



CLAHRC WM

Theme 4 Steering Committee

11th June 2019



‘Overview’ study

SUMMARY: Review of systematic reviews on effectiveness of integrated care interventions on patient experience, reducing use of hospital and other health services and cost implications.

56 reviews included. Few interventions were successful and effective interventions may show modest results. Most likely to be effective were complex interventions with multiple components; multidisciplinary teams (especially discharge management); MDT with disease-specific specialists; home or community-based follow-up, and self-management interventions when combined with multidisciplinary approaches.

Successful interventions were most likely to deliver significant reductions when used for specific conditions (e.g. heart failure, COPD) rather than for general chronic diseases.

PPI: Input to selection of chronic conditions, results synthesis and dissemination plans

OUTPUTS: Study report, paper in BMJOpen (with press release) on hospital outcomes (*Damery et al 2016*); paper in Health and Quality of Life Outcomes (*Flanagan et al 2017*); CLAHRC BITE; regional dissemination event; presentations to 2 NHS Trusts on MDTs; presentations to CLAHRC Theme Steering Committee and Programme Steering Committee

FURTHER WORK: None specifically, but findings informed approach to several other studies

Renal patients' emotional and psychological support

SUMMARY: Mixed methods study on prevalence and experience of distress by ESRD patients at 4 NHS Trusts; problems renal staff experience in recognising and managing patient distress.

33% of patients were distressed, most commonly those on dialysis, women, patients aged <50 and BME patients. Distress can happen to anyone at any time, and patients often avoided talking about distress to staff due to perceptions about staff skills, time and renal unit culture inhibiting discussions. Staff found distress hard to recognise due to time pressure, lack of training and perceptions of responsibility. Management was difficult due to challenges in solving problems, lack of quickly accessible support options.

Recommend patient education and support, training + emotional support for staff, staff should have a mix of formal and informal support options to offer, and change to renal unit culture.

PPI: Input from CLAHRC PPI on study materials, and PPI reps on Renal Advisory Group (RAG).

OUTPUTS: Study report; summary leaflet for patients and staff; 9 presentations: NHS Trusts (n=4), national renal counsellors, RAG, TSC, PSC, IAHR seminar; protocol published (Taylor et al BMC Nephrology); prevalence paper in press (Damery et al BMJOpen) main results paper submitted (Damery et al BMC HSR), staff paper (Combes et al PlosOne), patient paper (Sein et al QHR) written; 2 conference presentations at BRS.

FURTHER WORK: Spin-off study at Heartlands with PD patients.

'LACE' study

SUMMARY: Retrospective cohort study to assess how well the LACE score (Length of stay, Acute admission, Comorbidity, A&E visits) predicted 30 day hospital readmission using data on 183,843 anonymised inpatient episodes at Sandwell and West Birmingham NHS Trust.

Increasing LACE score and each of its individual components independently predicted readmission, with a LACE score of 11 as the most effective threshold for distinguishing between higher and lower risk patients. However, only 25% of readmissions occurred in the higher scoring group and a separate, simpler statistical model combining just A&E visits and number of inpatient episodes per patient in the previous year was more effective at predicting whether a patient would be readmitted to hospital within 30 days.

Whilst LACE was effective in statistical terms, it had little added value over clinical judgement in predicting a patient's risk of hospital readmission.

PPI: None.

OUTPUTS: Results paper in BMJOpen (*Damery and Combes 2017*); CLAHRC BITE

FURTHER WORK: None.

Evaluation of SPACE care home improvement programme

SUMMARY: 24 month mixed evaluation of Walsall and Wolverhampton SPACE programme aiming to reduce avoidable harms and hospital admissions in 26 care homes through training and facilitator support to managers and staff. Manager + staff survey x3 of safety climate; changes in rates of harms and hospital admissions; interviews with CCG managers and facilitators; 49 manager/staff interviews at 4 case study care homes; 184 hrs of observation.

Positive changes to safety, widespread uptake of QI tools and training; improvements in safety climate, significant reduction in falls and UTIs, and reductions in severe pressure ulcers.

Success factors: intensive facilitation; engaging and empowering all staff; co-design of QI; using simple QI tools that care homes could adapt for themselves; care homes sharing ideas and mutual learning; support to work with other service providers; celebrating success.

PPI: Input to design of survey and interview topic guides.

OUTPUTS: Study report; staff summary leaflet; presentations to 2 regional SPACE conferences and 1 regional dissemination event; HSRUK conference, TSC and PSC; 2 papers being written.

FURTHER WORK: None yet, although we have developed good care home expertise!

