| Reference<br><br>Source<br><br>Nature of publication | Stated aim/ objective | Patient/service user group | Setting<br><br>(Country; Primary/secondary/tertiary etc.; involvement of non-NHS services/organisations)‡ | Defining characteristics of approach as described by authors/practitioners | Integrated care factors* | Facilitators for wider implementation (process outcomes described by authors) | Barriers to wider implementation (process outcomes described by authors) | Evaluation?<br><br>(Yes/No)<br><br>Outcome relevant to physical health |
|---|---|---|---|---|---|---|---|---|
| Bartels (2014)[32]<br><br>Literature<br><br>RCT pilot study[32] | To evaluate feasibility and effectiveness of integrated Illness Management and Recovery (I-IMR) for people with SMI and chronic general medical conditions. | Older adults with SMI (schizophrenia spectrum; bipolar disorder; major depression) and chronic medical conditions. | USA<br><br>Community mental health centres | Combined patient training in self-management for both psychiatric and general medical illness. 10 modules delivered weekly over 8 month period by an I-IMR specialist. Preventive and on-going health care facilitated by a primary care nurse health care manager located one day per week at the mental health centre.<br><br>Components of intervention for both psychiatric and general medical illness: customized to patient education/training about illness and treatment; cognitive-behavioural approaches to improve medication adherence; relapse prevention; coping skills to manage persistent | 4.7. | Participant attendance at sessions was sufficient to benefit from training and nurse management. Indicates feasibility of intervention. | | Yes.<br><br>Measures of improvement in self-management of psychiatric and general medical illness (including disease-specific measures for diabetes, COPD, hypertension, hyperlipidemia, and arthritis.<br><br>Participation (communication and preferences about decision-making) in psychiatric and medical |

| Reference<br><br>Source<br><br>Nature of publication | Stated aim/ objective | Patient/service user group | Setting<br><br>(Country; Primary/secondary/tertiary etc.; involvement of non-NHS services/organisations)‡ | Defining characteristics of approach as described by authors/practitioners | Integrated care factors* | Facilitators for wider implementation (process outcomes described by authors) | Barriers to wider implementation (process outcomes described by authors) | Evaluation?<br><br>(Yes/No)<br><br>Outcome relevant to physical health |
|---|---|---|---|---|---|---|---|---|
| | | | | symptoms; social skills. | | | | encounters. Use of acute care services. |
| Bellamy (2013)[53]<br><br>Clinical trials register<br><br>RCT protocol | To study health outcomes of individuals with mental illness attending a co-located primary health care centre in a mental health centre. | People with SMI | USA<br><br>Mental health centre | SAMHSA-funded integrated Wellness Center (WC) providing four evidence-based practices: (a) on-site primary care; (b) screening of clients for modifiable risk factors and medical conditions; (c) care coordination; and (d) peer health navigation. | 3. 4. 5. 6. 7. | - | - | Yes<br><br>Clinical (e.g. blood pressure, BMI, glucose/ lipid levels, substance use) and patient-centred outcomes. |
| Bradford(2013) [27]<br><br>Literature<br><br>Journal article (systematic | To conduct a systematic review of studies of interventions that integrated medical and mental health care to improve general medical outcomes in individuals with | People with SMI | USA<br><br>Veterans' Administration (VA) outpatient mental health clinic | Co-located general medical clinic with care provided by a nurse practitioner with supervision from a family practitioner; care coordination provided by a nurse. Liaison with mental health providers. | 1. 3. 4. 5. 6. | Single payer health care system | - | Yes<br><br>General medical service use |

| Reference<br><br>Source<br><br>Nature of publication | Stated aim/ objective | Patient/service user group | Setting<br><br>(Country; Primary/secondary/tertiary etc.; involvement of non-NHS services/organisations)‡ | Defining characteristics of approach as described by authors/practitioners | Integrated care factors* | Facilitators for wider implementation (process outcomes described by authors) | Barriers to wider implementation (process outcomes described by authors) | Evaluation?<br><br>(Yes/No)<br><br>Outcome relevant to physical health |
|---|---|---|---|---|---|---|---|---|
| review) | serious medical illness. | | | Primary care appointments were scheduled to immediately follow mental health appointments when possible.<br><br>VA computerized record.<br><br>Funded by VA Research and<br><br>Development/ local clinic funds. | | | | |
| (continued) | | Bipolar disorder | USA<br><br>Veterans' Administration (VA) outpatient mental health clinic | Specialty team of psychiatrist and nurse care manager, including self-management support (psychoeducational "Life Goals Program", primarily addressing bipolar disorder symptoms) decision support (simplified VA<br><br>Bipolar Clinical Practice Guidelines for providers), | 1. 3. 4. 5. | Single payer health care system | - | Yes<br><br>SF-36 physical health |

| Reference<br><br>Source<br><br>Nature of publication | Stated aim/ objective | Patient/service user group | Setting<br><br>(Country; Primary/secondary/tertiary etc.; involvement of non-NHS services/organisations)‡ | Defining characteristics of approach as described by authors/practitioners | Integrated care factors* | Facilitators for wider implementation (process outcomes described by authors) | Barriers to wider implementation (process outcomes described by authors) | Evaluation?<br><br>(Yes/No)<br><br>Outcome relevant to physical health |
|---|---|---|---|---|---|---|---|---|
| | | | | emphasis on primary care enrollment and collaboration.<br><br>Nurse care manager provided same-day telephone and next-business-day clinic appointments.<br><br>VA computerized record.<br><br>Funded by VA Research and Development. | | | | |
| (continued) | | Bipolar disorder | USA<br><br>Veterans' Administration (VA) outpatient mental health clinic | Bipolar disorder medical care model consisting of 4 sessions of self-management support, nurse care management (first response for bipolar disorder-specific care and liaison between existing providers), guideline | 1. 3. 4. 5. 6. | Single payer health care system | - | Yes<br><br>SF-12 quality of life-physical health |

| Reference<br><br>Source<br><br>Nature of publication | Stated aim/ objective | Patient/service user group | Setting<br><br>(Country; Primary/secondary/tertiary etc.; involvement of non-NHS services/organisations)‡ | Defining characteristics of approach as described by authors/practitioners | Integrated care factors* | Facilitators for wider implementation (process outcomes described by authors) | Barriers to wider implementation (process outcomes described by authors) | Evaluation?<br><br>(Yes/No)<br><br>Outcome relevant to physical health |
|---|---|---|---|---|---|---|---|---|
| | | | | implementation related to cardiovascular risk factors.<br><br>Decision support included continuing medical education and guidelines; pocket cards for medical and mental health providers related to cardiovascular risk factor management.<br><br>VA computerized record.<br><br>Funded by VA Research and<br><br>Development. | | | | |
| (continued) | | SMI | USA<br><br>Urban community mental | Nurse care management with self-management (motivational interviewing, development of action plans, and coaching), liaison | 5. 6. | | | Yes |

| Reference<br><br>Source<br><br>Nature of publication | Stated aim/ objective | Patient/service user group | Setting<br><br>(Country; Primary/secondary/tertiary etc.; involvement of non-NHS services/organisations)‡ | Defining characteristics of approach as described by authors/practitioners | Integrated care factors* | Facilitators for wider implementation (process outcomes described by authors) | Barriers to wider implementation (process outcomes described by authors) | Evaluation?<br><br>(Yes/No)<br><br>Outcome relevant to physical health |
|---|---|---|---|---|---|---|---|---|
| | | | health centre | between mental health and medical providers, and case management components.<br><br>Funded by National Institute of Mental Health. | | | | SF-36<br><br>Framingham Cardiac Index |

| Reference<br><br>Source<br><br>Nature of publication | Stated aim/ objective | Patient/service user group | Setting<br><br>(Country; Primary/secondary/tertiary etc.; involvement of non-NHS services/organisations)‡ | Defining characteristics of approach as described by authors/practitioners | Integrated care factors* | Facilitators for wider implementation (process outcomes described by authors) | Barriers to wider implementation (process outcomes described by authors) | Evaluation?<br><br>(Yes/No)<br><br>Outcome relevant to physical health |
|---|---|---|---|---|---|---|---|---|
| Chwastiak [45]<br><br>Clinical trials register<br><br>Feasibility study protocol | To demonstrate the feasibility and acceptability of adapting TEAMcare for patients with schizophrenia | Patients with schizophrenia and poorly controlled type 2 diabetes | USA<br><br>Mental health centre | TEAMcare is an evidence-based collaborative care approach to the treatment of diabetes and psychiatric illness. Involves structured visits with a study nurse to monitor psychiatric symptoms, control of medical disease, and self-care activities. Nurses use motivational coaching to help patients solve problems and set goals for improved self-care and medication adherence. Medications for diabetes, hypertension, and hyperlipidemia are monitored and therapy intensified based on treat-to-target guidelines. All process and outcome measures are tracked in a registry designed for the study, and the nurses receive weekly supervision with a psychiatrist, an endocrinologist and a psychologist in order to review new cases and to track progress. Once a patient achieves targeted levels for relevant measures, the patient and the nurse develop a maintenance plan. | 4, 5 | - | - | Yes<br><br>HbA1c, blood pressure, LDL cholesterol |

