

# Integrated care to address the physical health needs of people with severe mental illness: a rapid review

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**Declared competing interests of authors:** none

Published April 2016

DOI: 10.3310/hsdr04130

## Scientific summary

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Health Services and Delivery Research 2016; Vol. 4: No. 13

DOI: 10.3310/hsdr04130

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# Scientific summary

## Background

People with mental health conditions have a lower life expectancy and poorer physical health outcomes than the general population. Evidence suggests that this discrepancy is driven by a combination of clinical risk factors, socioeconomic factors and health system factors.

Although physical health and mental health are closely linked, services for mental health conditions are typically separate from general health care for physical conditions.

Service integration (i.e. breaking down the barriers in how care is provided between family doctors and hospitals, between physical and mental health care, and between health and social care) is a key step in the proposed system change for the NHS. Service integration encompasses the concept of integrated care, a potentially complex intervention with many different components. A number of initiatives relating to the development of integrated care services are under way in England. These include Vanguard sites, Integrated Personal Commissioning and the establishment of the NHS England Mental Health Taskforce.

A systematic review published in 2013 (Bradford DW, Cunningham NT, Slubicki MN, McDuffie JR, Kilbourne AM, Nagi A, *et al.* An evidence synthesis of care models to improve general medical outcomes for individuals with serious mental illness: a systematic review. *J Clin Psychiatry* 2013;**74**:e754–64) evaluated interventions that integrated medical and mental health care to improve general medical outcomes in individuals with severe mental illness (SMI). The included interventions were associated with increased rates of immunisation and screening, but had mixed results in terms of changes in physical functioning, and none reported clinical outcomes. In the same year, the Mental Health Foundation (Mental Health Foundation. *Crossing Boundaries. Improving Integrated Care for People with Mental Health Problems*. London: Mental Health Foundation; 2013) undertook an inquiry into integrated health care for people with mental health problems. This identified nine factors at the heart of good integrated care for people with mental health problems: (1) information sharing systems; (2) shared protocols; (3) joint funding and commissioning; (4) colocation of services; (5) multidisciplinary teams; (6) liaison services; (7) navigators; (8) research; and (9) reduction of stigma.

## Objectives

The aim of this project is to explore what current provision exists in practice, and to map the most recent evidence on models of care for addressing the physical health needs of people with mental health problems, primarily within the mental health service setting. Specifically, we sought to address the following four questions:

1. What types of models currently exist for the provision of integrated care specifically to address the physical health needs of people with SMI when accessing mental health-care services?
2. What are the perceived facilitators and barriers to implementation of these models?
3. How do models implemented in practice compare and contrast with those described in the literature?
4. Can we identify high-priority areas for either further primary research or a full evidence synthesis?

## Methods

We carried out a rapid review to identify, appraise and synthesise relevant evidence from 2013 to 2015, incorporating an update of Bradford *et al.* (2013). Our approach was pragmatic and iterative in nature. Inevitably the process was less exhaustive and the outputs somewhat less detailed than might be expected from a full systematic review. The results should be viewed in the context of evolving NHS policy and the likelihood of ongoing change in relation to developing models of integrated care.

### Data sources

We considered two main data sources: the published literature and an advisory group (comprising service users and experts in the field of mental health).

### Literature

A literature search was undertaken to identify empirical and descriptive publications relating to integrated care for the physical health of people with SMI. Building on the Bradford *et al.* (2013) review, we carried out searches to find and prioritise any new evaluative studies since 2013, using an adapted version of the search strategy from the review.

Nine electronic databases were searched from 1 January 2013 to May/June 2015. Further searches were undertaken to identify UK and international guidelines and any relevant English-language government policy documents from the UK, Australia, New Zealand, Canada or the USA.

The project team also collected relevant literature recommended by members of the advisory group working in the field of mental health.

### Advisory group

We contacted a number of field experts with an interest in our topic. Service users were identified through local contacts. Contacts were made by telephone or through a face-to-face meeting, with brief notes recorded for each conversation on standard forms.

### Inclusion and exclusion criteria

#### Study design

Empirical and descriptive publications, including evaluative studies arising from an update of Bradford *et al.* (2013), and policy/guideline documents.

