016, 352:i563.
- 18. **Greenhalgh T,** Vijayaraghavan S, **Wherton J, Shaw S**, Byrne E, Campbell-Richards D, Bhattacharya S, Hanson P, Ramoutar S, Gutteridge C et al: Virtual online consultations: advantages and limitations (VOCAL) study. BMJ Open 2016, 6(1).
- 19. Atkins S, Roberts C, Hawthorne K, **Greenhalgh T**. Simulated consultations: A sociolinguistic perspective. BMC Medical Education 2016; 16: 16.
- 20. Procter R, **Wherton J**, **Greenhalgh T**, Sugarhood P, Rouncefield M, Hinder S: Telecare Call Centre Work and Ageing in Place. Computer Supported Cooperative Work (CSCW) 2016:1-27.
- 21. Kristjansson E, Gelli A, Welch V, **Greenhalgh T**, Liberato S, Francis D, Espejo F: Costs, and cost-outcome of school feeding programmes and feeding programmes for young children. Evidence and recommendations. International Journal of Educational Development 2016; 48: 79-83.
- 22. Ovseiko PV, Edmunds LD, Pololi LH, **Greenhalgh T**, et al. Markers of achievement for assessing and monitoring gender equity in translational research organisations: a rationale and study protocol. BMJ Open 2016, 6(1): e009022.
- 23. Allen L. Bloomfield A. Engaging the private sector. Lancet Global Health. 2016; 4(12):e897-e898.
- 24. Kickbusch I, **Allen L**, Franz C. Commercial determinants of health. Lancet Global Health. 2016; 4(12):e895-e896.
- 25. **Allen L**. Why is there no funding for Non-Communicable Diseases? Journal of Global Health Perspectives.1 October 2016.
- 26. **Allen L**, Milton K. Beyond the consultation room: GPs and physical activity. British Journal of General Practice. 2016 Nov 1;66(652):558.
- 27. Allen L. Biosecurity and Non-Communicable Diseases. Journal of Bioterrorism and Biosecurity 7:145.
- 28. **Allen LN**, Christie GP The Emergence of Personalized Health Technology J Med Internet Res 2016;18(5):e99 doi:10.2196/jmir.5357
- 29. Allen L, Tsai A. An unusual case of appendicitis. BMJ Case Reports 2016; doi:10.1136/bcr-2016-214944.
- 30. **Allen L**, Williams J, Townsend N, Mikkelsen B, Roberts N, Foster C, Wickramasinghe K. Poverty and risk factors for non-communicable diseases in developing countries: a systematic review. Lancet 2016; 388:S17.
- 31. Pullar J, **Allen L**, Townsend N, Williams J, Foster C, Roberts N, Mikkelsen B, Wickramasinghe K. Poverty and development interventions that address behavioural risk factors of non-communicable diseases in low and lower middle income countries: a systematic review. Lancet 2016: 388: S97.
- 32. **Allen L**. Are we facing a non-communicable disease pandemic? Journal of Epidemiology and Global Health. 22 Nov. epub ahead of print.
- 33. Maile EJ, Barnes I, **Finlayson AE**, Sayeed S, Ali R. Nervous System and Intracranial Tumour Incidence by Ethnicity in England, 2001-2007: A Descriptive Epidemiological Study. PLoS One 2016; 11 (5): e0154347. doi: 10.1371/journal.pone.0154347.

- 34. Green E, **Shaw SE**, Harris T. "They shouldn't be coming to the ED should they?" A qualitative study of why patients with palliative care needs present to the Emergency Department, BMJ Supportive & Palliative Care 2016; 0:1–7. doi:10.1136/bmjspcare-2015-000999.
- 35. Walumbe J, Swinglehurst D and **Shaw SE**. Any Qualified Provider: A Qualitative Case Study of One Community NHS Trusts Response, BMJ Open 2016; 6:e009789. doi:10.1136/bmjopen-2015-009789.
- 36. **Russell J**, Berney L, Stansfeld SA, Lanz D, Kerry S, Chandola T and Bhui K. The role of qualitative research in adding value to a randomised controlled trial: lessons from a pilot study of a guided e-learning intervention for managers to improve employee wellbeing and reduce sickness absence. Trials 2016; DOI 10.1186/s13063-016-1497-8. 17:396.
- 37. Peters M, Potter CM, Kelly L, Hunter C, Gibbons E, Jenkinson C, Coulter A, Forder J, Towers AM, **A'Court C** *et al*: The Long-Term Conditions Questionnaire: conceptual framework and item development. *Patient related outcome measures* 2016, **7**:109-125.
- 38. Frischhut M, **Fahy N**: Patient Mobility in Times of Austerity: A Legal and Policy Analysis of the Petru Case. European journal of health law 2016, 23(1):36-60.
- 39. Gennissen L, Stammen L, Bueno-de-Mesquita J, **Wieringa S**, Busari J: Exploring valid and reliable assessment methods for care management education. *Leadership in health services* 2016, 29 (3):240-250
- 40. Willis CD, Riley B, Stockton L, Abramowicz A, Zummach D, **Wong G**, Robinson KL, Best A. Scaling up complex interventions: insights from a realist synthesis. Health Research Policy and Systems 2016; 14: 88.