| Reference<br><br>Source<br><br>Nature of publication | Stated aim/ objective | Patient/service user group | Setting<br><br>(Country; Primary/secondary/tertiary etc.; involvement of non-NHS services/organisations)‡ | Defining characteristics of approach as described by authors/practitioners | Integrated care factors* | Facilitators for wider implementation (process outcomes described by authors) | Barriers to wider implementation (process outcomes described by authors) | Evaluation?<br><br>(Yes/No)<br><br>Outcome relevant to physical health |
|---|---|---|---|---|---|---|---|---|
| Chwastiak (2014)[37] #734<br><br>Literature<br><br>Overview | To describe various collaborative care models (including the adapted TEAMcare model) for community mental health patients with serious mental illness (SMI). | Patients with SMI | USA<br><br>Community | Example 1: VA hospital – co-located medical and mental health care versus general medical clinic. Intervention group emphasis on prevention, patient education, and collaborative care with mental health providers.<br><br>Example 2: The Primary Care Access Referral and Evaluation (PCARE) trial. Co-location of a nurse care manager in specialist mental health clinic.<br><br>Example 3: Integrated Illness Management and Recovery (I-IMR); 8 month programme combining self-management training for physical and mental illness. | 4.<br><br>5.<br><br>6. | Flexibility within health care systems to work collaboratively.<br><br>Commitment from key leaders and administrators. | Regulatory barriers that limit information exchange between primary and mental health care. | Yes.<br><br>Number of primary care visits.<br><br>Receipt of preventive services (e.g., screening or colorectal cancer/metabolic disorders/BP control).<br><br>Cardiac risk factors.<br><br>Diabetes |

| Reference<br><br>Source<br><br>Nature of publication | Stated aim/ objective | Patient/service user group | Setting<br><br>(Country; Primary/secondary/tertiary etc.; involvement of non-NHS services/organisations)‡ | Defining characteristics of approach as described by authors/practitioners | Integrated care factors* | Facilitators for wider implementation (process outcomes described by authors) | Barriers to wider implementation (process outcomes described by authors) | Evaluation?<br><br>(Yes/No)<br><br>Outcome relevant to physical health |
|---|---|---|---|---|---|---|---|---|
| | | | | Example 4: Life Goals Collaborative Care (LGCC). Care management incorporated with care management and tracking of health behaviours/issue of treatment guidelines to providers of mental and primary health care.<br><br>Example 5: TEAMcare model (adapted for SMI). Multidisciplinary team in mental health care setting; nurse care manager is a community psychiatric nurse; increase emphasis on outreach and home visit; intervention training manuals adapted; collaboration with prescriber of antipsychotic medication; collaboration with wider mental health | | | | control. |

| Reference<br><br>Source<br><br>Nature of publication | Stated aim/ objective | Patient/service user group | Setting<br><br>(Country; Primary/secondary/tertiary etc.; involvement of non-NHS services/organisations)‡ | Defining characteristics of approach as described by authors/practitioners | Integrated care factors* | Facilitators for wider implementation (process outcomes described by authors) | Barriers to wider implementation (process outcomes described by authors) | Evaluation?<br><br>(Yes/No)<br><br>Outcome relevant to physical health |
|---|---|---|---|---|---|---|---|---|
| | | | | team. | | | | |
| Curtis (2015)[49]<br><br>From field expert contact<br><br>Prospective controlled study | To evaluate an individualized lifestyle and life skills intervention ("Keeping the body in mind") as part of standard mental health care. | Young people with first-episode psychosis (schizophreniform psychosis, schizophrenia, schizoaffective disorder, delusional disorder, depression/psychotic features according to DSM-IV-TR). | Australia<br><br>Community-based health services | In addition to standard care (individual mental health case management with medical assessment and antipsychotic prescriptions) participants received a 12-week intervention comprising three interrelated components: (1) individualised health coaching (to promote intervention adherence); (2), dietetic support; (3) supervised exercise prescription. Delivered by clinical nurse consultant, dietician, exercise physiologist, youth peer wellness coaches. Psychiatrists and endocrinologist carried out additional medication review and advice. | 4. 5. | NR | NR | Yes<br><br>Prevention of antipsychotic induced weight gain |

| Reference<br><br>Source<br><br>Nature of publication | Stated aim/ objective | Patient/service user group | Setting<br><br>(Country; Primary/secondary/tertiary etc.; involvement of non-NHS services/organisations)‡ | Defining characteristics of approach as described by authors/practitioners | Integrated care factors* | Facilitators for wider implementation (process outcomes described by authors) | Barriers to wider implementation (process outcomes described by authors) | Evaluation?<br><br>(Yes/No)<br><br>Outcome relevant to physical health |
|---|---|---|---|---|---|---|---|---|
| DeHert (2009)[54]<br><br>Literature<br><br>Proposed clinical pathway/Position statement (based on guidelines from the European Society of Cardiology/European Association for the Study of Diabetes). | Initiate cooperation and shared care and increase awareness of psychiatrists to screen and treat CV risk factors and diabetes in SMI. | Severe mental illness (schizophrenia, major depression, bipolar disorder) | Europe<br><br>Multiple settings.<br><br>Psychiatric co-ordination, ideally as part of shared care arrangements with general and specialist services. European focus. | CV risk assessment at 6 and 12 weeks after antipsychotic treatment initiation, followed by annual check to include:<br><br>Baseline assessment and advice: (1) history, smoking exercise, dietary habits; (2) BP, weight, waist circumference, BMI; ECG (3) Diabetes, fasting glucose and fasting lipids; (4) Advice on smoking cessation, food choices, physical activity.<br><br>This information should inform the choice or review of antipsychotic treatment. If additional treatment for CV risk or diabetes is needed, involve or refer to primary care/diebetologist/specialist where appropriate, with an agreed follow-up date.<br><br>Repeat steps 2, 3, and 4 plus smoking levels at weeks 6 and 12 if new to antipsychotic agent. Then annually for all patients. Flowchart presented in paper. | 2. | NR | NR | No<br><br>Risk factors for cardiovascular disease and diabetes. |

| Reference<br><br>Source<br><br>Nature of publication | Stated aim/ objective | Patient/service user group | Setting<br><br>(Country; Primary/secondary/tertiary etc.; involvement of non-NHS services/organisations)‡ | Defining characteristics of approach as described by authors/practitioners | Integrated care factors* | Facilitators for wider implementation (process outcomes described by authors) | Barriers to wider implementation (process outcomes described by authors) | Evaluation?<br><br>(Yes/No)<br><br>Outcome relevant to physical health |
|---|---|---|---|---|---|---|---|---|
| Department of Health (2006)[2]<br><br>Literature<br><br>Policy document | Commissioning Framework to help PCTs plan for, design, and commission and monitor services to improve physical health and well-being for people with SMI. | People with SMI | UK<br><br>Urban and rural settings.<br><br>Involving primary/secondary/tertiary/ non-NHS. | See specifically Appendices A & B. Case study examples of pilot programmes:<br><br>Four separate nurse-led programmes involving multi-agency input. Combined consultation and healthy living initiatives. Multidisciplinary teams of consultants/community mental health managers/ other service managers/psychiatric consultants. Clinic and home consultation visits. Regular healthy living groups for people with SMI.<br><br>Other promising approaches are: **Inpatient support:** Weekly Primary care service provided by GP to acute | 1.<br><br>4.<br><br>5.<br><br>6. | Training of health professionals.<br><br>Dedicated care-coordinator role.<br><br>Effective communication between multi-agency health professionals.<br><br>Continuity of care likely to be facilitated by:<br><br>Maintaining accurate registers of people with SMI to record physical health checks and consultations, including follow up and progress; | Resistance of primary care to carry out physical health checks.<br><br>Low attendance rate in younger service users. | Yes.<br><br>Substance use; weight loss; smoking; physical activity; diet; primary care use; BP; BMI; Glucose and Lipids |

| Reference<br><br>Source<br><br>Nature of publication | Stated aim/ objective | Patient/service user group | Setting<br><br>(Country; Primary/secondary/tertiary etc.; involvement of non-NHS services/organisations)‡ | Defining characteristics of approach as described by authors/practitioners | Integrated care factors* | Facilitators for wider implementation (process outcomes described by authors) | Barriers to wider implementation (process outcomes described by authors) | Evaluation?<br><br>(Yes/No)<br><br>Outcome relevant to physical health |
|---|---|---|---|---|---|---|---|---|
| | | | | inpatient unit; health screening pilot in an inpatient unit delivered by GP or practice nurse for those with length of stay >6 months; physical healthcare team (nurse practitioners) at acute mental health trust.<br>**Community services**: Collaborative primary and secondary care involving physical health checks and monitoring or service users and physical health/training for mental health nurses; SMI registers at GP practices, followed by annual health checks (led by mental health nurses). | | supporting access and appropriate referral to healthcare and health promotion services.<br><br>Other facilitators:<br><br>Local leadership of programmes (appropriate training; clearly defined roles and responsibilities); consultation with stakeholders (patients; health professionals; voluntary sector. Open referral policy; buddying programmes/ | | |

