# Improving care for older people with long-term conditions and social care needs in Salford: the CLASSIC mixed-methods study, including RCT

Peter Bower, 1\* David Reeves, 1 Matt Sutton, 2 Karina Lovell, 3 Amy Blakemore, 3 Mark Hann, 1 Kelly Howells, 1 Rachel Meacock, 2 Luke Munford, 2 Maria Panagioti, 1 Beth Parkinson, 2 Lisa Riste, 1 Mark Sidaway, 4 Yiu-Shing Lau, 2 Lynsey Warwick-Giles, 5 John Ainsworth, 6 Thomas Blakeman, 1 Ruth Boaden, 7 Iain Buchan, 6 Stephen Campbell, 8 Peter Coventry, 9 Siobhan Reilly, 10 Caroline Sanders, 1 Suzanne Skevington, 11 Waquas Waheed 1 and Katherine Checkland 5

<sup>&</sup>lt;sup>1</sup>National Institute for Health Research School for Primary Care Research, Centre for Primary Care, University of Manchester, Manchester, UK

<sup>&</sup>lt;sup>2</sup>Manchester Centre for Health Economics, University of Manchester, Manchester, UK

<sup>&</sup>lt;sup>3</sup>Division of Nursing, Midwifery and Social Work, University of Manchester, Manchester, UK

<sup>&</sup>lt;sup>4</sup>Salford Royal Foundation Trust, Salford, UK

<sup>&</sup>lt;sup>5</sup>Policy Research Unit in Commissioning and the Healthcare System, Centre for Primary Care, University of Manchester, Manchester, UK

<sup>&</sup>lt;sup>6</sup>Centre for Health Informatics, University of Manchester, Manchester, UK

<sup>&</sup>lt;sup>7</sup>National Institute for Health Research Collaborations for Leadership in Applied Health Research and Care for Greater Manchester, Alliance Business School Manchester, University of Manchester, Manchester, UK

<sup>&</sup>lt;sup>8</sup>National Institute for Health Research Greater Manchester Primary Care Patient Safety Translational Research Centre, Centre for Primary Care, University of Manchester, Manchester, UK

<sup>&</sup>lt;sup>9</sup>Health Sciences, University of York, York, UK

<sup>&</sup>lt;sup>10</sup>Health Research, University of Lancaster, Lancaster, UK

<sup>&</sup>lt;sup>11</sup>Manchester Centre for Health Psychology, University of Manchester, Manchester, UK

<sup>\*</sup>Corresponding author peter.bower@manchester.ac.uk

**Declared competing interests of authors:** Matt Sutton serves on the Health Services and Delivery Research (HSDR) Commissioning Board (commissioned and researcher led). Mark Hann has a role with the National Institute for Health Research (NIHR) Research Design Service. Rachel Meacock serves as an associate member of the HSDR Commissioning Board (commissioned and researcher led). Mark Sidaway and John Ainsworth report grants from the NIHR and the Medical Research Council (MRC) during the conduct of the study. Ruth Boaden is Director of the NIHR Collaborations for Leadership in Applied Health Research and Care (CLAHRC) Greater Manchester, which is hosted by Salford Royal NHS Foundation Trust, one of the organisations that comprise the Salford Integrated Care Programme (SICP), the subject of the research in this report. In addition, Ruth Boaden holds an honorary (unpaid) contract at Salford Royal NHS Foundation Trust as an Associate Director; however, her CLAHRC role does not involve any relationship with the SICP/integrated care organisation. Ruth Boaden is also a member of the NIHR HSDR Commissioning Board (commissioned and researcher led). Both Iain Buchan and Siobhan Reilly have received grants from MRC. Katherine Checkland reports grant income from the NIHR Policy Research Programme.

Published August 2018 DOI: 10.3310/hsdr06310

# **Scientific summary**

# The CLASSIC mixed-methods study, including RCT

Health Services and Delivery Research 2018; Vol. 6: No. 31

DOI: 10.3310/hsdr06310

NIHR Journals Library www.journalslibrary.nihr.ac.uk

# **Scientific summary**

The Salford Integrated Care Programme (SICP) was a large project to improve care for older people with long-term conditions and social care needs. The SICP sought to improve care via three mechanisms of integration:

- 1. improved access to community assets for self-management
- 2. better integration by 'multidisciplinary groups' (MDGs) providing structured, population-based care
- 3. an 'integrated contact centre' (ICC) to support navigation and self-management.

