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The effectiveness and cost benefit of integrated health and social care programmes in the United Kingdom and Ireland

A Rapid Review

Mae'r ddogfen yma hefyd ar gael yn Gymraeg.

This document is also available in Welsh.

# The effectiveness and cost benefit of integrated health and social care programmes in the United Kingdom and Ireland A Rapid Review

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This is a systematic rapid review of the literature, conducted as part of the economic evaluation of the National Evaluation of the Regional Integration Fund.

### **National Evaluation of the Regional Integration Fund**

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### **Glossary of terms**

Abbreviation Full term

A&E Accident and Emergency

BCF Better Care Fund

CMHT Community Mental Health Team

COP Community of Practice (or communities of practice)

COPD Chronic Obstructive Pulmonary Disease

GP General Practitioner

ICER Incremental Cost Effectiveness Ratio

ICS Integrated Care System

ICT Information and Communications Technology

IHSC Integrated Health and Social Care

IMPaCT Improve health and reduce substance use in established psychosis-

IMPaCT intervention

MoC Models of Care

NHS National Health Service

PICO Population, Intervention, Comparison (or Context) and Outcomes

PRISMA Preferred Reporting Items for Systematic reviews and Meta-Analyses

QALY Quality Adjusted Life Year

QoL Quality of Life

RCSI Royal College of Surgeons in Ireland

RCT Randomised Controlled Trial

RHA Regional Health Areas

RIF Regional Integration Fund

SDS Supported Discharge Service

SROI Social Return of Investment (SROI)

TOM Therapy Outcome Measures

UK United Kingdom

UN United Nations

WFL Wellbeing For Life

### **Executive summary**

Integrated care involves a structured approach to delivering coordinated, proactive, and person-centred care. It is provided by two or more care providers who communicate and collaborate to improve quality of care and health outcomes while empowering individuals to optimise their health. The aim of this rapid review was to determine the effectiveness and cost benefit of integrated health and social care programmes in the UK and Ireland.

A rapid review methodology was utilised, accelerating the process of conducting a traditional systematic review through streamlined approaches to produce evidence for stakeholders in a resource-efficient manner

The review encompassed 15 studies that presented full or partial economic evaluations on integrated health and social care programmes. These evaluations were based on a mix Randomised Controlled Trials (RCTs), observational, and cohort studies conducted between 2014 and 2024.

There was mixed effectiveness and economic evidence demonstrating the benefits of integrated health and social care initiatives, with varied economic evidence on costs, beneficial outcomes, and return on investment for integrated care approaches. The four key themes of: Complex care closer to home; Home from hospital services; Promoting emotional health and well-being; and Accommodation-based solutions were discussed.

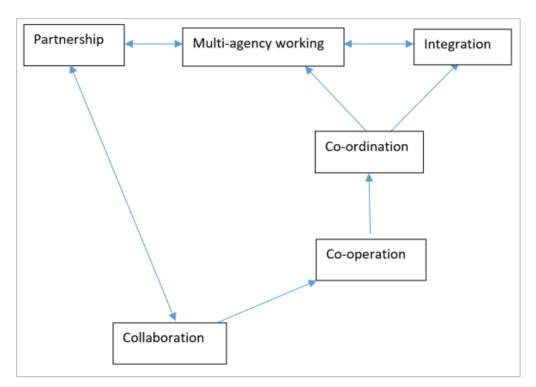
More high-quality economic evaluations are needed to capture the economic evidence for integrated health and social care. Future economic studies should be tailored to the different policy context of the UK devolved nations.

Integrated care models are vital for cross-sector delivery of quality care, particularly for individuals with complex care needs. There is a requirement to demonstrate the economic effectiveness of the approach and return on investment. Future evaluations of integrated care models should include economic methodology approaches such as Cost Benefit Analysis (CBA) to inform decision-makers on the benefits and return on investment of integrated care.

**Keywords**: Integrated health and social care; patient-centred; health outcomes; economic evaluation; cost-benefit analysis (CBA)

### 1. Background

- 1.1 The Welsh Government (WG) has commissioned a partnership led by the Welsh Institute for Health and Social Care, University of South Wales to deliver the evaluation of the Regional Integration Fund.
- 1.2 Integrated care involves a structured approach to delivering coordinated, proactive, and person-centred care. Integrated care is provided by two or more care providers who communicate and collaborate, whether they work within the same organisation or across different organisations. These organisations can be within the healthcare sector or span across health, social, or community care sectors, including informal care providers (Leijten et al., 2018). Integrated care is illustrated in Figure 1 which was originally presented in a report to support the final report of the evaluation of the social services and well-being (Wales) Act, 2014 (Wallace & Garthwaite, 2023).



**Figure 1:** Types of working together and their relationship with one another (Wallace & Garthwaite, 2023).

1.3 This review will focus on the United Kingdom (UK) and Ireland. However, healthcare systems and social care systems worldwide are increasingly adopting integrated care models to improve patient/client outcomes and enhance the efficiency of service delivery. Integrated health and social care. Health and care

providers are changing how they work with people as partners in care. Countries around the world, including Australia, Canada, New Zealand, and various European nations (e.g., Sweden, The Netherlands, and the UK) have implemented integrated care initiatives to better manage chronic conditions, improve access to services, and enhance the quality of care (Lennox-Chhugani, 2023). The International Foundation for Integrated Care (IFIC) has an annual survey to reflect on the progress of integrated care delivery worldwide. Their annual survey in 2024 showed that health and care providers were more positive about person centred care than the person at the centre of care (Alvarez-Rosete et al., 2024).

- 1.4 In the UK integrated health and social care systems are organised and not all funded in the same way. Different regions of the UK may have specific approaches to integrating health and social care. For example, England, Scotland, Wales, and Northern Ireland have their own health services and policies, which can lead to variations in how integrated care is implemented and funded.
- 1.5 In England, Integrated Care Systems (ICSs) are partnerships that bring together National Health Service (NHS) organisations, local authorities, and other stakeholders to plan and deliver services collectively. ICSs aim to improve health outcomes, reduce inequalities, and enhance the efficiency of services. For residents of the UK these services are funded through general taxation. However, members of the public can opt for private health insurance to access private healthcare services, which can offer shorter waiting times and additional services which are not available on the NHS.
- 1.6 The UK Government strives to build strong integrated care systems (ICS) everywhere. England is divided into 42 ICSs and these systems bring local health and social care organisations together to improve outcomes for their populations by creating better services (NHS England, 2021)
- 1.7 In Wales, the Welsh Government have provided a fund for Health and Social Care integration on a regional basis (Welsh Government, 2022) There are seven partnership board regions in Wales, working independently, but collaboratively within Communities of Practice (CoP) to provide integrated care to members of the

- community. The Health and Social Care Regional Integration Fund (RIF) in Wales focuses on establishing and mainstreaming six new national models of care.
- These models aim to provide seamless and effective services across the country. The six models are: 1) Community-based care prevention and community coordination. 2) Community-based care complex care closer to home. 3) Promoting good emotional health and well-being 4) Supporting families to stay together safely, and therapeutic support for care-experienced children. 5) Home from hospital services. 6) Accommodation based solutions. These six models of care are part of a broader effort to integrate health and social care services in Wales, ensuring that care is person-centred and delivered as close to home as possible. To date, models of care have mainly been used for administration and reporting purposes rather than shaping and informing delivery (Llewellyn et al., 2025). See overleaf for detailed descriptions of the models of care.
- 1.9 In Scotland 'The Integrated Health and Social Care plan for Scotland' (2019) addresses several key issues to ensure that Scotland can provide high-quality, integrated health and social care services (Scottish Government, 2019). The key issues are workforce integration, mental health services, workforce supply and demand, graining and recruitment, retention and development, and data and intelligence.
- 1.10 In Northern Ireland, the Integrated Care System for Northern Ireland (ICS NI) Framework was established in 2024. ICSNI are working with the Irish Department of Health and Health and Social Care Ireland towards creating a healthier population. The key objectives are population health, community-centred care, integration of services, workforce development, digital transformation and learning from past initiatives (Integrated Care System Northern Ireland, 2024). Although the concept and implementation of integrated care is relatively new in terms of policy direction, there are examples of successful implementation. For example, evidence examining the drivers of successful implementation of integrated care for multi-morbidity identified 17 case studies from 8 European countries including Scotland in the UK (Looman et al., 2021). The 17 programmes were analysed using implementation theory.