| Reference<br><br>Source<br><br>Nature of publication | Stated aim/ objective | Patient/service user group | Setting<br><br>(Country; Primary/secondary/tertiary etc.; involvement of non-NHS services/organisations)‡ | Defining characteristics of approach as described by authors/practitioners | Integrated care factors* | Facilitators for wider implementation (process outcomes described by authors) | Barriers to wider implementation (process outcomes described by authors) | Evaluation?<br><br>(Yes/No)<br><br>Outcome relevant to physical health |
|---|---|---|---|---|---|---|---|---|
| | | | | | | use of mobile technology to increase programme attendance.<br><br>Evaluation of effectiveness. | | |
| Social Care Local Government and Care Partnership Directorate(2014)[4]<br><br>Literature<br><br>Policy document | Increase access to mental health services | Not specified | NHS | Clinical commissioning tools that will support integration of physical and mental health care to be developed by NHS England | 3. | Insufficient details | Insufficient details | No |

| Reference<br><br>Source<br><br>Nature of publication | Stated aim/ objective | Patient/service user group | Setting<br><br>(Country; Primary/secondary/tertiary etc.; involvement of non-NHS services/organisations)‡ | Defining characteristics of approach as described by authors/practitioners | Integrated care factors* | Facilitators for wider implementation (process outcomes described by authors) | Barriers to wider implementation (process outcomes described by authors) | Evaluation?<br><br>(Yes/No)<br><br>Outcome relevant to physical health |
|---|---|---|---|---|---|---|---|---|
| (continued) | Integrate physical and mental health care | Not specified | NHS | Training programmes for health care employers to increase awareness of mental health problems and how they may affect their patients, including links between mental and physical health. | | Insufficient details | Insufficient details | No |
| (continued) | Integrate physical and mental health care | Not specified | NHS primary care | Improving GP knowledge and experience of management of SMI, including physical health and crisis care. RCGP adapting its Curriculum Statement for Mental Health and appointing a Mental Health Clinical Lead. All future GPs to receive specialist-led training in the care of young people and adults with mental health problems. | | Insufficient details | Insufficient details | No |
| (continued) | Integrate physical and mental health care | Mental health in-patients | NHS mental health in-patient facilities | Improving standards of physical care in to support earlier diagnosis and treatment of common | | Insufficient details | Insufficient details | No |

| Reference<br><br>Source<br><br>Nature of publication | Stated aim/ objective | Patient/service user group | Setting<br><br>(Country; Primary/secondary/tertiary etc.; involvement of non-NHS services/organisations)‡ | Defining characteristics of approach as described by authors/practitioners | Integrated care factors* | Facilitators for wider implementation (process outcomes described by authors) | Barriers to wider implementation (process outcomes described by authors) | Evaluation?<br><br>(Yes/No)<br><br>Outcome relevant to physical health |
|---|---|---|---|---|---|---|---|---|
| | | | | illnesses | | | | |
| (continued) | Integrate physical and mental health care | Not specified | NHS | Providing Health and Wellbeing boards with funds to develop their own plans for joined up health and care locally. 14 "Integrated Care pioneer sites" announced in November 2013. | 3. (other aspects may be covered by pioneer sites) | Insufficient details | Insufficient details | No |
| (continued) | Raising awareness of mental and physical health needs | Not specified | NHS/Public Health England | GPs, health care professionals and social workers can promote importance of physical health. Appropriate adaptation of lifestyle and public health intervention services for mental health service users. | 5.? | Insufficient details | Insufficient details | No |
| Druss (2001)[52]<br><br>From [85] | To evaluate an integrated model of primary medical care for patients with SMI. | Veterans with SMI | USA<br><br>Veterans Affairs Mental Health Clinic | Integrated care clinic located in the mental health clinic to provide primary care and case management, including prevention, patient education, and collaboration with mental health providers. Delivered by nurse | 4.5.6. | Additional staff resources to improve access and adherence to care (case manager outreach, extra appointment time, scheduling | Limited generalizability to non- VA settings. | Yes.<br><br>Health care visits (including primary care |

| Reference<br><br>Source<br><br>Nature of publication | Stated aim/ objective | Patient/service user group | Setting<br><br>(Country; Primary/secondary/tertiary etc.; involvement of non-NHS services/organisations)‡ | Defining characteristics of approach as described by authors/practitioners | Integrated care factors* | Facilitators for wider implementation (process outcomes described by authors) | Barriers to wider implementation (process outcomes described by authors) | Evaluation?<br><br>(Yes/No)<br><br>Outcome relevant to physical health |
|---|---|---|---|---|---|---|---|---|
| | | | | practitioner, part-time family practitioner, nurse care manager and administrative assistant. The registered nurse and the family practitioner provided liaison between psychiatry and medical services.<br><br>Patients were prompted about appointments scheduled (where possible) to follow mental health visits.<br><br>One representative from the integrated clinic liaised with mental health teams via weekly team meetings. | | flexibility).<br><br>Basic reorganization of services, including on-site location, common chart, enhanced channels of communication and information sharing. | | visit) /receipt of preventive health measures/Physical component of the SF-36. |
| NHS NIHR Collaboration for Leadership in Applied Health | 1. Develop a system that demonstrates<br><br>improved | People with SMI | UK<br><br>North West Community | Five main components:<br><br>1. A time-protected | 1?2? 5.6.7. | Boundary spanning role: Essential for CPHC to continue as a Care Co-ordinator whilst | Lack of time to perform community physical health | Yes (process evaluation) |

| Reference<br><br>Source<br><br>Nature of publication | Stated aim/ objective | Patient/service user group | Setting<br><br>(Country; Primary/secondary/tertiary etc.; involvement of non-NHS services/organisations)‡ | Defining characteristics of approach as described by authors/practitioners | Integrated care factors* | Facilitators for wider implementation (process outcomes described by authors) | Barriers to wider implementation (process outcomes described by authors) | Evaluation?<br><br>(Yes/No)<br><br>Outcome relevant to physical health |
|---|---|---|---|---|---|---|---|---|
| Research and Care (CLAHRC) for Greater Manchester (2013)[46, 47]<br><br>Literature<br><br>Guidance document and pilot project evaluation | continuity of care achieved<br><br>through strengthened coordination and collaboration between primary care and CMHTs, such that there is a clear shared responsibility for the physical health of people with SMI.<br><br>2. Develop clear pathways and guidance on delivering physical health checks in a community setting to ensure that the physical health of people with SMI is | | Mental Health Team (NW CMHT) of Manchester Mental Health and Social Care Trust (MMHSCT) and general practice. | Community Physical Health Co-ordinator (CPHC) role. Split with an ongoing part-time Care Coordinator role within the CMHT. Provided with mandatory physical health training (including medication side effects, COPD, obesity/weight management, type 2 diabetes, measuring blood pressure and stroke, preventing VTE, physical health assessments)<br><br>2. Regular multi-disciplinary team (MDT) meetings between the CPHC and GP practices to establish shared care with the NW CMHT. The CPHC co-ordinates each meeting with lead GP; obtains relevant client info from Care Co-ordinator; captures actions and feeds back to Care Co-ordinators and | | carrying out the role; Training in conflict management, facilitation, negotiation,<br><br>and physical health management to facilitate MDT meeting success.<br><br>Knowledge integration: MDT meetings involving at least a GP, Practice Manager /Administrator,<br><br>Practice Nurse/ Health Care Assistant and the CPHC; Integrated working between Assistant | assessments.<br><br>Difficulty for CMHT staff trying to accommodate physical health training into their case loads. | |

| Reference<br><br>Source<br><br>Nature of publication | Stated aim/ objective | Patient/service user group | Setting<br><br>(Country; Primary/secondary/tertiary etc.; involvement of non-NHS services/organisations)‡ | Defining characteristics of approach as described by authors/practitioners | Integrated care factors* | Facilitators for wider implementation (process outcomes described by authors) | Barriers to wider implementation (process outcomes described by authors) | Evaluation?<br><br>(Yes/No)<br><br>Outcome relevant to physical health |
|---|---|---|---|---|---|---|---|---|
| | assessed on a more regular basis and<br><br>access to appropriate care is timely,<br><br>resulting in better health outcomes for the service user.<br><br>3. Ensure that people with SMI are provided with improved access to lifestyle services currently available<br><br>Within Manchester Mental Health and Social Care Trust (MMHSCT), whilst improving the | | | consultants; holds a definitive list of lifestyle services; liaises with Practice Manager and GPs in between MDT meetings.<br><br>3. Identification of training needs amongst the NW CMHT staff and delivery of appropriate<br><br>training to improve capacity to address physical health needs and support lifestyle changes.<br><br>4. Regular physical health assessments delivered in a community setting by CMHT.<br><br>5. Increased use of existing physical health resources | | Practitioners and Care Co-ordinators;<br><br>Physical health<br><br>Education sessions provided by the Physical Health Nurses; Mandatory physical health training for all CMHT staff; Collaborative training day for CMHT and lifestyle service staff.<br><br>Standardisation: CPHC job description and a flowchart of responsibilities; A process for identifying service | | |