Supported Integrated Discharge at BHH

SUMMARY: Elaine O'Connell Francischetto's ongoing doctoral research exploring complexities involved in discharging older patients from hospital. Includes a meta-review of discharge interventions for older people and case study of the SID service at Heartlands Hospital which aims to facilitate effective patient transitions across settings and provide integrated rehabilitation and reablement services for eligible patients.

28 case study interviews completed: 14 staff for service mapping and perceptions of the service and its effectiveness; 10 patients and 4 carers on their experiences of using the SID service.

Meta-review: Searches, screening, quality assessment and data extraction complete. 66 reviews included, covering 10 broad types of discharge intervention and multiple health and care service and patient/carer outcomes (e.g. readmission, mortality, patient health status).

PPI: Input to design of study materials and project design.

OUTPUTS: Meta-review protocol published (*EoF et al 2016 Systematic Reviews*). Still to come: Elaine's PhD thesis; published findings from meta-review.

FURTHER WORK: Project still underway.

HECTOR (Heartlands Elderly Care, Trauma & Ongoing Recovery)

SUMMARY: Evaluation of an enhanced care-pathway for older patients admitted with traumatic injuries. The aim of the evaluation was to assess the effectiveness of the HECTOR pathway upon patient outcomes, in particular upon complication rates. Staff and stakeholders were interviewed to understand the context and climate within which the pathway was introduced and to explore how internal and external forces may have impacted upon the implementation and effectiveness of the pathway. We found the pathway had no statistically significant impact upon patient outcomes. There were a number of organisational influences upon uptake and implementation of the pathway in terms of internal and external capability, motivation, opportunity.

PPI: Heartlands PPI provided input throughout the project.

OUTPUTS: Implementation Science paper and report to the Trust. It won awards from the BMJ (2018 winner in the category of Emergency) and West Midlands Clinical Research Network (2017 winner in the category of Improvement project of the year).

FURTHER WORK: None planned.

TOPIC (ThOracic Epidural and Paravertebral Blockade In reducing Chronic Post-Thoracotomy Pain) Heartlands hospital

SUMMARY: A Randomised Controlled Trial to investigate the effectiveness of ThOracic Epidural and Paravertebral Blockade In reducing Chronic Post-Thoracotomy Pain - Feasibility Study. It sought to clarify aspects of the trial such as how many patients will consent to be randomised to PVB or TEB and what factors motivate, or become barriers for clinicians and patients to agree to be randomised (Heartlands and Manchester).

The study findings indicated that it was possible to randomize and follow-up patients with high fidelity.

PPI: representation was provided by a number of patients who previously underwent thoracotomy surgery – input around topic guide for interviews and questionnaire design.

OUTPUTS: Submission BMJ Open, awaiting decision.

FURTHER WORK: TOPIC 2 – funded by HCA to undertake multi-centre RCT – currently in the recruitment phase.

Fit for Surgery – Heartlands hospital

SUMMARY: Fit for surgery was a Heartlands Hospital (Birmingham) based project to develop, test and refine an exercise app for patients undergoing lung surgery. Participants in the programme had reduced rates of post-operative pulmonary complications, and reduced rates of readmissions. However, given the lack of outpatient services for these patients Health Foundation funding was secured to see if it is feasible to deliver a rehab service in the patients home via an app. Interviews with participants were undertaken to assess the acceptability and feasibility of the exercise app.

For the patients who participated and were interviewed, the app was an overall success. Piloting and testing the app meant changes could be made as and when issues arose. The quantitative data collected indicated that there was a marked improvement in exercise capacity after using the app.

PPI: Provided by a Heartlands patient representative who contributed at all stages of the project.

OUTPUTS: Submission to Journal of Cardiothoracic Surgery, awaiting decision.

FURTHER WORK: RFPB application submitted in 2017 - unsuccessful.

A pragmatic randomised feasibility study of myVideoClinic

AIM: To assess if the use of video clinics in routine follow-up appointments for clinically stable liver transplant patients can increase patient satisfaction compared to usual care.

METHODS: Participants randomised to video clinic or usual care, Participants complete questionnaires at 3,6,9 and 12 months, End of study interviews.

PPI INPUT: Comments and suggestions on the design, management and undertaking of the study.

FINDINGS SO FAR:

- 54 patients recruited to study (29 intervention, 25 usual care)
- 57% questionnaire completion rate
- 13 (45%) changed from intervention arm to usual care
- Clinicians and patients have experienced occasional technical problems with the video clinic software.

OUTPUTS: Protocol published in *Trials* (2018)

FURTHER WORK: End of study interviews, Analysis of questionnaire and qualitative data, Write up of papers and dissemination of results.