Detailed descriptions of the six Models of Care (MoC) in Wales

### 1. Community-based care - prevention and community coordination MoC

Community-based care is an integrated approach that emphasises **prevention and early intervention** to improve health and well-being. This model aims to deliver seamless health and social care services within communities, ensuring support is provided as close to home as possible.

### 2. Community-based care - complex care closer to home MoC

**Community-based care – complex care closer to home** is an approach that aims to deliver specialised health and social care services within the community, ensuring that individuals with complex needs receive support as close to home as possible.

### 3. Promoting good emotional health and well-being MoC

**Promoting good emotional health and well-being is** part of the broader Welsh Government objectives under the Well-being of Future Generations (Wales) Act 2015. This involves creating environments and conditions that support individuals to be happy, healthy, and comfortable with their lives. The focus is on improving social, economic, environmental, and cultural well-being through sustainable development principles.

### 4. Supporting families to stay together safely, and therapeutic support for careexperienced children MoC

**Supporting families to stay together safely** is providing early intervention and support to families to prevent the need for children to enter care. This involves identifying and addressing issues early, using family strengths and community resources, and ensuring that interventions prevent needs from becoming critical.

### 5. Home from hospital services MoC

**Home from Hospital services** is part of the "Home First" approach. This approach emphasises that the best place for recovery after a hospital stay is at home, whether that be a personal residence, a care home, or the home of a friend or family member. The goal is to maintain independence and reduce the risks associated with prolonged hospital stays, such as deconditioning and infections.

### 6. Accommodation based solutions MoC

**Accommodation-based solutions i**s part of the Welsh Government strategy to integrate health and social care services within the community. This approach involves creating and supporting housing options that provide a stable and supportive environment for individuals, particularly those with complex needs. The goal is to ensure that people can live independently with access to the necessary health and social care services.

- 1.11 Ten mechanisms for successful implementation of integrated care were identified including 1) commonly adopted an incremental growth model rather than a disruptive innovation approach; 2) a balance between flexibility and formal structures of integration; 3) collaborative governance; 4) distributed leadership throughout all levels of the system; 5) multi-disciplinary team culture with mutual recognition of each other's roles; 6) the development of new roles and competencies for integrated care; 7) secured long-term funding; 8) the implementation of Information and Communications Technology (ICT) that was specifically developed to support collaboration; 9) continuous monitoring system; and 10) an overarching mechanism for alignment of work across the different components and levels of the health and social care system.
- 1.12 According to the Welsh Government documentation regarding the RIF, regions are encouraged to use outcome measures such as the Warwick Edinburgh Mental Well-being Scale (WEMWBS) and the EQ-5D, for example. However, they also stated that regions may also continue use tools already being used successfully. (Welsh Government, 2022). There is no evidence to date to indicate which tools the regions in Wales are using to collect measurement data on the effectiveness of the RIF funding stream.
- 1.13 The Welsh Government has commissioned a research team led from the University of South Wales to provide ongoing review and phased evaluation of the impacts of the Regional Integration Fund (RIF) (Welsh Government, 2022). Collaborators on the RIF evaluation include partners outside of the University of South Wales, including Brunel University of London and OB3, a research and consultancy firm based in Wales. The evaluation will help to identify the key success factors in developing and embedding the national models of integrated care (Llewellyn et al., 2025). This rapid review is aligned to that national evaluation (Llewellyn et al., 2025).
- 1.14 The aim of this rapid review is to determine the evidence regarding the effectiveness and cost benefit of integrated health and care programmes in the UK and Ireland. The rapid review protocol is published on Prospero (Spencer et al., 2024).

### 2. Method

- 2.1 A rapid review methodology was utilised for this review. A rapid review is a form of knowledge **synthesis** that accelerates the process of conducting a traditional systematic review through streamlining methods to produce evidence for stakeholders in a resource-efficient manner (Harker & Kleijnen, 2012; Lewis et al., 2024; Plüddemann et al., 2018).
- 2.2 The main review question was: What is the effectiveness and cost benefit of integrated health and social care programmes in the United Kingdom and Ireland?
- 2.3 The eligibility criteria for inclusion of papers in this rapid review is described below and existing systematic reviews were included in the rapid review.

Eligibility criteria (PICO: Population, Intervention, Comparison and Outcomes)

### **Population**

Inclusion criteria = People receiving integrated health and social care Exclusion criteria = People not receiving integrated health and social care

### Phenomenon of Interest

Inclusion criteria = Papers directly related to integrated health and social care Exclusion criteria = Papers not directly related to integrated health and social care

### Context/Comparison

Inclusion criteria = Service delivery of integrated health and social care Exclusion criteria = Services not relevant to integrated health and social care

### **Outcome measures**

Inclusion criteria = Studies that report on relevant outcomes related to integrated health and social care: e.g. Care closer to home outcomes

Exclusion criteria = Studies unrelated to integrated health and social care.

### Study design

Inclusion criteria = Any evidence of effectiveness or economic evidence related to health and social care

Exclusion criteria = Studies not focussed on integrated health and social care

### **Countries**

Inclusion criteria = Studies from the United Kingdom and Ireland Exclusion criteria = Studies outside the United Kingdom and Ireland

### Language of publication

Inclusion criteria = English or Welsh Exclusion criteria = All other languages other than English or Welsh

### Literature search

- 2.4 The following databases were searched for papers of interest:
  - EMBASE
  - OVID Medline
  - EBSCO CINAHL
  - EBSCO APA PsycINFO
  - SCOPUS
- 2.5 A draft search strategy was prepared and adapted for each of the databases. The search strategy was reviewed by an Information Scientist, Royal College of Surgeons in Ireland, University of Medicine and Health Sciences.

### Search strategy

2.6 The full search strategy for the databases can be found in Appendix 1. A list is provided showing the main keywords which were common to all searches. Applying economic terms (costs and cost analysis, cost-effectiveness, cost-benefit, return on investment (ROI), Social Return on Investment (SROI), Quality Adjusted Life Year (QALY), and cost utility analysis) to generate evidence of public health outcomes associated with health and social care.