The Comprehensive Longitudinal Assessment of Salford Integrated Care (CLASSIC) study tested the ability of the SICP to deliver enhanced experiences of care, improved quality of life and reduced costs.

## **Objectives**

- How do key stakeholders (commissioners, strategic partners) view the SICP, what do they expect from it and how is it aligned with their objectives and incentives?
- How were the mechanisms of integration in the SICP (MDGs and the ICC) implemented in practice?
- What is the impact of the SICP and mechanisms of integration within the SICP (MDGs and health coaching in the ICC) on patient and cost outcomes?

#### **Methods**

We used interviews and observations to explore implementation of the SICP, both among leadership and management of the organisations involved, and managers and clinicians involved in everyday delivery. We used a variety of quantitative methods to explore particular questions:

- a patient cohort provided an assessment of the impact of the SICP over time
- variation in use by patients of different mechanisms of integration allowed modelling of effects
- we conducted a formal randomised trial within the cohort
- we used routine data, appropriate comparators and non-randomised methods to assess impact.

The CLASSIC study was conducted at the same time as the initial implementation of the SICP and the results reported here represent impacts relatively early in the implementation of the SICP.

#### **Results**

How do key stakeholders (commissioners, strategic partners) view the SICP? What do they expect from it? How is it aligned with their objectives and incentives?

Participants suggested that the SICP and subsequent development into an integrated care organisation (ICO) has been facilitated by strong partnerships between organisations, which have also helped to sustain those relationships. Partnerships were built on strong professional relationships, as well as a significant history of local co-operation and joint working.

Work towards the SICP has long roots, building on a variety of existing co-operative ventures. The model was underpinned by consultation and a shared vision developed over time. The geography of Salford is also a significant enabler, with organisations all covering similar geographical and population footprints. Participants in the interviews highlighted that the initial governance model (an Alliance Board) ensured that

the programme had a sustained impetus. Although the Alliance Agreement was not a legally enforceable contract, local partners felt that the process of drawing up the agreement had cemented partnerships.

The SICP faced challenges in relation to the changing NHS context, resource constraints and the progression from the SICP to even greater organisational integration in the ICO. It is possible that the managerial work associated with implementing the ICO increased the challenges of operational delivery of the SICP. However, the robust structure put in place to manage the SICP (managers and management groups) meant that despite the significant workload associated with ICO development, the implementation of the SICP continued. The SICP provided an important foundation for the creation of the ICO and the application to be a national vanguard. The ICO 'prime provider' contract is an innovative model for the NHS.

The SICP achieved functional integration through the pooling of health and social care budgets, the development of the Alliance Agreement between the four organisations and the development of the shared care record. Service-level integration is observed in the ICC and MDGs, whereby clinical integration led to the development of shared protocols and care plans.

Although primary care providers were engaged in the SICP, our evidence suggests that initial engagement was challenging in part because of the speed with which the ICO was developed and the need for senior leaders to focus on the formal legal requirements. Primary care engagement is a significant issue, as a 'primary and acute care system' is predicated on closer co-operative working between primary and secondary care. The creation of the Salford general practice provider organisation in mid-2016 (towards the end of CLASSIC) has provided new opportunities for the development of effective ways of working with the ICO.

# How were the mechanisms of integration in the SICP (multidisciplinary groups and the integrated contact centre) implemented in practice?

Multidisciplinary groups are designed to improve the integration of care for patients at higher levels of need. It is one of the most popular models of integrated care in England. The international evidence for MDGs is mixed, with few rigorous studies showing reductions in hospital admissions.

Multidisciplinary groups in the SICP have several innovative features that may enhance effectiveness: they are organised on a neighbourhood model, they use a staged introduction to allow learning from early work to inform the future roll-out, and they are being introduced in the context of a wider integrated care programme.

#### Implementation of the multidisciplinary groups

The CLASSIC research team observed MDG meetings; interviewed staff, patients and carers; and explored data collected by the MDGs themselves.