#### Setting

Integration of services primarily *within* the health-care sector. Models focused on the wider integration of services spanning non-NHS settings (e.g. social care, education, employment, housing and voluntary sector provision) were not eligible for inclusion.

#### Population

People diagnosed with SMI [schizophrenia, schizotypal and delusional disorders; bipolar affective disorder; severe depressive episode(s) with or without psychotic episodes].

#### Intervention

Any health-care services that include arrangements to address the physical health needs of people with SMI. Programmes primarily concerned with organisation and delivery of services rather than the implementation of discrete health technologies.

## Outcome

Any outcome relevant to the provision and implementation of integrated care. For the evaluative literature, outcomes were restricted to those related to physical health (including sexual health).

## Study selection and data extraction

Study selection was carried out by three reviewers independently and data extraction was carried out by one reviewer, checked by a second reviewer. Disagreements were resolved by discussion or with the involvement of a third reviewer.

## Quality assessment

We did not assess the included papers for methodological quality, given our primary aim was to describe interventions and their implementation rather than establishing the risk of bias in their evaluation.

## Synthesis

We combined studies in a narrative synthesis, using the nine factors of good integrated from the Mental Health Foundation report as a guiding framework. We also incorporated into our synthesis any other relevant factors identified during data extraction and from discussions with advisory group field experts, particularly wider system factors that might underpin the successful implementation of integrated care interventions.

## Findings and discussion

We spoke to 13 advisory group field experts, of whom eight provided helpful signposting information. We engaged with five people in more detailed face-to-face or teleconference conversations. We had face-to-face or teleconference conversations with two service users.

The rapid review included 45 publications describing 36 separate approaches to integrating physical health needs into the care of people with SMI. They comprised a range of study designs including systematic and non-systematic literature reviews, primary studies, book chapters, conference abstracts, dissertations, policy and guidance documents, feasibility studies, descriptive reports and programme specifications. Twenty-seven papers reported on 25 distinct evaluations of programmes or interventions.

Most service models were multicomponent programmes incorporating two or more of the factors that have previously been identified as facilitators of integrated care: information sharing systems, shared protocols, joint funding/commissioning, colocated services, multidisciplinary teams, liaison services, navigators, research and reduction of stigma (see table, below).

The majority of programmes were in community and/or secondary care mental health settings in the UK, North America or Australia.

## Classification of included publications

Publication	Study design	1. Information sharing systems	2. Shared protocols	3. Joint funding and commissioning	4. Colocation of services	5. Multidisciplinary teams	6. Liaison services	7. Navigators	8. Research	9. Reduction of stigma
Bartels <i>et al.</i> <sup>32</sup>	E				•			•		
Bellamy <sup>53</sup>	E			•	•	•	•	•		
Bradford <i>et al.</i> <sup>27</sup>	E	•	•	•	•	•	•	•		
Chwastiak <i>et al.</i> <sup>37, 45</sup>	E, E				•	•	•			
Curtis <i>et al.</i> <sup>49</sup>	E				•	•				
De Hert <i>et al.</i> <sup>54</sup>	P		•							
Department of Health <sup>2</sup>	P, E	•			•					
Department of Health <sup>4</sup>	P			•		•				
Druss <i>et al.</i> <sup>52</sup>	E				•	•	•			
Greater Manchester CLAHRC <sup>46, 47</sup>	E	•	•		•	•	•	•		
Happell <i>et al.</i> <sup>29, 55, 57</sup>	D, E				•		•	•		•
Hardy <i>et al.</i> <sup>30</sup>	E									
Jones <i>et al.</i> <sup>39</sup>	E							•		
Kelly <i>et al.</i> <sup>31</sup> and Brekke <i>et al.</i> <sup>43</sup>	E							•		•
Kern <sup>58</sup>	D	•	•	•	•	•	•	•	•	•
Kiliany <sup>42</sup>	E	•	•	•	•	•	•	•	•	•
Kilbourne <i>et al.</i> <sup>33, 35, 36, 59</sup>	D, E	•					•			
Lee <sup>40</sup>	E				•					
Maki and Bjorklund <sup>44</sup>	E	•				•				•