Common keywords used in all database searches

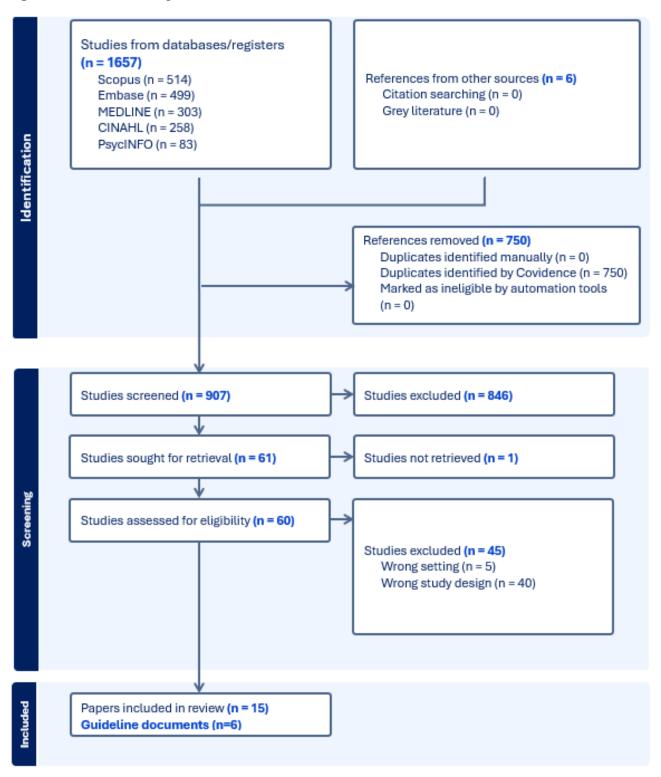
**Population**: children, adults, elderly, older people, families, workforce, staff, carers

**Outcome**: 'integrated care', health, social, 'emotional health', wellbeing, wellbeing, community-based, 'supporting families', 'home from hospital', 'accommodation based solutions'

**Economic terms**: costs and cost analysis, cost-benefit, cost-effectiveness, Quality Adjusted Life Year (QALY), social return on investment (SROI), return on investment (ROI), cost utility analysis

- 2.7 The database searches are outlined in the PRISMA diagram in Figure 2 overleaf (Page et al., 2021)
- 2.8 Grey literature was also searched a description of the sources used is contained in Appendix 2.

Figure 2: PRISMA diagram of included studies



2.9 Covidence reference management software was used as the main systematic review management tool and to delete duplicates (Veritas Health Innovation, 2021). Mendeley was used for intext citations (Mendeley, 2024).

### Study selection process, data extraction and assessment of quality

- 2.10 Two reviewers screened 100% of titles and abstracts independently. Following this, the level of agreement was assessed with disagreements settled by discussion and consensus. During independent screening, the lead researchers (LHS & MLynch) consulted with a third reviewer (DF) to come to an agreement on the final inclusions if there was disagreement.
- 2.11 Data extraction was based on the outlined eligibility criteria. The extracted data captured details/characteristics on study region/country, study design, type of intervention, type of economic evaluation, number of participants, relevant costs and outcomes (see eligibility criteria) and study settings.<sup>2</sup>
- 2.12 Critical appraisal assessments were conducted on all selected peer reviewed studies using the Joanna Briggs Institute Critical Appraisal Tools (Joanna Briggs Institute, 2021).<sup>3</sup>

<sup>&</sup>lt;sup>2</sup> Data Extraction lists can be supplied on request to the authors.

<sup>&</sup>lt;sup>3</sup> Critical Appraisal lists can also be supplied on request to the authors.

### 3. Results

### Overview of the evidence base

3.1 An evidence map of the literature is presented in below. The guidance documents are shown after that in the next list, which categorises the evidence according to study type.

Evidence map of the included studies (n=15) according to study design

### Review or systematic review (n=3):

Hill et al (2017), Sandhu et al (2022), Thomson and Chatterjee (2023)

### Cross-sectional study - economic evaluation (n=5):

Garner et al (2017), Stokes et al (2019), Stokes et al (2021), Visram et al (2020), Yu et al (2017)

### Cross-sectional study - cost study (n=4):

Exley et al (2019), Tian et al (2014), Ware (2019), Wilberforce et al (2016)

### Randomised Controlled Trials (n=3):

Evans et al (2021), Heslin et al (2017), Jones et al (2016)

3.2 The included papers (n=15) were mapped on to four of the models of care in Wales (as described above, see Paragraph 1.8): Complex care closer to home; Home from hospital services; Promoting emotional health and well-being; and Accommodation based solutions. None of the included papers provided economic evidence for the 'Supporting families' model of care. The connection between the papers in the review and the MoCs is described below.

### Community based care: complex care closer to home

3.3 Nine of the included studies focused on complex care closer to home (Evans et al., 2021; Garner et al., 2017; Heslin et al., 2017; Jones et al., 2016; Stokes et al., 2019, 2021; Thomson & Chatterjee, 2023; Visram et al., 2020; Yu et al., 2017). See below for the main cost findings from the complex care closer to home included studies.

Guidance documents for the integration of health and social care in the UK and Ireland

### 1. WALES

# A Healthier Wales: Long term plan for health and social care (Welsh Government, 2021)

In Wales, the 'Healthier Wales' policy is designed to create a more integrated, efficient, and patient-centred health and social care system. The key areas are:

- Prevention and early intervention
- Seamless integration of local health and social care
- Digital and data
- Sustainable funding
- Workforce development
- National leadership and direction

### Regional Integration Fund (RIF) (Welsh Government, 2022)

The RIF fund in Wales is designed to support the integration of health and social care services. Key elements are:

- Focus on prevention and early intervention
- Six national models of integrated care:
- Sustainable long-term resourcing
- Communities Of Practice (COP)
- Pooled Fund Arrangements
- Regional planning and partnership infrastructure.

These elements aim to create a more integrated, efficient, and patient-centred health and social care system in Wales

### 2. ENGLAND

# Building strong integrated systems everywhere: ICS implementation guidance on working with people and communities (NHS England, 2021)

NHS England has a policy which provides comprehensive guidance on how Integrated Care Systems (ICSs) can effectively engage with local communities. Some of the key elements are:

- Principles of working with people and communities
- Core requirements and good practices
- Involving people in governance
- Tackling health inequalities
- Co-producing
- Collaboration with health watch and the voluntary sector

### 3. SCOTLAND

An Integrated Health and Social Care Workforce Plan for Scotland (Scottish Government, 2019)

The Integrated Health and Social Care plan for Scotland addresses several key issues to ensure that Scotland can provide high-quality, integrated health and social care services. The key issues are:

- Workforce integration
- Mental health services
- Workforce supply and demand
- Training and recruitment
- Retention and development
- Data and intelligence

### 4. NORTHERN IRELAND

The Integrated Care System for Northern Ireland (ICS NI) Framework document (Integrated Care System Northern Ireland, 2024)

Integrated Care System in Northern Ireland are working with the Irish Department of Health and Health and Social Care Ireland towards creating a healthier population. The key objectives are:

- Population Health
- Community-centred care
- Integration of services
- Workforce development
- Digital transformation
- Learning from past initiatives

### 5. REPUBLIC OF IRELAND

Sláintecare Implementation Strategy and Action Plan 2021-2023 (Government of Ireland, 2021)

The key objectives of the Sláintecare programme in the Republic of Ireland are:

- Primary and community care
- Waiting lists
- Digital health
- Workforce development
- Regional Health Areas (RHA)