Evaluation of the Coventry Out of Hospital Care Model

AIM: To evaluate how the OOHC model has been developed and implemented in Coventry during the first 18 months of inception, as an example of whole system complex service change.

METHODS: 17 staff interviews, Documentary analysis, Draft logic model.

FINDINGS:

Positives:

- Generally well supported; holistic approach, MDT working. Early success with integrated single point of access (ISPA).

Challenges:

- Implementation of the new model was too slow – stuck in design and planning stage
- Poor communication with staff and stakeholders, especially frontline staff and primary care
- Staff: Lack of front-line staff involvement in development of the model, recruitment and retention, change of roles, role of GPs and GP engagement with the changes.
- Collaboration with other organisations – different cultures, professional identities, and expectations.

OUTPUTS: Report on findings prepared and sent to the commissioning organisation.

INTEGRATE: Renal transitions

SUMMARY: Exploration of patients' experience of moving from peritoneal dialysis to haemodialysis

Interviews with patients, their caregivers, and staff from the renal unit exploring the process and experience of transitioning between these two treatments

International project, incorporating three sites in the UK, one in Belgium, and three in Australia

PPI INPUT: Helped create and edit the interview schedule

OUTPUTS: Preliminary findings presented at UK Kidney Week, June 2019. In draft, paper for publication using results from all international sites

FURTHER WORK: Possibly to look at different transitions between renal replacement therapies (e.g. CKD stage 5 to any RRT, RRT to transplant)

Delays in discharge of older people from hospitals – what are the hidden challenges?

SUMMARY & FINDINGS: The aim of the research is to understand why delays occur and to develop sustainable solutions to local obstacles for effective discharge that could also have wider implications across the NHS. While these solutions are aimed at increasing efficiency and reducing numbers of days 'lost' to delayed discharges, they are also about improving the quality of life of older frail people by ensuring that they receive support and care in the most appropriate setting for their needs.

Ethnographic approach is employed to collect data in the case study sites. The data collection include detailed situated observations of key interactions, such as team meetings and ward rounds, 'shadowing' of individuals in key roles such as discharge coordinators, collection of key documents and routine data, and interviews with ward staff and local system and service leads. In addition, the data comprises interviews with patients and health professionals. We finalised the data collection phase and currently we are analysing the data.

PPI INPUT: this research received and implemented PPI suggestions such as excluding the word 'frailty' from the research consent forms and information sheets.

OUTPUTS: Data collection and planning for analysis presented to project Steering Group; the preliminary results will be presented at the BSA medical conference in Sept 2019 pending abstract acceptance oral presentation.

FURTHER WORK: we intend to produce two publications in academic journals with high impact factor. A workshop will be presented for the hospital staff.

OPAL : Older People's Assessment and Liaison Team

AIM: To investigate the views of health professionals about how the OPAL service works

METHODS: Qualitative interviews with 16 staff (doctors, therapists, nurses, A&E staff)

FINDINGS:

- the service had evolved considerably over time, but systems and processes had not
- considerable variations in practice between staff (inappropriate referrals; which patients were eligible; how they were assessed)
- service still evolving and not ready for formal evaluation

OUTPUTS:

- Written report to UHBT
- Workshop to discuss findings with staff

Other projects

- An evaluation of the cost and effectiveness of home haemodialysis which is undertaken more frequently than the usual NHS prescription of 3 times per week. This work was undertaken for the National Institute for Health Research (NIHR) Devices for Dignity Healthcare Technology Co-operative.
- Rapid review of evidence on outcomes-based commissioning and development of measures for ACE Pioneers Programme
- Evaluation of the Coventry alliance: best care, anywhere (Prime Minister's Challenge Fund)

Theme 4 Birmingham outputs

Papers

24 published, 3 more submitted

Conference presentations

British Renal Society x3; Euro PD; HSRUK x3

Grants

9 grants ranging from £9-816k; 3 more submitted and awaiting outcome

Variety of sources: NIHR x2; CCGs x2; AHSN x3; private foundations x2

Overview of the theme, Birmingham

- Good diversity of projects, both in terms of topics and approaches to research
- Ethics has taken twice as long as expected and recruitment has been half what clinicians expected
- Some projects have had impact in the field, others less so, dissemination has been frustrating at times
- Challenge of getting the right balance between what NHS organisations have wanted us to do and what has been feasible
- Limited opportunities for multi-site high quality research and publication in good journals has therefore been limited
- Strong team working, and researchers have had opportunities to develop new skills, although career progression may be limited by the type of research carried out
- Strong PPI group that has gelled and worked well with the research team
- Lack of on-going engagement with the field via the theme Steering Committee