Multidisciplinary group meetings were generally well attended by the appropriate mix of health professionals. However, securing the involvement of general practices was more challenging. Their engagement in the MDGs was facilitated in mid-2016 through local contracting. Staff reported an expectation that the MDGs would improve care and potentially reduce unnecessary admissions.

Clinical staff reported some issues with slow progress and considered that at times there was more focus on patients at certain levels of need who were already well supported, rather than on more 'unstable' patients for whom they anticipated greater opportunities for proactive rather than reactive care.

There was a significant focus early in the implementation on process measures (such as the numbers of 'shared care' records created). Actions arising from the MDGs were sometimes limited because of the short time slots allocated for discussion but could involve a variety of activities supporting integrated care: chasing up outstanding results and referrals; health improvement work; mental health carer assessments; 'tweaking' existing health and social care packages; supplying equipment; and supporting housing requests.

'Care co-ordinators' were allocated to each patient discussed at the MDG, although interviews with patients and carers showed that they did not recall details of co-ordinators or the MDG discussions.

#### Implementation of the integrated contact centre

We explored the function of the ICC, with a specific focus on 'health coaching' for older people with long-term conditions. The ICC faced some major delays in set-up, although the centre was dealing with a significant call volume when operating fully in July 2016. On the basis of interviews with a small number of patients, experiences of the ICC were mixed, which in part reflected the need to adapt to a new way of engaging with services.

# What is the impact of the SICP and mechanisms of integration on patient and cost outcomes?

We surveyed 13,033 patients with long-term conditions from 33 practices and had responses from 4380 (34%). The respondents were aged 65–98 years (average age 75 years); 52% were female and 37% lived alone. Fifteen per cent of all patients reported four or more long-term conditions, and 40% reported some level of depressive symptoms. The cohort was designed to broadly reflect older patients with long-term conditions in Salford and was not restricted to the patients with greater need, who were the focus for some aspects of the SICP.

In terms of their experiences of care at the start of CLASSIC:

- 5% of patients reported having a written care plan
- 50% of patients reported being almost always 'involved as much as they wanted about decisions'
- 54% of patients reported almost always 'getting enough support from health and social care team'
- 50% of patients reported that it was almost always the case that 'the support and care received was joined up and working for you'.

In terms of 'patient activation', 13% of patients were in the lowest group and 30% were in the lowest two groups.

We saw only small changes in patient experience over the time of the CLASSIC cohort (early 2015 to late 2016), although many aspects of the SICP achieved full operation only towards the end of the cohort period.

One mechanism of integration in the SICP was to increase older people's access to 'community assets'. The SICP used a variety of approaches, including well-being plans and supporting volunteers, as well as digital inclusion and falls prevention programmes. We were not able to assess the impacts of all of these SICP activities. We explored older people's use of community groups over a period of 18 months. We used the survey data to explore how many people used community groups, how that use changed over time and whether or not the use of community groups affected outcomes.

Around 50% of people reported using community groups at baseline. We saw a small (6%) increase in those reporting use of community groups 18 months later. Use of community groups was associated with better quality of life, even taking account of a range of other factors. The benefits are focused on improvements in quality of life, as impacts on self-reported care utilisation were not statistically significant.

We used similar methods to assess the benefits of care plans. At the end of CLASSIC, 10% reported having a written care plan (up 5% from baseline). Data suggested that the small number of patients who gained a care plan during CLASSIC were more likely to report that their care was 'joined up', but did not report improved activation or quality of life. It is important to note that we analysed only care plans reported by patients. Patients may not always be aware of care plans that have been created by SICP staff.

### What has been the impact of the multidisciplinary groups?

We tested whether or not the implementation of MDGs affected admissions to hospitals for all patients aged  $\geq$  65 years in Salford. As MDGs were quickly implemented across Salford, we could not conduct a formal experiment, so we compared admissions in Salford with those in other areas (locally and nationally). Our methods allowed us to test whether or not the MDGs were achieving greater reductions in admissions than the wider trends locally and nationally.

The data show a national trend for an increase in hospital admissions across all sites. We found that the SICP was associated with increases in the number of accident and emergency (A&E) attendances, particularly from health and social care providers. We also found increases in the number of emergency admissions, mostly through A&E. We did not find a statistically significant effect on ambulatory care-sensitive admissions.