### Included paper according to Model of Care

### Community based care: complex care closer to home MoC

- Palliative care (Evans et al., 2021)
- COPD service (Garner et al., 2017)
- Psychosis and health promotion (Heslin et al., 2017)
- Stroke self-management programme (Jones et al., 2016)
- Pooling of health and social care budgets (Stokes et al., 2019)
- Evaluation of two new care models in England (Stokes et al., 2021)
- Integrated care in the UK Review (Thomson & Chatterjee, 2023)
- Integrated health and wellbeing service in the UK (Visram et al., 2020)
- Diabetes integrated care (Yu et al., 2017)

### Home from hospital services

- Older people's programme (Exley et al., 2019)
- Pathway for older people in England (Tian et al., 2014)
- Supported discharge service (Ware, 2019)

### Promoting emotional health and well-being

- Alcohol prevention (Hill et al., 2017)
- Social prescribing programs in England and the United States (Sandhu et al., 2022)

### **Accommodation based solutions**

- Older people community mental health and institutional settings (Wilberforce et al., 2016)
- 3.4 The economic evidence from the identified studies focusing on care closer to home were mixed. Whilst Evans et al (2021) Garner et al (2017) and Visram et al (2020) provided positive evidence for beneficial integrated health and social care, Jones et al (2016) and Thomson and Chatterjee (2023) provided mixed evidence, and Heslin et al (2017), Yu et al (2017), and Stokes (2019 and 2021) found no economic evidence in favour of integrated health and social care.
- 3.5 An observational study conducted in London (Garner et al., 2017) aimed to examine data from the Acute Chronic Obstructive Pulmonary Disease (COPD) Early Response Service (ACERS) intervention (Garner et al., 2017). Pre-ACERS and post-ACERS datasets were analysed. The intervention sample size

Economic evidence from the complex care closer to home services studies

Author, date, country: Evans et al (2021), England

**Title**: Integrated palliative and supportive care intervention for older people living with chronic non-cancer conditions

**Main cost finding**: The cost-effectiveness analysis showed that the Incremental Cost Effectiveness Ratio (ICER) was: £12,000 per Quality Adjusted Life Year (QALY) gained.

Was there evidence of a benefit of integrated care? Yes

Author, date, country: Garner et al (2017), England

Title: The Acute COPD Early Response Service (ACERS).

Main cost finding: The bed days saving was £400,000 per year. Setting up the

integrated COPD service was cost neutral.

Was there evidence of a benefit of integrated care? Yes

Author, date, country: Heslin et al (2017), England

**Title**: The IMPaCT intervention, which was an integrated health promotion intervention designed to improve physical health and reduce substance use in individuals with established psychosis.

**Main cost finding**: Evidence indicated that there is no variance in health and social care or societal costs between those individuals with a diagnosis of psychosis receiving the integrated health promotion intervention or not receiving the intervention. In addition, there was no improvements in quality-of-life outcomes or cost-effectiveness.

Was there evidence of a benefit of integrated care? No

Author, date, country: Jones et al (2016), England

**Title**: Community based stroke rehabilitation teams in London. Clinicians were trained to integrate defined self-management principles into scheduled rehabilitation sessions, supported by a patient-held workbook.

**Main cost finding**: The costs of implementing the programme varied significantly across different sites. This was attributed to differences in how each site integrated the programme into their existing community rehabilitation services.

Was there evidence of a benefit of integrated care? There was no sufficient evidence to answer this question.

Author, date, country: Stokes et al (2019), England

**Title**: Pooled budgets for integrated health and social care

**Main cost finding**: There was no significant reduction in hospital use or costs in the short to intermediate term. For patients with multimorbidity, the use of bed days increased by 0.164 bed days per patient per year, which is approximately a 4.9% increase in the short term.

Was there evidence of a benefit of integrated care? No.

Author, date, country: Stokes et al (2021), England

**Title**: Two new models of care including: **e**nhanced inter-organisational support for chronic condition management; **i**mproved coordination between primary and secondary care services; **and p**roactive management of patients with complex needs to prevent hospital admissions.

**Main cost finding**: Both intervention sites (Salford and South Somerset) showed an increase in total costs of secondary care (approximately £74 per registered patient per year in Salford, £45 in South Somerset) and cost per user of secondary care (£130–138 per person per year).

Was there evidence of a benefit of integrated care? No

Author, date, country: Thomson and Chatterjee (2023), England

**Title**: A variety of interventions were included in the review. All were aimed at improving the coordination and delivery of health and social care services.

**Main cost finding**: The evidence showed that there is a paucity of robust research to evaluate integrated health and social care interventions and lack of standardised methodology to assess cost effectiveness.

Was there evidence of a benefit of integrated care? Mixed findings

Author, date, country: Visram et al (2020), England

**Title**: Wellbeing for Life Service (WBL)

Main cost finding: There was an estimated cost saving to the NHS of £1,477,911, not including £300,000 for costs offset from asset mapping and £498,800 from signposting and events. The results indicate an additional cost saving to social care of £126,326 (linked to the reduction in adverse health outcomes) and to criminal justice of £3883 (from reduced alcohol and substance abuse by clients). The total public sector cost saving attributed to the WFL service was £2,406,920

Was there evidence of a benefit of integrated care? Yes

Author, date, country: Yu et al (2017), England

**Title**: Integrated Type 2 diabetes service

**Main cost finding**: The Diabetes Integrated Care intervention did not lead to cost savings for the healthcare commissioners.

Was there evidence of a benefit of integrated care? No

was 69 COPD patients. A multi-disciplinary team made up of COPD Specialist Nurses, Respiratory Physiotherapists, Nurse Consultant (team leader), Respiratory Consultant (who provided medical advice and leadership) delivered the intervention. The types of costs measured were: cost of ACERS team, length of stay, bed days saved, and cost of death outside of hospital. There was evidence that the integrated COPD team improved the quality-of-care provision, reduced the number of bed days and patient's length of stay in hospital. The bed days saving was £400,000 per year. The model also calculated the rise in patients dying outside of hospital, leading to a £252,000 saving per year. The overall finding was that the implementation of the ACERS integrated care service was cost neutral, whilst improving the quality of care (Garner et al., 2017).

- 3.6 A RCT study by Heslin et al (2017) aimed to investigate the cost-effectiveness of a health promotion intervention used to improve physical health while decreasing substance use among people living with a psychotic disorder (Heslin et al., 2017). The intervention, called the IMPaCT intervention, was an integrated health promotion intervention designed to improve physical health and reduce substance use in individuals with established psychosis. The IMPaCT intervention included health promotion sessions, individual support, training and supervision. The intervention was evaluated between March 2010 and June 2011 and included 104 care coordinators along with 446 patients. The trial findings indicated that there is no difference in health and social care or societal costs between those individuals with a diagnosis of psychosis receiving the integrated health promotion intervention or not receiving the intervention. In addition, there was no improvements in quality-of-life outcomes or cost-effectiveness (Heslin et al., 2017).
- 3.7 An economic evaluation of The Wellbeing for Life (WFL) intervention in England was conducted between June 2015 and January 2017 (Visram et al., 2020). The WFL recipients included 3179 clients who received services from Health trainers (lay individuals who had been trained up). The interventions varied, with one-to-one behaviour change clients receiving up to eight sessions with a health trainer, or twelve sessions for those in the 'high need' intervention. Group-based activities typically lasted for at least four sessions. The WFL

service had a total delivery cost of £3,528,894.25. The main findings were that the total health gain from the WFL service (287.7 QALYs) implies an estimated cost saving to the NHS of £1,477,911, not including £300,000 for costs offset from asset mapping and £498,800 from signposting and events. The results indicate an additional cost saving to social care of £126,326 (linked to the reduction in adverse health outcomes) and to criminal justice of £3883 (from reduced alcohol and substance abuse by clients). Therefore, the total public sector cost saving attributed to the WFL service was £2,406,920. Being able to demonstrate value for money like this is crucial for the sustainability of interventions such as WFL, especially given the broader context of austerity and reductions in public health funding (Visram et al., 2020).