The ENHANCE pilot trial



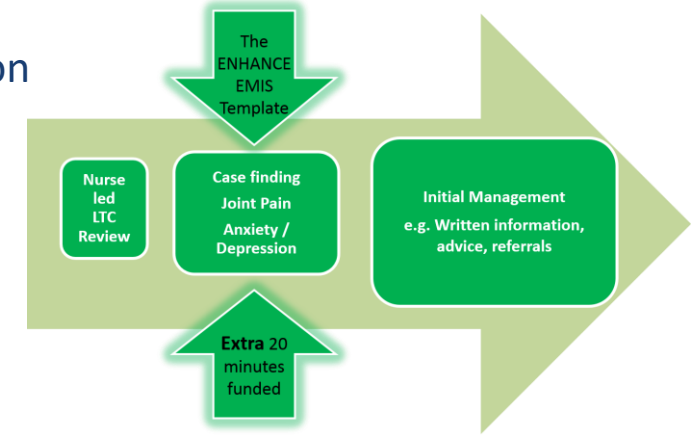
Aim: To examine the feasibility and acceptability of a practice nurse-led, integrated approach to LTC management (the ENHANCE review), tackling the under-diagnosis and under-management of OA-related pain, anxiety and/or depression

Summary:

- A pilot, pragmatic, stepped-wedge cluster randomised controlled trial with process evaluation
- Participants were patients registered in participating practices aged ≥45 years attending routine LTC reviews
- PPIE integral to development of review consultation, nurse training, process evaluation

Findings:

- 4 practices were recruited & 10 practice nurses were sequentially trained
- 319 participants (207 control, 112 intervention) (response 67%)
- 69% response at 6 months
- 96% & 93% in the intervention arm reported being asked about joint pain & mood
- Case finding questions were used as intended in most consultations (joint pain 20/24, anxiety 15/24, depression 6/24)
- Some evidence of good integration, some opportunities missed
- Query: did we engage the population most in need?



Conclusions:

This pilot demonstrated that we could:

- engage primary care teams
- deliver training
- recruit and retain patients
- maintain patient satisfaction & treatment fidelity

Further work

Application for funding for full trial made to HS&DR unsuccessful and now working on amending the application for a future application



Outputs

Papers:

- Healey EL, Jinks C, Tan VA, Chew-Graham CA, Lawton S, Nicholls E et al. Improving the care of people with long-term conditions in primary care: protocol for the ENHANCE pilot trial. *Journal of Comorbidity* 2015;5:135–149.
- Finney AG, Jinks C, Mallen C, Healey E. 2015. Study aims to test extended review of LTCs to improve management of OA and anxiety/ depression. *Practice Nurse*.
- Tan V, Jinks C, Chew-Graham C, Healey EL, Mallen C. 2015. The triple whammy anxiety depression and osteoarthritis in long-term conditions. *BMC Fam Pract*, vol. 16, 163.
- Healey EL, Jinks C., Chew-Graham C., Nicholls E., Finney A., Liddle J et al. Integrating case finding and initial management for osteoarthritis, anxiety and depression into routine primary care nurse-led long-term condition reviews: Results from the ENHANCE pilot trial. About to submit.
- Jinks C, Healey EL, Chew-Graham CA, Porcheret M, Lawton S, et al. Development of a primary care nurse-led long term condition review consultation (ENHANCE). A systematic approach to intervention development informed by theory. About to submit.

Conference presentations: (n=11) BSR, EULAR, HSRN, SAPC, WASP, SSM, RCGP, CLAHRC Multimorbidity day, RI PPI conference

Examples of Published abstracts:

- Jinks C, Nicholls E, Liddle J, Healey EL, Evans AL, Chew-Graham CA et al. 2017. Integrating case finding and initial management for osteoarthritis, anxiety and depression into routine primary care nurse-led long-term condition reviews: Results from the ENHANCE pilot trial. *Annals of the Rheumatic Diseases* 2017; 76: 1433.
- Liddle J, Lawton SA, Chew-Graham CA, Healey EL, Mallen CD, Jinks C. 2017. Exploring discrepancies between long-term condition review consultation audio-recordings and computer template data (the ENHANCE pilot trial). *Trials* 2017; 18: 47.
- Liddle J, Chew-Graham CA, Mallen CD, Healey EL, Jinks C, Dikomitil L. 2017. So looking at this, you look like you've got some issues going on with your joints: Exploring case-finding in long-term condition review consultations – the ENHANCE pilot trial. *Rheumatology* 2017; 56: 121.
- Lawton SA, Healey EL, Lewis M, Nicholls E, Jinks C, Tan V et al. 2016. Challenges and solutions for the operationalisation of the ENHANCE study: a pilot stepped wedge trial within a general practice setting. *Trials* 2016; 17: 1.