| Reference<br><br>Source<br><br>Nature of publication | Stated aim/ objective | Patient/service user group | Setting<br><br>(Country; Primary/secondary/tertiary etc.; involvement of non-NHS services/organisations)‡ | Defining characteristics of approach as described by authors/practitioners | Integrated care factors* | Facilitators for wider implementation (process outcomes described by authors) | Barriers to wider implementation (process outcomes described by authors) | Evaluation?<br><br>(Yes/No)<br><br>Outcome relevant to physical health |
|---|---|---|---|---|---|---|---|---|
| | provision of targeted health information<br><br>that will empower service users to take care of their own physical health needs. | | | through collaborative training day for CMHT and community lifestyle service staff on a) what lifestyle services were available, b) what they provided, c) how to refer into them, d) barriers to<br><br>referrals, e) how to improve the current system, f) how to improve the uptake, and g) experiences of working with SMI service users. | | users to raise for discussion at the MDT meetings;<br><br>Joint action plans for the physical health management of service users;<br><br>Clinical guidance document to assist Care Co-ordinators carrying out physical health assessments;<br><br>Distributing a physical health check bag (including scales etc.) to CMHT staff; Lifestyle services directory made available and distributed to all | | |

| Reference<br><br>Source<br><br>Nature of publication | Stated aim/ objective | Patient/service user group | Setting<br><br>(Country; Primary/secondary/tertiary etc.; involvement of non-NHS services/organisations)‡ | Defining characteristics of approach as described by authors/practitioners | Integrated care factors* | Facilitators for wider implementation (process outcomes described by authors) | Barriers to wider implementation (process outcomes described by authors) | Evaluation?<br><br>(Yes/No)<br><br>Outcome relevant to physical health |
|---|---|---|---|---|---|---|---|---|
| | | | | | | CMHT staff.<br><br>Supportive organizational culture: Spread and sustainability strategy; Commitment to CPHC role from management, protected time and resources;<br><br>Supervision of Care Co-ordinators to include MDT actions; Implementation of physical health mandatory training for all CMHT staff; Protected time plus support and guidance for completing | | |

| Reference<br><br>Source<br><br>Nature of publication | Stated aim/ objective | Patient/service user group | Setting<br><br>(Country; Primary/secondary/tertiary etc.; involvement of non-NHS services/organisations)‡ | Defining characteristics of approach as described by authors/practitioners | Integrated care factors* | Facilitators for wider implementation (process outcomes described by authors) | Barriers to wider implementation (process outcomes described by authors) | Evaluation?<br><br>(Yes/No)<br><br>Outcome relevant to physical health |
|---|---|---|---|---|---|---|---|---|
| | | | | | | physical health assessments. | | |
| Happell (2013)[55]<br><br>Literature<br><br>Journal article (Survey) | To identify the views of nurses working within the Mental Health Nurse Incentive Program (MHNIP) about their involvement with the physical health of people with SMI | People with SMI | Australia<br><br>Primary care settings (GP clinics, private psychiatry services, private hospitals). | Mental Health Nurse Incentive Program (MHNIP) was designed to increase access to quality mental-health care services in the primary care setting and to support GPs in providing quality health-care services.<br><br>Involves the introduction of Mental Health Nurses (MHN) into primary care settings such as GP clinics, private psychiatry services, private hospitals.<br><br>Primary role of MHN is to coordinate the mental health care for people in the community, destigmatising the primary care experience | 6. 9. | MHNIP allows flexibility to deal within the MHN role to deal with physical health care.<br><br>MHNIP allows important access to all services in one location.<br><br>Strong relationship between MHN and general practitioner. | - | No |

| Reference<br><br>Source<br><br>Nature of publication | Stated aim/ objective | Patient/service user group | Setting<br><br>(Country; Primary/secondary/tertiary etc.; involvement of non-NHS services/organisations)‡ | Defining characteristics of approach as described by authors/practitioners | Integrated care factors* | Facilitators for wider implementation (process outcomes described by authors) | Barriers to wider implementation (process outcomes described by authors) | Evaluation?<br><br>(Yes/No)<br><br>Outcome relevant to physical health |
|---|---|---|---|---|---|---|---|---|
| | | | | of consumers, helping to ensure connection with the general community, and to prevent hospitalisation.<br><br>Only documented reference to physical health is 'providing information on physical health care' and 'improving links to other professionals and community support programmes'. However, survey respondents reported often discussing physical health of consumers with GPs, psychiatrists, and case managers. Also checking whether consumers had received physical health assessments on entering the service, checking if they had a regular GP, plus weight management, exercise and dietary advice. Less frequently gave advice on | | | | |

| Reference<br><br>Source<br><br>Nature of publication | Stated aim/ objective | Patient/service user group | Setting<br><br>(Country; Primary/secondary/tertiary etc.; involvement of non-NHS services/organisations)‡ | Defining characteristics of approach as described by authors/practitioners | Integrated care factors* | Facilitators for wider implementation (process outcomes described by authors) | Barriers to wider implementation (process outcomes described by authors) | Evaluation?<br><br>(Yes/No)<br><br>Outcome relevant to physical health |
|---|---|---|---|---|---|---|---|---|
| | | | | STD protection and contraceptives and ensuring eyesight is regularly checked. | | | | |
| Happell (2014)[29]<br><br>Literature<br><br>RCT | To describe the initial physical health of SMI participants randomized to a specialist Cardiometabolic Health Nurse (CHN) intervention. | SMI | Australia<br><br>Community mental health care | Identification of at-risk factors for cardiometabolic health by CHN. | 4.<br><br>6.<br><br>7. | NR | NR | Yes.<br><br>Measures assessed:<br><br>BP<br><br>BMI<br><br>Self-reported physical activity and views on physical activity, smoking and nutrition |

| Reference<br><br>Source<br><br>Nature of publication | Stated aim/ objective | Patient/service user group | Setting<br><br>(Country; Primary/secondary/tertiary etc.; involvement of non-NHS services/organisations)‡ | Defining characteristics of approach as described by authors/practitioners | Integrated care factors* | Facilitators for wider implementation (process outcomes described by authors) | Barriers to wider implementation (process outcomes described by authors) | Evaluation?<br><br>(Yes/No)<br><br>Outcome relevant to physical health |
|---|---|---|---|---|---|---|---|---|
| Happell (2014)[57]<br><br>Literature<br><br>Protocol for 26-week RCT | To evaluate the impact on physical health care of community mental health consumers following intervention of a specialist Cardiometabolic Health Nurse (CHN) vs usual care. | Community mental health consumers | Australia<br><br>Community mental health care | Participants receive 2 x 30 min consultations (baseline/completion), covering physical assessment (BMI, waist/hip ratio, vegetable intake, smoking status, alcohol use, ECG, self-care of feet , BP, glucose, lipids, medication review.<br><br>CHN implements strategies to address concerns of those identified at-risk, including links to GPs or allied health professionals/advice on health behaviour change. CHN responsible for follow up. | 4.<br><br>6.<br><br>7. | - | - | Yes<br><br>Self-reported physical health.<br><br>Use of primary health services.<br><br>Behaviour change. |
| Happell (2015)[56]<br><br>Literature | To explore the views of nurses on the introduction of the Cardiometabolic Health Nurse (CHN) as an effective strategy | Nurses caring for patients with SMI. | Australia | Option for mental health nurses to refer patient to CHN (role description as above). | 4.<br><br>6.<br><br>7. | Seen as helpful support for mental health nurses.<br><br>Will depend on context and extent of existing provision for | Funding and resources.<br><br>Potential service fragmentation.<br><br>Encroachment on/conflicts with | No.<br><br>See [57] for range of physical health outcomes considered. |

| Reference<br><br>Source<br><br>Nature of publication | Stated aim/ objective | Patient/service user group | Setting<br><br>(Country; Primary/secondary/tertiary etc.; involvement of non-NHS services/organisations)‡ | Defining characteristics of approach as described by authors/practitioners | Integrated care factors* | Facilitators for wider implementation (process outcomes described by authors) | Barriers to wider implementation (process outcomes described by authors) | Evaluation?<br><br>(Yes/No)<br><br>Outcome relevant to physical health |
|---|---|---|---|---|---|---|---|---|
| Survey | in patients with SMI. | | | | | primary care services. | comprehensive nursing.<br><br>Complicating/interfering with care.<br><br>“Muddying the waters” on who is responsible for physical health.<br><br>Diverting attention from GP access. | |

| Reference<br><br>Source<br><br>Nature of publication | Stated aim/ objective | Patient/service user group | Setting<br><br>(Country; Primary/secondary/tertiary etc.; involvement of non-NHS services/organisations)‡ | Defining characteristics of approach as described by authors/practitioners | Integrated care factors* | Facilitators for wider implementation (process outcomes described by authors) | Barriers to wider implementation (process outcomes described by authors) | Evaluation?<br><br>(Yes/No)<br><br>Outcome relevant to physical health |
|---|---|---|---|---|---|---|---|---|
| Hardy (2014)[30]<br><br>Literature search<br><br>Primary study | To establish whether training practice nurses increases the proportion of patients with SMI who are screened for CVD risk factors and given life-style advice in primary care. | Patients with SMI in primary care (taken from the SMI register). | UK (England); NHS primary care (Practice Nurses). | Training manual and website (developed as part of the study).<br><br>Manual provides clear guidance and a rationale to help practice nurses make decisions about individual patients.<br><br>Website provides training and a resource for useful tools and links.<br><br>Training aimed to provide practice nurses with greater understanding of the increased risk of CVD in patients with SMI and confidence in carrying out the physical health checks. | | NR | Organisation of practice nurses workload.<br><br>Culture of primary care - also need to educate commissioners and GPs about the risk of CVD in this group of patients. | Yes: Before and after audit.<br><br>Proportion of SMI patients receiving elements of an annual health check (CVD screening and lifestyle advice). |
| Jones (2013)[39]<br><br>Literature | To examine whether dental awareness training plus a dental checklist leads to a | Care-coordinators working in Early Intervention in | UK NHS East Midlands | One-off dental awareness training for care coordinators, and a checklist to be completed with service users, covering SMI history, | 7. | - | - | Yes, though not yet complete.<br><br>Problems with |