- 3.8 A randomised controlled trial (RCT) investigating the impact of the short-term integrated palliative and supportive care intervention for older people living with chronic noncancer conditions was conducted in four National Health Service (NHS) general practices in England between January 2019 and December 2020. Multidisciplinary teams including community nurses and GPs provided inperson palliative care. The cost-effectiveness analysis showed that the Incremental Cost Effectiveness Ratio (ICER) was: £12,000 per Quality Adjusted Life Year (QALY) gained, which would be considered cost effective according to guidelines in the UK context (National Institute for Health and Care Excellence, 2013)(National Institute for Health and Care Excellence, 2013). The findings remained robust after sensitivity analysis was conducted. It showed that the cost-effectiveness of the community-based short-term integrated palliative and supportive care intervention remained consistent even when key assumptions and parameters, such as costs and discount rates, were varied (Evans et al., 2021).
- 3.9 Mixed evidence for the benefit of integrated health and social care was found in a feasibility study to investigate the effectiveness of a self-management programme integrated into stroke rehabilitation service in England (Jones et al., 2016). The study included 78 patients with a diagnosis of stroke over a 14-

month period during 2014-2015. Rehabilitation clinicians were trained to integrate defined self-management principles into scheduled rehabilitation sessions, supported by a patient-held workbook. Cost utilisation data was collected at baseline, 6 weeks, and 12 weeks in 2014-2015. Healthcare costs included staff costs, training costs and healthcare utilisation costs. Costs collected were those associated with the use of healthcare services, such as hospital readmissions and outpatient visits. The main cost finding from the feasibility study was that costs varied by site. This variation was likely due to differences in how the self-management programme was integrated into existing community rehabilitation services. Total rehabilitation inputs were similar in the two control sites (24 therapy hours per patient). However, a difference was found between the two intervention sites (20.1 vs 50.7 therapy hours). Intervention sites reported a proportionately higher use of therapy assistants than control site. Costs of patient-facing time ranged from £600 in the low resource use intervention site to £1667 in the high resource use intervention site. The costs of the two control sites were similar (£754 and £763). Total costs for control sites (mean of two sites) ranged from £930 to £1459, depending on the assumptions made about the ratios of patient-facing to patient-related nonface-to-face costs. The equivalent range for the low resource use intervention site was £721-£1103, and for the high resource use intervention site it was £1987–£3012 (Jones et al., 2016).

3.10 There was also mixed evidence of the benefit of integrated health and social care in a rapid review (Thomson & Chatterjee, 2023) The aim of the rapid review was to determine the barriers and enablers of integrating health and social care and community resources in the UK, and to ascertain the extent of this evidence. A variety of interventions were included in the review. All were aimed at improving the coordination and delivery of health and social care services. These interventions encompassed both medical (clinical and diagnostic) and non-medical (public health services and community-based or person-centred care) strategies. The rapid evidence included 34 review articles, and 21 grey literature reports published between 2018 and 2022. The review highlighted the paucity of robust research to evaluate integrated health and

- social care interventions and lack of standardised methodology to assess cost effectiveness.
- 3.11 Another three of the included papers found no evidence for the benefit of integrated health and social care (Stokes et al., 2019, 2021; Yu et al., 2017) The Diabetes Integrated Care Initiative was evaluated in England (Yu et al., 2017). The study included a sample size of 2,700 patients with Type 2 diabetes in the Cambridgeshire intervention area. The intervention was delivered by specialist nurses, dietitians, podiatrists and medical professionals. The length of follow-up was 3 years, and the types of costs measured were inpatient care costs, community service costs, and expenses related to the enhanced community diabetes services, including specialist nursing, dietetic, podiatry, and medical support. The approach involved comparing the area under the curve (AUC) of inpatient payments at baseline and follow-up periods. This method allowed the researchers to estimate the effect of the integrated care intervention on commissioner payments by analysing the distribution of inpatient payments over time. The Diabetes Integrated Care intervention did not lead to cost savings for the healthcare commissioners. However, there were reductions in inpatient payments for certain age groups. Specifically, the study observed a reduction in inpatient payments for 3.2% of patients aged under 70 years and 4.1% of patients aged 70 years and older in one of the two adjacent areas. This suggests that the impact of the Diabetes Integrated Care Initiative varied across different age groups.
- 3.12 An economic evaluation of The Better Care Fund (BCF) assessed the effects of BCF on secondary care utilisation and costs using a dataset recording all secondary care use in England (Stokes et al., 2019). The study analysed data from a cohort of 14.4 million patients, focusing on the short (1 year) and intermediate-term (up to 2 years) effects. There were various health and social care interventions funded by the BCF and the types of costs which were measured were, hospital inpatient admissions, emergency department visit costs, outpatient appointment costs and cost of bed days. The evaluation found no significant reduction in hospital use or costs in the short to intermediate term. For patients with multimorbidity, the use of bed days increased by 0.164 bed days per patient per year, which is approximately a 4.9% increase in the short

- term. Stokes et al (2019) acknowledge that while pooling budgets has potential benefits, it is not a guaranteed solution for reducing hospital use and costs. Successful integrated care requires careful implementation and realistic expectations (Stokes et al., 2019).
- 3.13 Another large evaluation study aimed to examine the effectiveness of two integrated care models in Salford and South Somerset in England in relation to patient experience, health outcomes and costs of care (Stokes et al., 2021). Data was collected three years following the introduction of the new integrated care models which aimed to enhance inter-organisational support for chronic condition management, improve coordination between primary and secondary care services, and proactively manage patients with complex needs to prevent hospital admissions. The sample included 1.2 million patients, and the intervention deliverers were healthcare professionals including General Practitioners (GPs), nurses, specialists, community health workers, and social care providers. Costs of secondary care were measured, including all hospitalrelated expenses along with cost per user of secondary care, and avoidable emergency admissions. Both intervention sites showed an increase in total costs of secondary care (approximately £74 per registered patient per year in Salford, £45 in South Somerset) and cost per user of secondary care (£130-138 per person per year). Additionally, there were no statistically significant effects on health status or patient experience of care (Stokes et al., 2021).

### Promoting emotional health and wellbeing

- 3.14 Of the included papers, n=2 were focused on promoting emotional health and wellbeing (Hill et al., 2017; Sandhu et al., 2022). See below for the main economic evidence relating to promoting emotional health and well-being.
- 3.15 A descriptive review by Hill et al (2017) aimed to examine the economic methods applied to evaluate interventions used in the prevention of excess consumption of alcohol to assist public health decision makers. The review focused on cost benefit analysis and cost-effectiveness analysis as guided by NICE (Hill et al., 2017). Twenty-seven studies published between January 2006 and May 2016 were included.