Major keynote lectures, workshops and conference presentations 2016

- 1. Greenhalgh T (with Cassam Q, University of Warwick). Workshop: Virtues and Vices in Evidence-Based Clinical Practice. Green Templeton College, January 2016.
- 2. Greenhalgh T. Academic Primary Health Care: Still the poor cousin of hospital based research? Radcliffe Memorial Lecture, University of Oxford, November 2016.
- 3. Greenhalgh T. Research Impact. Opening keynote at International Primary Care Respiratory Society Conference, Amsterdam, May 2016.
- 4. Greenhalgh T. The link between what we know and what we do. Knowledge to Action Conference, University of Oslo, May 2016.
- 5. Wong G. Realist Evaluation, DFID Joint Evaluation and Statistics Professional Development Conference, Oxford, September 2016.
- 6. Greenhalgh T. Remote video consultations: Expectation, hubris, hype and evidence. University of Kent, Centre for Health Service Studies Annual Guest Lecture, October 2016.
- 7. Greenhalgh T. Narrative and the Cultural Contexts of Health. Keynote to Narrative Medicine conference, Milan, Italy, December 2016.
- 8. Wherton J. VOCAL: Virtual Online Consultations Advantages and Limitations. International Congress on eHealth in Revolution, Dublin, Ireland, September 2016
- 9. Wherton J, Virtual clinics and consultations the evidence: Professional conference on 'Setting up and running virtual clinics'. London, October 2016.
- 10. Fahy N. Keynote speaker at opening plenary of the European Health Forum Gastein 2016 on the wider impact of Brexit on health and Europe.

External appointments / policy engagement / public engagement

Fahy

- Specialist adviser to House of Commons Health Committee for their inquiry into Brexit and health and social care;
- Policy adviser within an EU-funded research project "Transfer of Organisational innovations for Resilient,
 Effective, equitable, Accessible, sustainable and Comprehensive Health Services and Systems", a 29partner consortium bringing together ministries, research institutes and universities and aiming to set a
 Europe-wide agenda for research into health services and systems;
- Chair of WHO/EURO Expert Advisory Group to enhance monitoring and reporting for the Health 2020 policy strategy.

Finlayson:

Technology innovation / implementation grants (AF)

- The Hill. £300K European Regional Development Fund.
- Proximity to Discovery. £25K MRC
- Strategic Partnerships for Higher Education Innovation and Reform. £2.7M UKAID / British Council SPHEIR grant for MedicineAfrica programme

Greenhalgh:

- BMJ Editor's Award for Persistence and Courage in Speaking Truth to Power 2016
- WHO Alliance for Health Policy and Systems Research, Scientific and Technical Advisory Committee
- Visiting Professor, Radboud University, Nijmegen, Netherlands
- European Public Health Association, International Advisory Group on Public Health Research Impact
- Oxfordshire Health Inequalities Commission
- Advised to Wachter Review of NHS IT, March 2016

Shaw:

- Delivering Primary Health Care to Homeless People, NIHR Advisory Committee
- Appointed Research Fellow at Green Templeton College

Wherton

In Virtual Online Consultations: Advantages and Limitations (VOCAL) study with TG, SS:

- Developed standard operating procedures for remote consultations (published with Information Governance Alliance)
- Informed evolving inspection framework for digital health, Care Quality Commission
- Supported programme for roll-out of remote consultations, Barts Health NHS Trust

Wong

- Realist Evaluation, presentation to HM Treasury, London, May 2016.
- NIHR, Health Technology Assessment Programme Primary Care, Community and Preventive Interventions Panel

Strategy for 2017

- 1. RESEARCH: Consolidate and progress our current funded programmes of work especially establishing the major BRC theme Partnerships for Health Wealth and Innovation. New grant income is not a priority except to maintain staff posts.
- 2. PUBLICATION AND DISSEMINATION: All research staff to publish one REF-returnable empirical paper or systematic review. Continue and extend public engagement work in SCALS-related research.
- 3. TEACHING: Deliver MSc modules in Knowledge to Action and Realist Evaluation and Review. Develop MSc module in Health Policy and Systems. Explore options for developing an MSc in social science aspects of primary health care to align with strategic focus of DPCHS on Patient Experience / Digital Health / Health Policy and Systems. Keep doctoral students on track.
- 4. STAFF AND STUDENT DEVELOPMENT. Support new DPhil applications related to our existing research programmes; ensure that all early career researchers have clear career plans and opportunities for progression. Where appropriate, submit applications for IPF, DRF, PDF, CRF or SRF.

Trisha Greenhalgh and Sara Shaw December 2016