Wessex NIHR @10: Improving healthcare for older people through research

Helen Roberts

BRC Nutrition Faculty
CLAHRC: Wessex Theme Lead
CRN Ageing Specialty Group National Lead
NIHR support for Ageing Research

National overview

Research here in Wessex
Comprehensive Research Network

The NHS Delivery part of the CRN

- 15 Local Clinical Research Networks
- Each LCRN has a number of front line research staff working on recruiting patients into studies
- Portfolio and levels of activity varies between regions
- National overview of portfolio provided by the Coordinating Centre
CRN Ageing Speciality Group

• **Study delivery**: national oversight of portfolio; advise on poor delivery & promote improved performance working with delivery managers

• **Clinical ambassador for CRN**: promote NHS as place for research, engage with key stakeholders - public sector, charity, life science funding, pharma, patients and public

• **Promote clinical engagement** in NIHR research
Ageing Speciality Group success

• Active committed membership
• Examples of studies with >1000 recruits
• Project board for NIHR study of acute care of frail older people in hospital developed by the group
• New multi-centre intervention study for sarcopenia 2016
• Developing James Lind Alliance prioritisation on topic of multi-morbidity
• Initiated portfolio development groups 2016
• Speciality ‘CV’ to attract commercial research studies
Ageing Specialty Management Report - England Data

3d Recruitment per 100,000 LCRN Population - Ageing

- East Midlands: 1044, 27.8
- Eastern: 2480, 85.9
- Greater Manchester: 1188, 40.4
- Kent, Surrey and Sussex: 520, 11.6
- North East and North Cumbria: 1731, 55.6
- North Thames: 351, 6.4
- North West Coast: 133, 8.6
- North West London: 189, 9.4
- South London: 1092, 34.6
- South West Peninsula: 176, 7.9
- Thames Valley and South Midlands: 607, 26.1
- Wessex: 3089, 113.4
- West Midlands: 341, 6.0
- West of England: 105, 4.4
- Yorkshire and Humber: 1916, 35.2

Raw recruitment numbers on axis

FY1516 recruitment
FY1516 recruitment per 100,000 LCRN Population

In reports where all Specialties are shown, studies are counted against the Managing Specialty only. See glossary for details on exclusions and Recruitment to Time and Target ratings.
A lifecourse approach to sarcopenia

Muscle mass and strength

Age

Early life
Growth and development to maximise peak

Adult life
Maintaining peak

Older life
Minimising loss

Range of muscle mass and strength between individuals

Sayer AA et al Age Ageing 2013
Prevalence of sarcopenia in community-dwelling older people in the UK using the European Working Group on Sarcopenia in Older People (EWGSOP) definition: findings from the Hertfordshire Cohort Study (HCS)

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Abstract

Introduction: sarcopenia is associated with adverse health outcomes. The aim of this study was to describe the prevalence of sarcopenia in community-dwelling older people in the UK using the European Working Group on Sarcopenia in Older People (EWGSOP) consensus definition.
Grip strength varies across different health care settings

Admission grip strength predicts length of stay in hospitalised older patients

Roberts HC Age Ageing (2013)

A. Kerr Age Ageing (2006)
Standardised measurement of grip strength

• Calibrated Jamar dynamometer

• Seated in upright chair with elbows supported

• Maximum value from three attempts with each hand 1 minute apart

• Standard encouragement

Roberts HC  Age Ageing (2011) 40: 423
Grip strength T-score of $\leq -2.5$

51.7 kg (SD 9.8) $\rightarrow$ **27 kg**

31.5 kg (SD 6.0) $\rightarrow$ **16 kg**

Dodds et al., PLOS One 2014
Implementing grip strength measurement into routine clinical practice; a feasibility study (GRImP)

Kinda Ibrahim, Harnish Patel, Mark Baxter, Carl May, Avan A. Sayer, Helen Roberts
Under nutrition of older in-patients

- Multi-national studies estimate up to 39% older in-patients are malnourished

- Poor nutrition associated with increased morbidity, mortality, longer length of stay and more readmissions

- Contributory factors include acute illness, cognitive impairment, altered taste and low mood