Economic evidence from the promoting emotional health and wellbeing services studies

Author, date, country: Hill et al (2017), England

**Title**: Studies regarding excess consumption of alcohol.

**Main cost finding**: There is insufficient use of rigorous economic methods such as Cost Benefit Analysis (CBA) and Cost Consequence Analysis (CCA) which are advised as economic theoretically suitable approaches applied in public health intervention evaluation.

Was there evidence of a benefit of integrated care? No

Author, date, country: Sandhu et al (2016), England and USA

Title: Financing of social prescribing initiatives in England and the USA

**Main cost finding**: Dedicated funding for social prescribing activities is crucial but insufficient on its own as the sustainability and effectiveness of these programs also depend on adequate investment in community-based organisations and broader public services to which patients are referred.

Was there evidence of a benefit of integrated care? There was no sufficient evidence to answer this question.

- 3.16 It was identified that there was a deficiency of focus on the methodological challenges connected with evaluating public health interventions and insufficient use of rigorous economic methods such as Cost Benefit Analysis (CBA) and Cost Consequence Analysis (CCA) which are advised as economic theoretically suitable approaches applied in public health intervention evaluation (Hill et al., 2017).
- 3.17 Another descriptive review paper by Sandhu et al (2022) aimed to describe the public-financing approaches in England and USA to support social prescribing to advance uptake of this non- clinical approach. The purpose of the review was to examine English and USA governmental approaches to financing of social prescribing to understand from a policy perspective what financial supports are required to advance the implementation of social prescribing in both countries as well as globally. The types of costs measured were, health care costs, social care costs, program implementation costs and community-based organisation costs. There are differences in health and social care financing in England and USA. In England, primary healthcare is free at the point of contact from birth to

death and in the USA, there is a market-based health care system with mixed public and private insurance. Both countries apply flexible funding models pooling of funds (England) value-based payment, Incentivised models (USA). Direct financing is also different in England the USA. In England, there is funding for link workers through primary care. In the USA direct financing is through models such as Medicare Accountable Health Communities. In both England and the USA, greater consideration should be given to the financial provisions required for the nonmedical interventions in social prescribing schemes. The current financing models in England and USA mainly focus on evaluating social needs and/or connecting with relevant social services. Consideration should be given to supporting the capacity of voluntary and community sectors in both countries to increase resilience and sustainability for social prescribing provision (Sandhu et al., 2022).

- 3.18 It was identified that there was a deficiency of focus on the methodological challenges connected with evaluating public health interventions and insufficient use of rigorous economic methods such as Cost Benefit Analysis (CBA) and Cost Consequence Analysis (CCA) which are advised as economic theoretically suitable approaches applied in public health intervention evaluation (Hill et al., 2017).
- 3.19 Another descriptive review paper by Sandhu et al (2022) aimed to describe the public-financing approaches in England and USA to support social prescribing to advance uptake of this non- clinical approach. The purpose of the review was to examine English and USA governmental approaches to financing of social prescribing to understand from a policy perspective what financial supports are required to advance the implementation of social prescribing in both countries as well as globally. The types of costs measured were, health care costs, social care costs, program implementation costs and community-based organisation costs.
- 3.20 There are differences in health and social care financing in England and USA. In England, primary healthcare is free at the point of contact from birth to death and in the USA, there is a market-based health care system with mixed public and private insurance. Both countries apply flexible funding models pooling of funds (England) value-based payment, Incentivised models (USA). Direct

financing is also different in England the USA. In England, there is funding for link workers through primary care. In the USA direct financing is through models such as Medicare Accountable Health Communities. In both England and the USA, greater consideration should be given to the financial provisions required for the nonmedical interventions in social prescribing schemes. The current financing models in England and USA mainly focus on evaluating social needs and/or connecting with relevant social services. Consideration should be given to supporting the capacity of voluntary and community sectors in both countries to increase resilience and sustainability for social prescribing provision (Sandhu et al., 2022).

### Home from hospital services

- 3.21 Three of the included papers focussed on interventions which align with the theme of 'home from hospital' services, and all were from England (Exley et al., 2019; Tian et al., 2014; Ware, 2019). One study was a cohort study, one was an observational study, and one was a cost-analysis study (see below for the economic evidence for the home from hospital services).
- 3.22 A retrospective cohort cost study was published in 2014 and aimed to explore the whole system cost of the care pathway for older people (aged 65 and over) who were admitted to hospitals following a fall in the region of Torbay in southwest England (Tian et al., 2014). The study aimed to track and analyse the costs of hospital, community, and social care services for patients before and after a fall. The intervention was delivered by a coordinated team of healthcare professionals, including community health workers, social care providers and hospital staff over a two-year period. For each patient who fell, costs were almost four times higher in the 12 months following the fall compared to the cost of the fall itself. Specifically, costs increased by 160% for community health care; 37% for social care; and 35% for acute hospital care. There was also evidence of under-coding of co-morbidities for falls patients, particularly for dementia (Tian et al., 2014).

Economic evidence from the home from hospital services

Author, date, country: Tian et al (2014), England

**Title**: Integrated care pathways for older people who have experienced falls.

**Main cost finding**: The cost of hospital, community, and social care services for each patient who fell was almost four times higher in the 12 months following the fall compared to the cost of the fall itself. Specifically, costs increased by: 160% for community health care; 37% for social care; 35% for acute hospital care.

Was there evidence of a benefit of integrated care? Inconclusive – but authors in support of integrated care

Author, date, country: Exley et al (2019), England

**Title**: Southwark and Lambeth Integrated Care Older People's Programme

**Main cost finding**: The programme did not achieve cost savings and resulted in a net increase in health service expenditure of £64 per resident aged 65 and above.

Was there evidence of a benefit of integrated care? No

Author, date, country: Ware (2019), England

**Title**: Supported Discharge Service (SDS) within the Harrogate and District NHS Foundation National Health Trust in Ripon, UK

**Main cost finding**: An average of 2.3 bed days were saved per patient.

Was there evidence of a benefit of integrated care? Yes

3.23 An observational study including a controlled time series analysis and a cost consequence analysis evaluated the Southwark and Lambeth Integrated Care Older People's Programme (Exley et al., 2019). The main aim was to improve the care and health outcomes for older people at risk of avoidable hospitalisation. Specifically, the programme sought to reduce hospital utilisation by decreasing Accident and Emergency (A&E) attendances, outpatient visits, and both elective and emergency admissions. The programme also aimed to enhance integrated care through holistic assessments and integrated care management to address unmet needs; and manage costs by potentially reducing overall health service expenditure through more efficient care delivery. The costs of the Programme were £149 per resident aged 65 and above but savings in hospital costs were only £86 per resident aged 65 and above, equivalent to a net increase in health service expenditure of £64 per resident though the Programme was nearly cost neutral if set-up costs were excluded.

- However, there were reductions in A&E attendances, outpatient visits, and elective admissions by the fourth year, but there was no significant reduction in emergency admissions (Exley et al., 2019).
- 3.24 A cost analysis study conducted in England evaluated the Supported Discharge Service (SDS) within the Harrogate and District NHS Foundation National Health Trust in Ripon, UK. The service was introduced to improve patient flow and bed management by supporting patients over the age of 65 years in returning to their normal place of residence as soon as they were medically fit. Patient Satisfaction Questionnaires and Therapy Outcome Measures (TOM) were collected over a two-week period in February 2018. Direct healthcare costs, operational costs and productivity costs were measured. Significant improvements in patient health and recovery were observed. Patient satisfaction levels were high and increased productivity and efficiency led to notable financial savings. There was also evidence that the service demonstrated enhanced operational efficiency, reducing hospital readmissions (Ware, 2019).