As noted previously, evaluation commenced at the same time as SICP implementation, which meant that we had data for only 12 months after the start of the MDGs and even less time following full initiation of MDGs (April 2016). Effects may take longer to become apparent and may need a significant period after the full initiation of MDGs. Further analyses could be carried out to explore these longer-term effects.

#### What has been the impact of health coaching in the integrated contact centre?

Patients eligible for 'health coaching' were those aged  $\geq$  65 years with two or more existing long-term conditions and assessed as needing some assistance with self-management (in terms of patient activation scores). A total of 504 patients were offered health coaching and 197 (39%) agreed, with 85% receiving four or more telephone calls.

We interviewed 22 people in health coaching. Most valued health coaching, with some adopting key health messages involving diet and physical activity. Most reported discussing health concerns with the coaches. Many appreciated being 'signposted' to local 'community assets'.

There was evidence that the coaching was appreciated by patients. However, the offer of health coaching did not lead to significant effects on activation, quality of physical health or depression across the entire group of patients offered coaching. It is possible that the impacts of health coaching are greater in certain patients.

In the economic analysis, patients offered health coaching reported a different pattern of care use, with lower levels of emergency care but an increase in the use of elective services. Overall costs were higher in the health coaching group. This led to small increases in health-related quality of life, which would be judged as cost-effective by current standards. Health coaching among patients with multimorbidity may have some value as a way of improving quality of care but does not appear to be an effective strategy for reducing the use of health care.

### **Conclusions**

Mechanisms of integration within the SICP have been implemented in a way that is consistent with the original vision for integrated services. The greatest resource and fastest progress in delivering mechanisms of integration has involved the MDGs. Beyond those mechanisms, the SICP was also an important factor enabling the establishment of new integrated structures across Salford through the ICO.

As with many integrated care transformations, it has proved challenging to deliver transformation in care, which means that the evaluation data reported here may be 'early' in terms of the evolution of new services. Further evaluation will determine whether or not the establishment of new integrated structures will deliver demonstrable patient benefit in the medium and longer term.

In terms of the outcomes reported in the CLASSIC timeline, patient experience is only one of the core outcomes of the SICP, and there was little evidence that a sample of older patients in Salford were experiencing care as feeling more 'joined up' at this point of the evaluation of the SICP. The evaluation of individual components of the SICP (MDGs, health coaching, use of community assets) suggests some modest evidence of benefits, with community assets and health coaching generating some benefits in increased quality of life, albeit at increased cost. The SICP has introduced new services, but it is not clear that the scale of the programme is sufficient at this point in time to make a significant impact across the wider population of older people in Salford.

## **Trial registration**

This trial is registered as ISRCTN12286422.

## **Funding**

Funding for this study was provided by the Health Services and Delivery Research programme of the National Institute for Health Research.

# **Health Services and Delivery Research**

ISSN 2050-4349 (Print)

ISSN 2050-4357 (Online)

This journal is a member of and subscribes to the principles of the Committee on Publication Ethics (COPE) (www.publicationethics.org/).

Editorial contact: journals.library@nihr.ac.uk

The full HS&DR archive is freely available to view online at www.journalslibrary.nihr.ac.uk/hsdr. Print-on-demand copies can be purchased from the report pages of the NIHR Journals Library website: www.journalslibrary.nihr.ac.uk

#### Criteria for inclusion in the Health Services and Delivery Research journal

Reports are published in *Health Services and Delivery Research* (HS&DR) if (1) they have resulted from work for the HS&DR programme or programmes which preceded the HS&DR programme, and (2) they are of a sufficiently high scientific quality as assessed by the reviewers and editors.

#### **HS&DR** programme

The Health Services and Delivery Research (HS&DR) programme, part of the National Institute for Health Research (NIHR), was established to fund a broad range of research. It combines the strengths and contributions of two previous NIHR research programmes: the Health Services Research (HSR) programme and the Service Delivery and Organisation (SDO) programme, which were merged in January 2012.

The HS&DR programme aims to produce rigorous and relevant evidence on the quality, access and organisation of health services including costs and outcomes, as well as research on implementation. The programme will enhance the strategic focus on research that matters to the NHS and is keen to support ambitious evaluative research to improve health services.