- Hospital environment: food placed out of reach, going cold because of clinical care, lack of assistance with eating
The Southampton Mealtime Assistance Study: a nutritional intervention in hospitalised older people

Objective
Feasibility and acceptability study of volunteer mealtime assistance on an acute medical ward to improve mealtime care and nutritional status in hospitalised older women

Design
Data collected in two female wards in baseline year and then intervention year, during which trained volunteer mealtime assistants worked on one ward

Outcomes:
1. Feasibility of recruiting volunteers
2. Views of patients, relatives, staff and volunteers;
3. Impact on dietary intake

Roberts et al. BMC Geriatrics 2013 13:5
Intervention: trained volunteer mealtime assistants

- Formal half day training of volunteers by dietician and speech therapist
- Clean patients’ hands and trays
- Prepare food trays and open packaging
- Encourage eating
- Cut up food
- Help guide food from plate to mouth
- Feed patients as required
- Complete food and fluid charts
- 29 volunteers helped during 229 lunchtimes during the year

Key points from initial study

- Trained volunteers were successfully introduced onto a female acute ward and provided additional feeding assistance, supplementing ward staff and freeing them up for other duties.
- Volunteers perceived to improve the quality of mealtime care.
- Most older patients required mealtime assistance.
- Patients had low energy and protein intakes despite assistance with feeding.
- The need for mealtime assistance was strongly associated with poor intake and could act as a marker for those at risk of malnutrition.
The Southampton Mealtime Assistance Implementation Study

Dr Fiona Howson
Specialist Registrar in Geriatric Medicine
NIHR CLAHRC Clinical Research Fellow

Chief investigator: Dr Helen Roberts, Associate Professor in Geriatric Medicine
Hospital departments and wards involved

Aims:
Evaluate the implementation of volunteer mealtime assistants in four different hospital departments (adoption, coverage, acceptability, costs)

Describe the differences in volunteers and activity between departments

2 wards in each hospital department and patients 70 years and over:

- Medicine for Older People (MOP)
- Acute Medical Unit (AMU)
- Trauma and Orthopaedics (T&O)
- General Medicine (GM)
846 sessions were provided by 65 volunteers

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<td>Assisting food to mouth</td>
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<td>Feeding</td>
<td>56%</td>
<td>35%</td>
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Conclusions

• The volunteer mealtime assistant programme can be scaled up
• Volunteer mealtime assistants were valued by patients and staff across the departments
• Training was essential and valued by volunteers
• Volunteers need to be actively managed and supported
• Volunteers can free up considerable expensive nursing time
• Future plans: evaluate fortified foods
Physical Activity

- Accelerometer studies demonstrated patients only upright 25 minutes/day.
- Interviews with 92 older people - inpatients, lunch club, nursing home, volunteers – routine involvement of volunteers with physical activity is acceptable.
- Literature review indicated little evidence but some signal of benefits re quality of care. Baczynska AM JCN 2016

The Southampton Mobility Volunteer programme to increase physical activity levels of older inpatients: a feasibility study (SoMoVe)

- Can trained volunteers work with therapy and ward staff to maintain older patients mobility in hospital?
- Feasibility study of chair based exercises and ‘walking partners’ on Medicine for Older People wards.
- Recruited 50 baseline participants to describe physical activity using accelerometers.
- Volunteers working and intervention phase underway.
Academic Trainees in Geriatric Medicine: Wessex 2016

- Richard Dodds – NIHR Clinical Lecturer
- Alicja Baczynska – NIHR BRC Research Fellow
- Fiona Rossiter – NIHR CLAHRC Research Fellow
- Stephen Lim – NIHR CLAHRC Research Fellow
- Natalie Cox – NIHR Academic Clinical Fellow
- Charlotte Owen - NIHR Academic Clinical Fellow
- 2 new ACF posts awarded 2016
Improving healthcare for older people through research

- NIHR CLAHRC Ageing & Dementia Theme Projects – grip strength measurement, nutrition, physical activity

- NIHR Nutrition BRC Projects eg Hertfordshire Sarcopenia Study

- NIHR CRN Ageing Speciality Group - multicentre studies with WTCRF support

- NIHR Project Grants eg Hospital wide CGA study (HSDR), PD Dance (RFPB), PD SAFE (HTA)

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