| Reference<br><br>Source<br><br>Nature of publication | Stated aim/ objective | Patient/service user group | Setting<br><br>(Country; Primary/secondary/tertiary etc.; involvement of non-NHS services/organisations)‡ | Defining characteristics of approach as described by authors/practitioners | Integrated care factors* | Facilitators for wider implementation (process outcomes described by authors) | Barriers to wider implementation (process outcomes described by authors) | Evaluation?<br><br>(Yes/No)<br><br>Outcome relevant to physical health |
|---|---|---|---|---|---|---|---|---|
| RCT protocol | clinically significant difference in oral health behavior of people with serious mental illness | Psychosis (EIP) teams. | | contact with dentist, toothbrush ownership/use, current state of dental health, and an oral hygiene information sheet for service users. | | | | mouth and teeth. |

| Reference<br><br>Source<br><br>Nature of publication | Stated aim/ objective | Patient/service user group | Setting<br><br>(Country; Primary/secondary/tertiary etc.; involvement of non-NHS services/organisations)‡ | Defining characteristics of approach as described by authors/practitioners | Integrated care factors* | Facilitators for wider implementation (process outcomes described by authors) | Barriers to wider implementation (process outcomes described by authors) | Evaluation?<br><br>(Yes/No)<br><br>Outcome relevant to physical health |
|---|---|---|---|---|---|---|---|---|
| Kelly (2014)[31]<br><br>Literature<br><br>RCT pilot | To evaluate the effectiveness of a peer-delivered health navigation intervention ("The Bridge") for improving health and healthcare use in people with SMI. | People with SMI | USA/Southern California<br><br>Mental health setting | "The Bridge" – four components (1) patient health assessment and health navigation planning; (2) co-ordinated linkages/activities to help patients navigate the health care system and follow-up/adherence to treatment plans; (3) consumer education, including partnering with medical care providers, treatment compliance, self-advocacy and interaction skills, health & wellness, benefits and entitlements); (4) cognitive-behavioural strategies to support health care use behaviour change and behaviour maintenance.<br><br>Delivered in 2 phases (timing individualized according to need): Phase 1 – intense contact between patient and navigator. Phase 2 – contact less intense as navigator starts to monitor from a distance.<br><br>Comparator: Treatment as usual. | 7. | NR | - | Yes.<br><br>Measures (for pain only) drawn from SF-6D.<br><br>24 common physical symptoms (listed in tab 2 of the paper) plus measure of pain recorded at baseline and up to 12 months. |

| Reference<br><br>Source<br><br>Nature of publication | Stated aim/ objective | Patient/service user group | Setting<br><br>(Country; Primary/secondary/tertiary etc.; involvement of non-NHS services/organisations)‡ | Defining characteristics of approach as described by authors/practitioners | Integrated care factors* | Facilitators for wider implementation (process outcomes described by authors) | Barriers to wider implementation (process outcomes described by authors) | Evaluation?<br><br>(Yes/No)<br><br>Outcome relevant to physical health |
|---|---|---|---|---|---|---|---|---|
| Brekke (2013)[43]<br><br>Literature<br><br>Journal article (Pilot study) | To describe the development and implementation of "The Bridge": a peer-staffed care-linkage model situated in a mental health clinic. | People with SMI | USA<br><br>Mental health service | The Bridge – a peer health navigator intervention to give clients the skills and experience to self-manage their health care activities to the greatest degree possible (adapted from Gelberg et al 200: Behavioural Model of Health Service Use for Vulnerable Populations (BMHSUVP) to address some of the barriers to implementation identified in BMHSUVP).<br><br>The recruited peer navigator was given comprehensive training, combining 10 weeks in classroom, followed by six weeks internship. Spent two months shadowing clinic nurses, team leaders, and service providers, plus further training in the navigator model and | 7. 9. | Supervision and support of the peer navigator | - | Yes<br><br>Health screenings in previous 6 months/medical hospital admissions/emergency room admissions for physical problems/outpatient visits to primary care providers. |

| Reference<br><br>Source<br><br>Nature of publication | Stated aim/ objective | Patient/service user group | Setting<br><br>(Country; Primary/secondary/tertiary etc.; involvement of non-NHS services/organisations)‡ | Defining characteristics of approach as described by authors/practitioners | Integrated care factors* | Facilitators for wider implementation (process outcomes described by authors) | Barriers to wider implementation (process outcomes described by authors) | Evaluation?<br><br>(Yes/No)<br><br>Outcome relevant to physical health |
|---|---|---|---|---|---|---|---|---|
| | | | | supporting theory. Navigator was provided self-instructional cognitive behavioural strategy guides.<br><br>Intervention intended to last around 6 months (4-month intensive phase, followed by 2 month step-down phase)<br><br>Four intervention components are: (1) Assessment of health status, current use of services, and experiences of accessing services. Used to develop a collaborative care health navigation plan and a step-by-step strategy as a basis for monitoring. (2) Coordinated linkages – assisting clients make appointments, communicate with medical | | | | |

| Reference<br><br>Source<br><br>Nature of publication | Stated aim/ objective | Patient/service user group | Setting<br><br>(Country; Primary/secondary/tertiary etc.; involvement of non-NHS services/organisations)‡ | Defining characteristics of approach as described by authors/practitioners | Integrated care factors* | Facilitators for wider implementation (process outcomes described by authors) | Barriers to wider implementation (process outcomes described by authors) | Evaluation?<br><br>(Yes/No)<br><br>Outcome relevant to physical health |
|---|---|---|---|---|---|---|---|---|
| | | | | care providers, ensure follow-up, handling pharmacy issues, and ensuring compliance with treatment plans. (3) Consumer education about the health care system, how to partner with medical providers, treatment compliance, self-advocacy, appropriate interaction skills, health and wellness issues, health benefits and entitlements. (4) Cognitive behavioral strategies: modeling, role-playing, coaching, and fading in order to gradually shift navigation activities to the client so they can manage their own health to the greatest extent possible.<br><br>Peer navigator was supervised and supported by the project manager and | | | | |

| Reference<br><br>Source<br><br>Nature of publication | Stated aim/ objective | Patient/service user group | Setting<br><br>(Country; Primary/secondary/tertiary etc.; involvement of non-NHS services/organisations)‡ | Defining characteristics of approach as described by authors/practitioners | Integrated care factors* | Facilitators for wider implementation (process outcomes described by authors) | Barriers to wider implementation (process outcomes described by authors) | Evaluation?<br><br>(Yes/No)<br><br>Outcome relevant to physical health |
|---|---|---|---|---|---|---|---|---|
| | | | | participated in weekly team meetings. | | | | |
| Kern (2015)[58]<br><br>Literature<br><br>Book chapter | Describe practices where primary care services are provided to adults with SMI in a mental health environment. | Adults with SMI | USA<br><br>Primary care services typically provided within Community Mental Health Centre (CMHC) settings, and funded through the Substance Abuse and Mental Health Services Administration's (SAMHSA) Primary and Behavioural Health Care Integration (PBHCI) programme.<br><br>Alternative administrative arrangements include global payment systems for physical, mental, and dental care for Medicaid beneficiaries (coordinated care organisations; CCOs) and | PBHCI requires CMHCs to create a link with a primary care partner. This can be a local Federally Qualified Health Centre (FQHC; a federally funded primary care clinic for medically underserved areas) or a Primary Care Provider (PCP). CMHCs may alternatively take on FQHC status.<br><br>Recommended components of PBHCI programmes:<br><br>(1) Regular screening and registry tracking/outcome measurement; (2) Placing PCPs, nurse practitioners, or physician assistants in behavioural health facilities; | 1-9 | - Informing providers of available tobacco cessation services, and engaging staff to support abstinence attempts.<br><br>- Encouraging behavioural health case managers to expand their scope into the medical realm. Training in medical issues.<br><br>- Strong administrative support for attitude change | - Lack of availability of useful Web-based registry software<br><br>- Lack of attention to tobacco cessation from psychiatric providers<br><br>-Difficulty recruiting PCP and case management staff in rural centres.<br><br>- PCPs uncomfortable | No<br><br>Some evaluative evidence presented. |