For more information about the HS&DR programme please visit the website: http://www.nets.nihr.ac.uk/programmes/hsdr

#### This report

The research reported in this issue of the journal was funded by the HS&DR programme or one of its preceding programmes as project number 12/130/33. The contractual start date was in April 2014. The final report began editorial review in February 2017 and was accepted for publication in September 2017. The authors have been wholly responsible for all data collection, analysis and interpretation, and for writing up their work. The HS&DR editors and production house have tried to ensure the accuracy of the authors' report and would like to thank the reviewers for their constructive comments on the final report document. However, they do not accept liability for damages or losses arising from material published in this report.

This report presents independent research funded by the National Institute for Health Research (NIHR). The views and opinions expressed by authors in this publication are those of the authors and do not necessarily reflect those of the NHS, the NIHR, NETSCC, the HS&DR programme or the Department of Health and Social Care. If there are verbatim quotations included in this publication the views and opinions expressed by the interviewees are those of the interviewees and do not necessarily reflect those of the authors, those of the NHS, the NIHR, NETSCC, the HS&DR programme or the Department of Health and Social Care.

© Queen's Printer and Controller of HMSO 2018. This work was produced by Bower et al. under the terms of a commissioning contract issued by the Secretary of State for Health and Social Care. This issue may be freely reproduced for the purposes of private research and study and extracts (or indeed, the full report) may be included in professional journals provided that suitable acknowledgement is made and the reproduction is not associated with any form of advertising. Applications for commercial reproduction should be addressed to: NIHR Journals Library, National Institute for Health Research, Evaluation, Trials and Studies Coordinating Centre, Alpha House, University of Southampton Science Park, Southampton SO16 7NS, UK.

Published by the NIHR Journals Library (www.journalslibrary.nihr.ac.uk), produced by Prepress Projects Ltd, Perth, Scotland (www.prepress-projects.co.uk).

## **NIHR Journals Library Editor-in-Chief**

Professor Tom Walley Director, NIHR Evaluation, Trials and Studies and Director of the EME Programme, UK

## **NIHR Journals Library Editors**

**Professor Ken Stein** Chair of HTA and EME Editorial Board and Professor of Public Health, University of Exeter Medical School, UK

Professor Andrée Le May Chair of NIHR Journals Library Editorial Group (HS&DR, PGfAR, PHR journals)

Dr Martin Ashton-Key Consultant in Public Health Medicine/Consultant Advisor, NETSCC, UK

**Professor Matthias Beck** Professor of Management, Cork University Business School, Department of Management and Marketing, University College Cork, Ireland

Dr Tessa Crilly Director, Crystal Blue Consulting Ltd, UK

Dr Eugenia Cronin Senior Scientific Advisor, Wessex Institute, UK

Dr Peter Davidson Director of the NIHR Dissemination Centre, University of Southampton, UK

Ms Tara Lamont Scientific Advisor, NETSCC, UK

**Dr Catriona McDaid** Senior Research Fellow, York Trials Unit, Department of Health Sciences, University of York, UK

Professor William McGuire Professor of Child Health, Hull York Medical School, University of York, UK

Professor Geoffrey Meads Professor of Wellbeing Research, University of Winchester, UK

Professor John Norrie Chair in Medical Statistics, University of Edinburgh, UK

Professor John Powell Consultant Clinical Adviser, National Institute for Health and Care Excellence (NICE), UK

**Professor James Raftery** Professor of Health Technology Assessment, Wessex Institute, Faculty of Medicine, University of Southampton, UK

Dr Rob Riemsma Reviews Manager, Kleijnen Systematic Reviews Ltd, UK

Professor Helen Roberts Professor of Child Health Research, UCL Great Ormond Street Institute of Child Health, UK

Professor Jonathan Ross Professor of Sexual Health and HIV, University Hospital Birmingham, UK

**Professor Helen Snooks** Professor of Health Services Research, Institute of Life Science, College of Medicine, Swansea University, UK

**Professor Jim Thornton** Professor of Obstetrics and Gynaecology, Faculty of Medicine and Health Sciences, University of Nottingham, UK

**Professor Martin Underwood** Director, Warwick Clinical Trials Unit, Warwick Medical School, University of Warwick, UK

Please visit the website for a list of editors: www.journalslibrary.nihr.ac.uk/about/editors

Editorial contact: journals.library@nihr.ac.uk