Publication	Study design	1. Information sharing systems	2. Shared protocols	3. Joint funding and commissioning	4. Colocation of services	5. Multidisciplinary teams	6. Liaison services	7. Navigators	8. Research	9. Reduction of stigma
Mental Health Foundation <sup>28</sup>	D	•	•	•	•	•	•	•	•	•
NHS IQ <sup>50</sup>	E		•	•	•	•	•	•		•
NHS London <sup>60</sup>	D		•							
Nover <sup>61</sup>	D			•	•	•		•		
Parks <sup>62</sup>	D	•	•	•	•	•	•	•	•	•
Pirraglia <i>et al.</i> <sup>41</sup>	E			•	•					
Rubin <i>et al.</i> <sup>51</sup>	E			•	•	•	•	•		
Shackleford <i>et al.</i> <sup>63</sup>	D			•	•		•			
Solomon <i>et al.</i> <sup>64</sup>	D							•		
Stark and Walker <sup>65</sup>	D	•					•		•	
Tallian <i>et al.</i> <sup>66</sup>	D		•							
Ungar <i>et al.</i> <sup>67</sup>	D				•	•	•			
Vanderlip <i>et al.</i> <sup>68</sup>	D					•	•			
Vinas Cabrera <i>et al.</i> <sup>34</sup>	E	•	•							
von Esenwein and Druss <sup>38</sup>	E	•								
Weithagen <i>et al.</i> <sup>69</sup>	D			•	•		•			
Yeomans <i>et al.</i> <sup>48</sup>	E	•								

CLAHRC, Collaboration for Leadership in Applied Health Research and Care; D, descriptive; E, evaluation; IQ, Improving Quality; P, policy.

**Note**

1–9 indicates the likely emphasis of the intervention, according to the nine factors of good integrated care. Full reference details can be found in the full report: Rodgers M, Dalton J, Harden M, Street A, Parker G, Eastwood A. Integrated care to address the physical health needs of people with severe mental illness: a rapid review. *Health Serv Deliv Res* 2016;**4**(13).

### ***What type of models currently exist for the provision of integrated care specifically to address the physical health needs of people with severe mental illness when accessing mental health-care services?***

Most programmes described the complex interaction of multiple components. However, few were described in detail and fewer still were comprehensively evaluated, raising questions about the replicability and generalisability of much of the existing evidence.

Many variants of the 'navigator' model were described, although the few available evaluations tended to be superficial, with little clarity about implementation. However, the available evidence suggests that any individual tasked with co-ordinating care needs to be empowered with the authority to influence other care professionals. Additional considerations of sustainability and ethics apply to 'peer navigator' approaches.

### ***What are the perceived facilitators and barriers to implementation of these models?***

A fundamental requirement for successful integration of physical and mental health care is having the right people with the right skills and attitudes.

Any planned structural changes should consider the likely impact on the attitudes, skills and behaviours of the people interacting within and across health organisations, be they health professionals or service users. Many factors identified as facilitators either empowered individuals and/or minimised the effort needed for individuals to provide and access integrated services.

Mental health professionals who avoid physical health actions through a lack of confidence in their own skills may be empowered through targeted training and greater clarity about their responsibilities in relation to physical health. Care co-ordinators/navigators may have an empowerment role by providing advocacy for service users in certain settings, and might benefit from greater formal authority over care integration. All health professionals need time to undergo training and to collaborate on patient care, which can be difficult in clinical settings with heavy caseloads. Management commitment to protect time and resources for such activities has been raised as a potentially worthwhile investment.

Integrated information systems and individual electronic records have yet to be properly implemented because of various technical, legal and organisational barriers. However, these remain the most promising means of simplifying communication and collaboration among professionals across multiple services. However, any arrangements that reduce the level of effort necessary to deliver integrated services on a day-to-day basis should be welcomed. The literature mentions simple measures such as informal referral procedures, high visibility and open access as facilitators of physical health clinics for people with SMI in mental health settings.