| Reference<br><br>Source<br><br>Nature of publication | Stated aim/ objective | Patient/service user group | Setting<br><br>(Country; Primary/secondary/tertiary etc.; involvement of non-NHS services/organisations)‡ | Defining characteristics of approach as described by authors/practitioners | Integrated care factors* | Facilitators for wider implementation (process outcomes described by authors) | Barriers to wider implementation (process outcomes described by authors) | Evaluation?<br><br>(Yes/No)<br><br>Outcome relevant to physical health |
|---|---|---|---|---|---|---|---|---|
| | | | self-contained systems (Veterans Health Administration, Department of Defense, private insurers). | (3) Primary care supervising physician to provide consultation on complex health issues; (4) Nurse care managers to increase participation and follow-up primary care screening, assessment and treatment services; (5) Use of evidence based practices; (6) Prevention and wellness support services (e.g. nutrition, health education/literacy, peer specialists, self-help)<br><br>Typical staff:<br><br>Care manager (typically nurse with physical care background) maintains registry of physical health indicators, communicates need for treatment adjustment to primary care | | among providers.<br><br>- Global funding of health care to better engage PCPs. Or Health Homes model<br><br>- Exploiting the ability of psychiatrists to move along the primary care-behavioural health spectrum.<br><br>- Psychiatrists providing medical care for common conditions (hypertension, diabetes, | with treating SMI patients and/or difficulties with the complexities and/or slow pace of this work.<br><br>- Inadequate inclusion of psychiatrists.<br><br>- Confidentiality laws preventing sharing of EMR information between providers. | |

| Reference<br><br>Source<br><br>Nature of publication | Stated aim/ objective | Patient/service user group | Setting<br><br>(Country; Primary/secondary/tertiary etc.; involvement of non-NHS services/organisations)‡ | Defining characteristics of approach as described by authors/practitioners | Integrated care factors* | Facilitators for wider implementation (process outcomes described by authors) | Barriers to wider implementation (process outcomes described by authors) | Evaluation?<br><br>(Yes/No)<br><br>Outcome relevant to physical health |
|---|---|---|---|---|---|---|---|---|
| | | | | team, and coordinates multiple medical providers. Provides clinical direction to case managers, as well as direct physical assessment, health education and primary care linkage for individual patients.<br><br>Case managers (typically batchelors-level clinicians) role includes maintaining patients' benefits and housing, keeping appointments, interpreting "medicalese", basic medical education, decoding insurance problems, assisting improved health behaviours, miscellaneous problem-solving.<br><br>Peers living with mental | | dyslipidemias) with support of consulting PCP.<br><br>- PCPs embedded in behavioural Health Home model.<br><br>- Finding ways to access information from multiple EMRs<br><br>- Electronic data gathering via handheld units or desktop computer kiosks to allow patient self-entry of data such as | | |

| Reference<br><br>Source<br><br>Nature of publication | Stated aim/ objective | Patient/service user group | Setting<br><br>(Country; Primary/secondary/tertiary etc.; involvement of non-NHS services/organisations)‡ | Defining characteristics of approach as described by authors/practitioners | Integrated care factors* | Facilitators for wider implementation (process outcomes described by authors) | Barriers to wider implementation (process outcomes described by authors) | Evaluation?<br><br>(Yes/No)<br><br>Outcome relevant to physical health |
|---|---|---|---|---|---|---|---|---|
| | | | | illness can be involved in individual and group approaches to improving health behaviours.<br><br>PCPs (physicians, nurse-practitioners, or physician assistants) provide direct medical services, may oversee the primary care support team and/or provide education to all staff in basic health literacy. May use registry data to establish priorities and target educational efforts, and provide consultation to psychiatric providers on chronic medical issues.<br><br>Psychiatrists ensure attention to health issues, use of safer psychotropic medicines, | | depression scales.<br><br>- Clarity about goals of the primary care clinic.<br><br>- Providing sufficient physical space for the primary care service if located in mental health clinic.<br><br>- Ensuring site is both visible and accessible<br><br>- Planning for unexpected | | |

| Reference<br><br>Source<br><br>Nature of publication | Stated aim/ objective | Patient/service user group | Setting<br><br>(Country; Primary/secondary/tertiary etc.; involvement of non-NHS services/organisations)‡ | Defining characteristics of approach as described by authors/practitioners | Integrated care factors* | Facilitators for wider implementation (process outcomes described by authors) | Barriers to wider implementation (process outcomes described by authors) | Evaluation?<br><br>(Yes/No)<br><br>Outcome relevant to physical health |
|---|---|---|---|---|---|---|---|---|
| | | | | regular physical screening with appropriate intervention where necessary. May provide basic treatment of common metabolic conditions with retraining and PCP consultation and/or written protocols.<br><br>Example programmes include: peers as wellness coaches; providing resources such as fitness centre/relaxation room for peer run programmes ; locating primary care services in the mental health clinic; Electronic medical records (EMRs) accessible to both physical and behavioural health services; becoming an FQHC in order to develop a common EMR, plus using a van to provide primary care services to | | financial issues.<br><br>- Planning and nurturing communication mechanisms.<br><br>- Use of registry to organize physical care of psychiatric population.<br><br>- Learning how to make behavior change happen.<br><br>- Continual reinforcement with staff of the need for | | |

| Reference<br><br>Source<br><br>Nature of publication | Stated aim/ objective | Patient/service user group | Setting<br><br>(Country; Primary/secondary/tertiary etc.; involvement of non-NHS services/organisations)‡ | Defining characteristics of approach as described by authors/practitioners | Integrated care factors* | Facilitators for wider implementation (process outcomes described by authors) | Barriers to wider implementation (process outcomes described by authors) | Evaluation?<br><br>(Yes/No)<br><br>Outcome relevant to physical health |
|---|---|---|---|---|---|---|---|---|
| | | | | largely homeless population, coordinating with other organisations that use mobile services; employing a physician trained in bariatric medicine to consult on obesity. | | integration.<br><br>- Making time for providers to collaborate on patient care. | | |
| Kilany (2015)[42]<br><br>Literature<br><br>Dissertation | To examine the performance of the patent-centred medical care home (PCMH) model for Medicaid beneficiaries with SMI living in urban and rural areas based on a set of health service utilization and quality of care outcomes. | Medicaid beneficiaries with SMI | US<br><br>Primary care | "The main tenets of the PCMH model are a physician-directed medical practice, a personal physician for each patient, the capacity to coordinate high quality, accessible care and payments".<br><br>Encompasses five functions and attributes: (1) Comprehensive care; (2) patient-centred; (3) Coordinated care; (4) Accessible services; (5) Quality and safety. Detailed description of the concept | Potentially 1-9 | Health IT (telemental health services), and advanced practice psychiatric nurses are examples of the type of resources that can aid rural PCMHs. | Rural areas have mental health professional shortages. As a result, co-location of specialty mental health in non-urban PCMHs is not a realistic option in most situations. | Yes<br><br>No clinical outcomes |

| Reference<br><br>Source<br><br>Nature of publication | Stated aim/ objective | Patient/service user group | Setting<br><br>(Country; Primary/secondary/tertiary etc.; involvement of non-NHS services/organisations)‡ | Defining characteristics of approach as described by authors/practitioners | Integrated care factors* | Facilitators for wider implementation (process outcomes described by authors) | Barriers to wider implementation (process outcomes described by authors) | Evaluation?<br><br>(Yes/No)<br><br>Outcome relevant to physical health |
|---|---|---|---|---|---|---|---|---|
| | | | | available from: https://pcmh.ahrq.gov/ | | | | |
| Kilbourne (2012)[35]<br><br>Literature<br><br>RCT Pilot | To determine the impact of Life Goals Collaborative Care (LGCC) on cardiometabolic factors in people with bipolar disorder in community-based settings. | People with bipolar disorder (I, II, NOS) and at least one cardiometaboli c risk factor. | USA<br><br>Community-based mental health outpatient setting. | Three components: Self-management; care management; guideline support.<br><br>Self-management: Over 6 month period , four 2-hour weekly self- management sessions (active discussions based on social cognitive theory, covering bipolar disorder and CV risk, stigma, diet and exercise relating to symptom coping, and collaborative care management).<br><br>This was followed by brief care management from a nurse care manager (CM) contacts to track progress (by | 1.<br><br>9.<br><br>6.? | NR | Incomplete lab data (glucose, lipids) to determine necessity for medical care. | Yes.<br><br>BMI<br><br>BP<br><br>HR QOL<br><br>Functioning (WHO Disability Assessment Scale) |

| Reference<br><br>Source<br><br>Nature of publication | Stated aim/ objective | Patient/service user group | Setting<br><br>(Country; Primary/secondary/tertiary etc.; involvement of non-NHS services/organisations)‡ | Defining characteristics of approach as described by authors/practitioners | Integrated care factors* | Facilitators for wider implementation (process outcomes described by authors) | Barriers to wider implementation (process outcomes described by authors) | Evaluation?<br><br>(Yes/No)<br><br>Outcome relevant to physical health |
|---|---|---|---|---|---|---|---|---|
| | | | | addressing symptoms and side effects and facilitating provider communication. Also directly contacts medical/mental health/geriatric providers regarding urgent health concerns based on patient communication or medical record information and provides outreach/crisis management after critical service encounters or missed appointments).<br><br>Guideline support: A series of one-hour continuing medical education (CME) in-services were held that addressed CVD risk in older patients with bipolar disorder for all primary care and mental health providers. Pocket cards summarizing these recommendations for | | | | |