### **Accommodation based solutions**

3.25 Only one of the included studies focused on accommodation-based solutions (Wilberforce et al., 2016). The aim of this observational cost study conducted in the year 2011-2012 aimed to evaluate the association between the degree of community mental health team (CMHT) integration and (1) the service costs of community mental health and social care provision, and (2) rates of admission to institutional settings (mental health inpatient wards and care homes). Results found patients supported by high integration teams received services costing an estimated 44% more than those supported by low integration teams. After controlling for case mix, there were no significant differences in the likelihood of admission to mental health inpatient wards or care homes between the two types of CMHT teams.

### 4. Discussion, conclusion, limitations and implications

4.1 This rapid review is original in that it focuses on the economic evaluation of integrated health and social care initiatives, and this has not been the focus of a previous review. The Hill et al., (2017) review was focused only on alcohol prevention interventions, and this review cast a wider net.

### **Discussion**

- 4.2 In this review, 15 studies were included and were selected on the basis that these peer reviewed articles provided economic evidence related to integrated health and social care related services. The 15 studies included were mapped onto the national 'Models of Care' as described within the Welsh Government's guidance on the Regional Integration Fund. There was a degree of overlap with four of these namely, Community based care: complex care closer to home; Home from hospital services; Promoting good emotional health and well-being; and Accommodation based solutions (Welsh Government, 2022a). However, there were no studies to include under the heading of 'Supporting families to stay safely together'.
- 4.3 Overall, the nine studies included under complex care closer to home, showed that the economic evidence for integrated health and social care is mixed, with some studies demonstrating positive outcomes and others highlighting no significant economic benefits. The WFL intervention demonstrated substantial cost savings across various sectors (Visram et al., 2020).
- 4.4 Two studies focused on promoting emotional health and wellbeing. Garner et al. (2017) found the ACERS intervention for COPD patients in London improved care quality and was cost-neutral, saving significant costs. Heslin et al. (2017) reported no cost-effectiveness or quality-of-life improvements from the IMPaCT intervention for psychosis. Hill et al. (2017) highlighted a lack of rigorous economic methods in evaluating alcohol prevention interventions. Sandhu et al. (2022) reviewed public-financing approaches in England and the USA for social prescribing, emphasising the need for financial support to implement these non-clinical interventions.

- 4.5 Two of the three home from hospital included papers demonstrated that interventions in England aimed at reducing secondary care costs did not achieve cost savings (Exley et al., 2019; Tian et al., 2014) Only one of the included studies (again from England) provided evidence of reduced hospital admissions due to the Supported Discharge Service (SDS) (Ware, 2019)
- 4.6 The economic evidence-base regarding accommodation-based solutions related only to one paper indicating that more economic evidence is needed in this area. The authors found that costs increased with a higher level of CMHT integrated care. There is therefore a clear need for a more rigorous evidence-base to inform accommodation-based solutions in relation to integrated health and social care.
- 4.7 All 15 papers included in this review were from England with one paper comparing financing across England and USA, therefore evidence regarding effectiveness and economic evaluations regarding integrated care from other devolved nations in the UK were not captured in this rapid review. This may be because the area of integrated health and social care is relatively new, and the research community have not published this work yet (Integrated Care System Northern Ireland, 2024; Scottish Government, 2019; Wales Audit Office, 2019).
- 4.8 Similar to Hill et al., (2017) this review identified a lack of focus on the methodological challenges associated with evaluating public health interventions. Hill et al., (2017) identified insufficient use of rigorous economic methods such as Cost Benefit Analysis (CBA) and Cost Consequence Analysis (CCA). These methods are recommended as theoretically suitable approaches for evaluating public health interventions(Hill et al., 2017)

### Conclusion

4.9 The review has highlighted that the economic evaluation of integrated health and social care is a developing area. To date, there is limited information, data and analysis available. The existing studies and data on the economic impact of integrated health and social care programmes are sparse, with mixed evidence about the economic benefit of integrated care. Sometimes the evidence is inconclusive. This lack of comprehensive economic analysis highlights the need

for further research to better understand the cost-effectiveness and financial implications of integrated health and social care programmes.

### Limitations

- 4.10 The quality of the included studies varied. Some of the included reviews were not systematic reviews, and only three RCTs were included. No studies were excluded based on quality.
- 4.11 The included papers were not all about the same approach to integration or with a similar range of interventions, and this has implications for what was compared in this review.
- 4.12 Only studies from the UK were considered for this rapid review, a global net might have resulted in an increased number of studies relevant to answering the research question.

### Guidance based on the evidence presented

- 4.13 Based on the analysis that has been undertaken, the authors suggest that:
- 4.14 There is a need for joint strategies across organisations which includes strong leadership to support integrated care. It is important to consider variations in population demographics, healthcare infrastructure, and local policies.
- 4.15 Policymakers should implement mechanisms for continuous monitoring and evaluation of integrated care models to identify areas for improvement and ensure that integration efforts are meeting their intended health and social care goals.
- 4.16 Future health and social care integrated services or programme evaluations should include an economic component such as cost-benefit analysis, cost consequence analyses, social return on investment analyses (SROI) or where possible, cost-effectiveness analysis.

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### Appendix 1 - Search strategies for all databases searched

### **EMBASE**

- integrated health care system'/exp OR 'integrated health' OR 'coordinated care' OR 'integrated care' OR 'integrated care partnership\*' OR 'integrated care provider\*' OR 'integrated social care' OR 'accommodation based solution\*' OR (('community-based' OR emotional OR health OR wellbeing OR 'well-being' OR 'social care') NEAR/2 (intervention\* OR solution\* OR investment\*)) OR 'home from hospital'
- #2 cost benefit analysis'/exp OR 'cost'/exp OR 'cost' OR 'cost-utility' OR 'cost-benefit analysis' OR 'social cost benefit analysis' OR 'cost-effectiveness' OR 'qaly' OR 'social return on investment\*' OR 'sroi' OR effectiveness OR 'rate of success' OR ('cost benefit\*' NEAR/2 analysis) OR (economic NEAR/2 evidence)
- #3 #1 AND #2
- #4 england'/exp OR 'wales'/exp OR england:ti,ab,kw OR wales:ti,ab,kw
- #5 #3 AND #4
- #6 #5 AND [2014-2024]/py AND [english]/lim

('integrated health care system'/exp OR 'integrated health' OR 'coordinated care' OR 'co-ordinated care' OR 'co ordinated care' OR 'comprehensive care' OR 'interprofessional care' OR 'ics':ti,ab OR 'inter professional care' OR 'integrated care' OR 'integrated care partnership\*' OR 'integrated care provider\*' OR 'integrated social care' OR 'accommodation based solution\*' OR (('community-based' OR emotional OR health OR wellbeing OR 'well-being' OR 'social care') NEAR/2 (intervention\* OR solution\* OR investment\*)) OR 'home from hospital') AND ('cost benefit analysis'/exp OR 'cost'/exp OR 'cost' OR 'cost-utility' OR 'cost-benefit analysis' OR 'social cost benefit analysis' OR 'cost-effectiveness' OR 'qaly' OR 'social return on investment\*' OR 'sroi' OR effectiveness OR 'rate of success' OR ('cost benefit\*' NEAR/2 analysis) OR (economic NEAR/2 evidence)) AND ('england'/exp OR 'wales'/exp OR england:ti,ab,kw OR wales:ti,ab,kw) AND [2014-2024]/py AND [english]/lim