Multidisciplinary teams form an important role in the provision of mental health services, and are likely to continue to do so in the future. However, simply having an appropriate skill mix within a team does not appear to be sufficient for providing integrated care. There is often broad agreement about what needs to be done to improve the physical health of people with SMI, but not about who should be responsible. Within multidisciplinary teams there must be clarity about the specific aspects of care for which individuals in the team are responsible and accountable, supported by effective communication between team members. We heard several instances where opportunities to intervene have been missed owing to poor communication between providers.

Organisational incentives alone are likely to be inadequate unless individuals have the appropriate knowledge, skills, resources and environment to support them. Shared protocols, joint action plans and decision support tools may assist by clarifying responsibilities and supporting record keeping and communication across boundaries.

The advisory group described several ways in which the existing organisation of services, and often unconscious assumptions, attitudes and behaviours of health-care staff, can be stigmatising to people with SMI. Concerns such as inattention to the sexual health of people with SMI and inpatient environments conducive to poor physical health were not mentioned in the identified literature.

Greater prioritisation of physical health needs to be embedded in the culture and environment of mental health services. This will require clear strategic leadership and commitment from staff at all levels, backed by appropriate funding arrangements.

### ***How do models implemented in practice compare and contrast with those described in the literature?***

In 2013, the Mental Health Foundation concluded that good integrated care appears to be the exception rather than the norm, with isolated pockets of good practice but overall dissatisfaction with progress being made across the UK. Our advisory group field experts gave the impression that this remained the state of affairs in 2015, describing a small number of high-profile programmes as well as their own local efforts. However, at the time of writing there are several high-profile initiatives either announced or ongoing.

### ***Can we identify high-priority areas for either further primary research or a full evidence synthesis?***

A lack of evaluation and dissemination of local innovations makes it difficult for local lessons learned to be shared across institutions and the wider health service.

Most published evaluations were small scale and/or poorly described. Ideally, future evaluations should be on a larger scale and use meaningful, validated measures of success. In particular, evaluations need to be clear about which outcomes, facilitators and barriers are likely to be context-specific, and which might be generalisable.

Wherever possible, service users should be involved in the design, conduct and evaluation of programmes. For example, service users on our advisory panel identified scope for: improved appointment-booking arrangements for patients with SMI; making mental health inpatient environments more conducive to good physical health; and greater attention to the sexual health of people with SMI. These concerns have received very little attention in recent literature.

There is scope for additional research on understanding why efforts to integrate physical health-care needs for people with SMI succeed or fail, using qualitative or mixed-method techniques.

## **Limitations and future work**

The literature identified in this rapid review was restricted in volume and often lacked the depth of description necessary to acquire useful insights. Much of the literature was descriptive or failed to provide useful information on barriers and facilitators. The weight of attention given to specific interventions in our synthesis was partly determined by the amount of available information rather than the inherent value of the intervention.

All members of our advisory group were based in England, so this report has limited information on the NHS contexts specific to Scotland, Wales and Northern Ireland.

Although our initial focus was on people accessing care in the mental health setting, we found that the initial point of access is often not quite so clear-cut, especially when patients are invariably referred back and forth between secondary and primary care.



Owing to the nature of the existing published evidence and changing policy landscape, a full systematic review of this topic would not appear to be feasible or appropriate in the immediate future. However, there might be an argument for undertaking a more interpretivist approach to exploring this literature. Very few of the interventions described in the literature had any explicit theoretical basis, but it might be possible to code these studies with the specific aim of developing higher-level concepts and theory. Equally, aspects of this literature could be interpreted in light of existing theories of behaviour change. Such an investigation was outside the scope and resources of this rapid review.

## Funding

The research reported here was commissioned and funded by the Health Services and Delivery Research programme as part of a series of evidence syntheses under project number 13/05/11. For more information visit [www.nets.nihr.ac.uk/projects/hsdr/130511](http://www.nets.nihr.ac.uk/projects/hsdr/130511).



# 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/](http://www.publicationethics.org/)).

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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 13/05/11. The contractual start date was in May 2015. The final report began editorial review in September 2015 and was accepted for publication in January 2016. 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.

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