INCLUDE : INtegrating and improving Care for patients with infLammatory rheUmatological DisordErs in the community: Identifying multimorbidity



Aim: To evaluate the feasibility of a nurse-led integrated review (INCLUDE) for people with inflammatory rheumatological conditions to assess for commonly associated morbidities (Cardiovascular disease, Anxiety and Depression, Bone health / Osteoporosis risk)

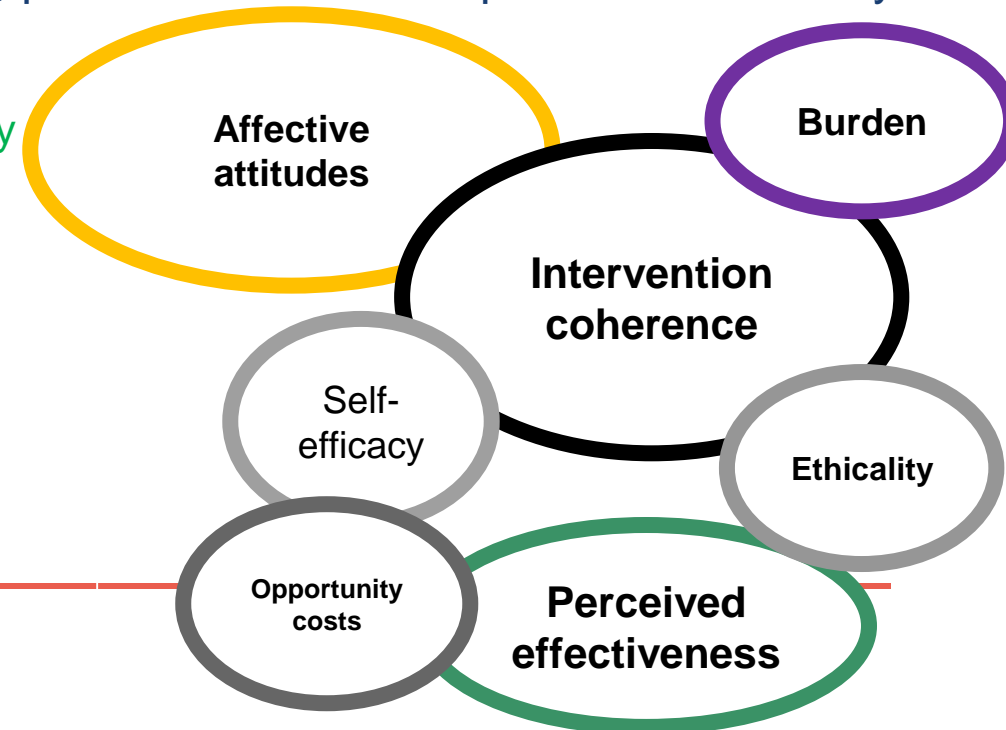
Summary:

- Cluster pilot RCT with process evaluation
- PPIE integral to development of review consultation, nurse training, process evaluation & plans for next study

Findings:

- 129 (76% of those invited attended)
- Mean age 69.1years, 60% female
- 86 people (67%) overweight (BMI > 25)
- 39 (30%) QRisk2 >10%
- 33 (26%) had a high FRAX score
- 43 (33%) +ve GAD-2
- 45 (35%) +ve PHQ-2

- Inflammatory condition and comorbidities not always linked by patient
- Raised BMI sometimes not mentioned to the patient; limited advice about diet/activity
- Patient preferences not explored
- New Theoretical Framework of Acceptability used to analyse qualitative data





Further work

Application for funding for full trial, with broad stakeholder consultation up-front, and parallel implementation evaluation

Outputs (so far)

Hider SL, Bucknall M, Cooke K et al. The INCLUDE study: INtegrating and improving Care for patients with infLammatory rheUmatological DisordErs in the community; Identifying multimorbidity: Protocol for a pilot randomised controlled trial. *Journal of Comorbidity* 2018. Aug 2; 8(1):2235042X18792373.

Hider SL, Chew-Graham CA. Workshop - “No health without mental health”: Impact of mood problems in patients with rheumatic disorders. BSR May 2018.

Conference presentations and posters in 2018 and 2019: SAPC, RCGP, BSR (n=12)

Dissemination to lay audience: Haywood Hospital



The team would like to thank everyone involved with Theme 4 for their input into the various projects during the past 5 years, especially our PPI advisors:

Jennifer Leech

Robert Mottram

Priti Parmar

Magdalena Skrybant

Deb Smith

John Wright