| Reference<br><br>Source<br><br>Nature of publication | Stated aim/ objective | Patient/service user group | Setting<br><br>(Country; Primary/secondary/tertiary etc.; involvement of non-NHS services/organisations)‡ | Defining characteristics of approach as described by authors/practitioners | Integrated care factors* | Facilitators for wider implementation (process outcomes described by authors) | Barriers to wider implementation (process outcomes described by authors) | Evaluation?<br><br>(Yes/No)<br><br>Outcome relevant to physical health |
|---|---|---|---|---|---|---|---|---|
| | | | | metabolic syndrome risk monitoring, psychotropic drug toxicity monitoring, and reminders to promote diet and exercise with patients were also handed out as part of the educational sessions | | | | |
| Kilbourne (2013)[33]<br><br>Literature<br><br>RCT | To determine the impact of Life Goals Collaborative Care (LG-CC) on cardiometabolic factors in VA patients with bipolar disorder. | VA patients with bipolar disorder (I,II,NOS, Schizoaffective bipolar subtype) and at least one CVD risk factor. | USA<br><br>Community-based mental health outpatient setting. | As above. | As above. | NR | As above. | Yes.<br><br>Primary: BP<br><br>Cholesterol<br><br>Physical HR QOL.<br><br>Secondary:<br><br>Lipids<br><br>Weight/BMI<br><br>Waist circumference |

| Reference<br><br>Source<br><br>Nature of publication | Stated aim/ objective | Patient/service user group | Setting<br><br>(Country; Primary/secondary/tertiary etc.; involvement of non-NHS services/organisations)‡ | Defining characteristics of approach as described by authors/practitioners | Integrated care factors* | Facilitators for wider implementation (process outcomes described by authors) | Barriers to wider implementation (process outcomes described by authors) | Evaluation?<br><br>(Yes/No)<br><br>Outcome relevant to physical health |
|---|---|---|---|---|---|---|---|---|
| Kilbourne (2014)[36]<br><br>Literature<br><br>RCT. | To determine the impact of Life Goals Collaborative Care (LGCC) on physical health in VA patients with SMI. | VA patients with serious mental illness based on ICD-9-CM (includes schizophrenia, bipolar disorder, major depressive disorder) and at least one CVD risk factor. | USA<br><br>VA mental health clinic | Three components: Self-management; care management; provider support.<br><br>Self-management: Five weekly self-management sessions/five group sessions covering SMI facts and risk factors for CVD; personal goal-setting; active discussion on coping and management of psychiatric and medical risk factors; provider engagement and communication tips.<br><br>Care management: Health specialist conducts ongoing patient contacts monthly for 6 months to reinforce lessons from self-management, track progress on patient-specific physical activity and dietary goals made during self- | As above. | NR | Resources needed to integrate LG-CC into routine VA care. | Yes.<br><br>Primary: Physical HR QOl (VR-12)<br><br>Secondary: CV risk factors (BP,BMI)<br><br>Physical activity |

| Reference<br><br>Source<br><br>Nature of publication | Stated aim/ objective | Patient/service user group | Setting<br><br>(Country; Primary/secondary/tertiary etc.; involvement of non-NHS services/organisations)‡ | Defining characteristics of approach as described by authors/practitioners | Integrated care factors* | Facilitators for wider implementation (process outcomes described by authors) | Barriers to wider implementation (process outcomes described by authors) | Evaluation?<br><br>(Yes/No)<br><br>Outcome relevant to physical health |
|---|---|---|---|---|---|---|---|---|
| | | | | management sessions, and identify symptoms or other health issues to relay to providers. Provides links to community resources where applicable. Contacts patient's principle primary care and mental health provider on a monthly basis using electronic medical record view alerts or in-person curbside consultations to relay potential issues brought up when contacting patients, including physical or mental health symptoms, medication side effects, symptoms, or urgent health concerns. Uses registry for recording all relevant information.<br><br>Provider support: Health specialist provides care plan to primary care and mental health providers after the last | | | | |

| Reference<br><br>Source<br><br>Nature of publication | Stated aim/ objective | Patient/service user group | Setting<br><br>(Country; Primary/secondary/tertiary etc.; involvement of non-NHS services/organisations)‡ | Defining characteristics of approach as described by authors/practitioners | Integrated care factors* | Facilitators for wider implementation (process outcomes described by authors) | Barriers to wider implementation (process outcomes described by authors) | Evaluation?<br><br>(Yes/No)<br><br>Outcome relevant to physical health |
|---|---|---|---|---|---|---|---|---|
| | | | | care management contact to facilitate ongoing clinical management. They also disseminate information on LGCC program and VA guidelines for CVD risk monitoring to primary care and mental health providers at staff meetings. | | | | |
| Kilbourne (2015)[59]<br><br>Literature<br><br>Conference abstract | See above | | | | | | | No |

| Reference<br><br>Source<br><br>Nature of publication | Stated aim/ objective | Patient/service user group | Setting<br><br>(Country; Primary/secondary/tertiary etc.; involvement of non-NHS services/organisations)‡ | Defining characteristics of approach as described by authors/practitioners | Integrated care factors* | Facilitators for wider implementation (process outcomes described by authors) | Barriers to wider implementation (process outcomes described by authors) | Evaluation?<br><br>(Yes/No)<br><br>Outcome relevant to physical health |
|---|---|---|---|---|---|---|---|---|
| Lee (2010)[40]<br><br>Literature<br><br>Conference abstract | To evaluate a Personalised Care Programme | Patients with severe mental illness | Hong Kong<br><br>District-based model | Trained case managers (including psychiatric nurses, social workers, occupational therapists) aiming to provide patient centred care, needs and risk management, gate-keeping to prevent avoidable hospitalization, better treatment adherence, reduction of disabilities, enhancement of recovery, and social inclusion.<br><br>Programme involves holistic biopsychosocial risk and needs assessment, regular clinical meetings with internal and community partners, service co-location, delivery of phase-specific post-discharge interventions. 365 day case management service with medical supervision and out-of-hours medical support. Central training programme and clinical protocols for case managers to acquire generic core competency. | 4. 5. | - | - | Yes, though not reported<br><br>Clinical symptoms, A&E attendance (proxy measure) |

| Reference<br><br>Source<br><br>Nature of publication | Stated aim/ objective | Patient/service user group | Setting<br><br>(Country; Primary/secondary/tertiary etc.; involvement of non-NHS services/organisations)‡ | Defining characteristics of approach as described by authors/practitioners | Integrated care factors* | Facilitators for wider implementation (process outcomes described by authors) | Barriers to wider implementation (process outcomes described by authors) | Evaluation?<br><br>(Yes/No)<br><br>Outcome relevant to physical health |
|---|---|---|---|---|---|---|---|---|
| Maki (2013)[44]<br><br>Literature<br><br>Journal article (quality improvement process evaluation) | Describe and evaluate an improved process of identifying and managing CVD factors | People with SMI | USA<br><br>Community mental health centre psychiatry clinic, targeting centre staff working for or with Assertive Community Treatment (ACT) teams (psychiatrist, advanced practice registered nurse, registered nurses, case managers, and ACT support staff). | Basic education of staff about CVD risk in SMI, plus a CVD screening tool prompting providers to order appropriate laboratory tests and communicate the results to primary care providers (PCPs) | 5.1.8. | Education and consensual /shared goals across mental health and primary care settings. | Population with severe mental health symptoms/ Patient compliance.<br><br>Clinical settings with heavy caseloads, limiting time available to practitioners/incomplete laboratory documentation/process.<br><br>Insurance companies refusing to pay for laboratory tests if not indicated (i.e. refusing lipid panel orders for patients not taking second-generation anti-psychotics) | Yes<br><br>Screening rates |

| Reference<br><br>Source<br><br>Nature of publication | Stated aim/ objective | Patient/service user group | Setting<br><br>(Country; Primary/secondary/tertiary etc.; involvement of non-NHS services/organisations)‡ | Defining characteristics of approach as described by authors/practitioners | Integrated care factors* | Facilitators for wider implementation (process outcomes described by authors) | Barriers to wider implementation (process outcomes described by authors) | Evaluation?<br><br>(Yes/No)<br><br>Outcome relevant to physical health |
|---|---|---|---|---|---|---|---|---|
| Mental Health Foundation, (2013)[28]<br><br>Literature<br><br>Report on an Inquiry from 2012-2013 (involving literature search; expert seminars; call for evidence) | To identify good practice, generate discussion, and draw up key messages on integrated health care for people with mental health problems. | People with mental health problems. (By implication, this report covers people with SMI) | UK | The report implies there is no single agreed approach to integrated health care or integrated care. Various generic definitions are presented, including:<br><br>WHO (2008): "…the organization and management of health services so that people get the care they need, when they need it, in ways that are user-friendly, achieve the desired results and provide value for money".<br><br>Department of Health (2011): "…most commonly used to express a very practical desire to make sure separate specialist healthcare services work closely together to | The report identifies 9 factors of successful integrated care See 1-9 below (footnote) | Two underpinning essential factors:<br><br>1. Having the right people in the organisation<br><br>(leaders who will drive forward<br><br>integration at a strategic level and<br><br>staff who understand and respect the roles<br><br>and responsibilities of other professions and are willing to work with patients and across<br><br>organisational and professional boundaries) | - | No. |