### OVID MEDLINE

- exp "Delivery of Health Care, Integrated"/ or ("integrated health" or "coordinated care" or "integrated care" or "integrated care" or "integrated care partnership\*" or "integrated care provider\*" or "integrated social care" or "accommodation based solution\*" or (("community-based" or emotional or health or wellbeing or "well-being" or "social care") adj2 (intervention\* or solution\* or investment\*)) or "home from hospital").mp. or ics.tw.
- exp Cost-Benefit Analysis/ or exp "Costs and Cost Analysis"/ or (cost or "cost-utility" or "cost-benefit analysis" or "social cost benefit analysis" or "cost-effectiveness" or "qaly" or "social return on investment\*" or sroi or effectiveness or "rate of success" or ("cost benefit\*" adj2 analysis) or (economic adj2 evidence)).mp.
- 3 1 and 2
- 4 exp England/ or exp Wales/ or (england or wales).ti,ab,kf.
- 5 3 and 4
- 6 limit 5 to (yr="2014 -Current" and (english or welsh))

### **EBSCO CINAHL**

- S1 (MH "Health Care Delivery, Integrated") OR "integrated health" or "coordinated care" or "integrated care" or "integrated care" or "integrated care partnership\*" or "integrated care provider\*" or "integrated social care" or "accommodation based solution\*" or (("community-based" or emotional or health or wellbeing or "well-being" or "social care") N2 (intervention\* or solution\* or investment\*)) or "home from hospital") OR TI ICS OR AB ICS
- S2 (MH "Cost Benefit Analysis") OR (MH "Costs and Cost Analysis+") OR cost or "cost-utility" or "cost-benefit analysis" or "social cost benefit analysis" or "cost-effectiveness" or "qaly" or "social return on investment\*" or sroi or effectiveness or "rate of success" or ("cost benefit\*" N2 analysis) or (economic N2 evidence)
- S3 S1 AND S2
- S4 TI (England OR Wales) OR AB (England OR Wales) OR ((MH "England") OR (MH "Wales"))
- S5 S3 AND S4
- S6 Limiters Publication Date: 20140101-20241231; English Language

### EBSCO APA PsycINFO

- DE "Integrated Services" OR "integrated health" or "coordinated care" or "co-ordinated care" or "co ordinated care" or "comprehensive care" or "interprofessional care" or "integrated care" or "integrated care partnership\*" or "integrated care provider\*" or "integrated social care" or "accommodation based solution\*" or (("community-based" or emotional or health or wellbeing or "well-being" or "social care") N2 (intervention\* or solution\* or investment\*)) or "home from hospital") OR TI ICS OR AB ICS
- S2 DE "Social Exchange" OR DE "Health Care Economics" OR DE "Costs and Cost Analysis" OR DE "Budgets" OR DE "Cost Containment" OR DE "Health Care Costs" OR DE "Money" OR cost or "cost-utility" or "cost-benefit analysis" or "social cost benefit analysis" or "cost-effectiveness" or "qaly" or "social return on investment\*" or sroi or effectiveness or "rate of success" or ("cost benefit\*" N2 analysis) or (economic N2 evidence)
- S3 S1 AND S2
- S4 TI (England OR Wales) OR AB (England OR Wales) OR KW (England OR Wales)
- S5 S3 AND S4
- S6 Limiters Publication Date: 20140101-20241231; English language

### **SCOPUS**

TITLE-ABS-KEY ("integrated health" OR "coordinated care" OR "co-ordinated care" OR "co ordinated care" OR "comprehensive care" OR "interprofessional care" OR "inter professional care" OR "integrated care" OR "integrated care partnership\*" OR "integrated care provider\*" OR "integrated social care" OR "accommodation based solution\*" OR ( ( "community-based" OR emotional OR health OR wellbeing OR "well-being" OR "social care" ) W/2 ( intervention\* OR solution\* OR investment\* ) ) OR "home from hospital" ) OR TITLE-ABS ( "ICS" ) OR INDEXTERMS (

"Integrated Services" OR "Health Care Delivery, Integrated" OR "Delivery of Health Care, Integrated" OR "integrated health care system")

- 2 TITLE-ABS-KEY ( cost OR "cost-utility" OR "cost-benefit analysis" OR "social cost benefit analysis" OR "cost-effectiveness" OR "qaly" OR "social return on investment\*" OR sroi OR effectiveness OR "rate of success" OR ( "cost benefit\*" W/2 analysis ) OR ( economic W/2 evidence ) ) OR INDEXTERMS ( "Cost Benefit Analysis" OR "Cost Analysis" OR "Cost OR "Cost-Benefit Analysis" OR "Costs and Cost Analysis" )
- 3 1 AND 2
- 4 TITLE-ABS-KEY (england OR wales ) OR INDEXTERMS (england OR wales )
- 5 3 and 4
- 5 AND PUBYEAR > 2013 AND PUBYEAR < 2025 AND ( LIMIT-TO ( LANGUAGE , "English" ) )
- TITLE-ABS-KEY ( england OR wales ) OR INDEXTERMS ( england OR wales ) ) AND ( ( TITLE-ABS-KEY ( cost OR "cost-utility" OR "cost-benefit analysis" OR "social cost benefit analysis" OR "cost-effectiveness" OR "qaly" OR "social return on investment\*" OR sroi OR effectiveness OR "rate of success" OR ( "cost benefit\*" W/2 analysis ) OR ( economic W/2 evidence ) ) OR INDEXTERMS ( "Cost Benefit Analysis" OR "Cost Analysis" OR "Cost" OR "Cost-Benefit Analysis" OR "Costs and Cost Analysis" ) ) AND ( TITLE-ABS-KEY ( "integrated health" OR "coordinated care" OR "co-ordinated care" OR "coordinated care" OR "interprofessional care" OR "integrated care portinership\*" OR "integrated care provider\*" OR "integrated social care" OR "accommodation based solution\*" OR ( ( "community-based" OR emotional OR health OR wellbeing OR "well-being" OR "social care" ) W/2 ( intervention\* OR solution\* OR investment\* ) ) OR "home from hospital" ) OR TITLE-ABS ( "ICS" ) OR INDEXTERMS ( "Integrated Services" OR "Health Care Delivery, Integrated" OR "Delivery of Health Care, Integrated" OR "integrated health care system" ) ) ) AND PUBYEAR > 2013 AND PUBYEAR < 2025 AND ( LIMIT-TO ( LANGUAGE , "English" ) )

## Appendix 2 - Grey literature sources

#	Source of grey literature	No. found (search)	No. included
1.	JISC Library Hub Discovery	3	0
2.	The King's Fund Library Catalogue	2	0
3.	Trip Medical Database	3	0
4.	Welcome to GOV.UK	721	0
5.	Home   The Health Foundation	27	0
6.	Home   NHS Transformation Directorate (first 50)	50	0
7.	Google Scholar	123	0
	Total	929	0