| Reference<br><br>Source<br><br>Nature of publication | Stated aim/ objective | Patient/service user group | Setting<br><br>(Country; Primary/secondary/tertiary etc.; involvement of non-NHS services/organisations)‡ | Defining characteristics of approach as described by authors/practitioners | Integrated care factors* | Facilitators for wider implementation (process outcomes described by authors) | Barriers to wider implementation (process outcomes described by authors) | Evaluation?<br><br>(Yes/No)<br><br>Outcome relevant to physical health |
|---|---|---|---|---|---|---|---|---|
| | | | | ensure all a patient's needs are met".<br><br>Appleton (2009): …"the coordinated commissioning and delivery of services and support to individual in a way that enables them to maximize their independence, health and wellbeing."<br><br>Lester (2005): Shared care: "the pooling of expertise and enhanced creativity in problem-solving". | | 2. Cross-boundary inter-professional training and education that<br><br>must be ongoing with continuing professional development.<br><br>Key facilitators to implement 1-9:<br><br>1. An ability to anonymize and aggregate data to inform a needs assessment of the local population.<br><br>2. Staff "buy-in" | | |

| Reference<br><br>Source<br><br>Nature of publication | Stated aim/ objective | Patient/service user group | Setting<br><br>(Country; Primary/secondary/tertiary etc.; involvement of non-NHS services/organisations)‡ | Defining characteristics of approach as described by authors/practitioners | Integrated care factors* | Facilitators for wider implementation (process outcomes described by authors) | Barriers to wider implementation (process outcomes described by authors) | Evaluation?<br><br>(Yes/No)<br><br>Outcome relevant to physical health |
|---|---|---|---|---|---|---|---|---|
| | | | | | | and commitment.<br><br>3.Commissioner awareness of issues beyond traditional health and social care interventions.<br><br>4. Staff understanding their respective roles and responsibilities.<br><br>5. Effective interprofessional education and staff training.<br><br>6. Commissioner awareness of evidence for services; economic benefits.<br><br>7. A single named | | |

| Reference<br><br>Source<br><br>Nature of publication | Stated aim/ objective | Patient/service user group | Setting<br><br>(Country; Primary/secondary/tertiary etc.; involvement of non-NHS services/organisations)‡ | Defining characteristics of approach as described by authors/practitioners | Integrated care factors* | Facilitators for wider implementation (process outcomes described by authors) | Barriers to wider implementation (process outcomes described by authors) | Evaluation?<br><br>(Yes/No)<br><br>Outcome relevant to physical health |
|---|---|---|---|---|---|---|---|---|
| | | | | | | individual.<br><br>8. More research of effectiveness and economic assessment of integrated care.<br><br>9. Public and healthcare workforce awareness, education and training on mental health issues. | | |

| Reference<br><br>Source<br><br>Nature of publication | Stated aim/ objective | Patient/service user group | Setting<br><br>(Country; Primary/secondary/tertiary etc.; involvement of non-NHS services/organisations)‡ | Defining characteristics of approach as described by authors/practitioners | Integrated care factors* | Facilitators for wider implementation (process outcomes described by authors) | Barriers to wider implementation (process outcomes described by authors) | Evaluation?<br><br>(Yes/No)<br><br>Outcome relevant to physical health |
|---|---|---|---|---|---|---|---|---|
| NHS Improving Quality (2014)[50]<br><br>From field expert contact<br><br>Case study | To pilot a 12-week education and exercise programme* for young people with SMI.<br><br>(*SHAPE: Supporting Health and Promoting Exercise) based on "Keeping the Body in Mind" developed at Bondi Beach, Australia.) | Young people diagnosed with psychosis and bipolar disorder. | UK<br><br>Primary/Secondary/non-NHS organisations | Multidisciplinary 'lifestyle medicine programme'. Partnership model, including Worcester Health and Care NHS Trust Early Intervention in Psychosis service; University of Worcester; McClelland Health and Wellbeing Centre; local private industry; Worcestershire County Council; The Health Foundation/SHINE; South Worcestershire Clinical Commissioning Group.<br><br>12-week programme. Baseline physical health MOT for participants. Group health education sessions on healthy eating, smoking cessation, substance abuse, dental care, sexual health and stress management. Programme involved weekly individual sessions with a dietician and an exercise physiologist.<br><br>Group cardiovascular exercise sessions and advice on how to access these locally. 12-month gym membership. Access to peer support and help with goal setting; 1:1 encouragement and fitness training/taking part in team sports. Partnerships formed with local private industry to sportswear and equipment. | 3.?<br><br>5.<br><br>7.<br><br>9. | Adequate funding to sustain the model.<br><br>Interactive sessions. | NR | Yes.<br><br>Key physical health risk markers.<br><br>Weight/fitness levels/behaviour change and engagement with programme. |

| Reference<br><br>Source<br><br>Nature of publication | Stated aim/ objective | Patient/service user group | Setting<br><br>(Country; Primary/secondary/tertiary etc.; involvement of non-NHS services/organisations)‡ | Defining characteristics of approach as described by authors/practitioners | Integrated care factors* | Facilitators for wider implementation (process outcomes described by authors) | Barriers to wider implementation (process outcomes described by authors) | Evaluation?<br><br>(Yes/No)<br><br>Outcome relevant to physical health |
|---|---|---|---|---|---|---|---|---|
| NHS London Health Programmes, (2011)[60]<br><br>Literature search<br><br>Description of model of care for long term mental health conditions | Describe a model of care for long term mental health conditions (i.e., p29 of report onwards); includes aim to integrate physical and mental health care. | People with long term mental health conditions.<br><br>likely diagnoses (ICD10) of schizophrenia, schizoaffective disorder, bipolar disorder, recurrent depression, and chronic neurotic, stress related and somatoform disorders. | UK (England); NHS primary and secondary care with links into local authority and third sector. | Broad proposed model of care encompassing inpatient services, secondary services, shared care, primary care, social determinant of health: universal support, involvement of family/carers.<br><br>Physical health component mainly addressed through primary care, but also included in shared care element.<br><br>(Relevant principle underpinning the model of care: more active involvement of primary care teams can improve physical health care for those with a long term mental health condition.) | 2. | Training in primary care to increase competence and capacity for shared care. | NR | No.<br><br>Description of a proposed model of care with anticipated benefit for each component. Case studies provided but none addressing physical health needs.<br><br>Discusses possible outcome measures – generic, which could encompass physical health measures but do not explicitly do so. Also proposes implementation tools and plans, but no further detail. |

| Reference<br><br>Source<br><br>Nature of publication | Stated aim/ objective | Patient/service user group | Setting<br><br>(Country; Primary/secondary/tertiary etc.; involvement of non-NHS services/organisations)‡ | Defining characteristics of approach as described by authors/practitioners | Integrated care factors* | Facilitators for wider implementation (process outcomes described by authors) | Barriers to wider implementation (process outcomes described by authors) | Evaluation?<br><br>(Yes/No)<br><br>Outcome relevant to physical health |
|---|---|---|---|---|---|---|---|---|
| Nover (2014)[61]<br><br>Literature<br><br>Report of pilot implementation | To improve medical treatment for patients with SMI who had a diagnosis of, or risk factors for hypertension, coronary artery disease (CAD), dyslipidemia, and/or diabetes. | Severe mental illness (schizophrenic disorders, recurrent major depression, bipolar disorder) with a diagnosis of, or risk factors for hypertension, CAD, dyslipidemia, and/or diabetes. | 16-month CalMEND Collaborative to Integrate Primary Care and Mental Health Services (CPCI) programme in a community care clinic in rural California. | Programme coordinated by a social worker (also responsible psychosocial assessments and interventions) with a nurse responsible for medical assessments and interventions.<br><br>Contracted with dietitian and pharmacist to deliver relevant interventions.<br><br>Eligible patients were identified from records or from referrals from the clinic physicians/psychiatrist and asked if they wanted to participate.<br><br>Baseline assessment of presenting problem, | 4. 5. 7 | Budget for contracting with outside providers and community-based programmes. | Providers sometimes unwilling or unable to refer to the programme.<br><br>Months of work to identify patients through chart review.<br><br>Important data missing from patient charts.<br><br>Some patients would agree to participate but not attend arranged assessment. | No outcome measurement |

| Reference<br><br>Source<br><br>Nature of publication | Stated aim/ objective | Patient/service user group | Setting<br><br>(Country; Primary/secondary/tertiary etc.; involvement of non-NHS services/organisations)‡ | Defining characteristics of approach as described by authors/practitioners | Integrated care factors* | Facilitators for wider implementation (process outcomes described by authors) | Barriers to wider implementation (process outcomes described by authors) | Evaluation?<br><br>(Yes/No)<br><br>Outcome relevant to physical health |
|---|---|---|---|---|---|---|---|---|
| | | | | biopsychosocial history, treatment goals (social work assessment); medical history, frequency of tests, self-management of illnesses (nursing assessment).<br><br>Patients asked to attend clinical weekly-monthly for individualized treatment to meet their treatment goals ( typically weight loss, smoking cessation, diabetes management, SMI symptom management) | | | Providers rarely signed “Shared Care Planning Forms”.<br><br>Problems with office staff: scheduling appointments, notification of patient arrival, access to medical charts.<br><br>Budget cuts forced programme to end early.<br><br>Insufficient funds for >10 weeks of | |

| Reference<br><br>Source<br><br>Nature of publication | Stated aim/ objective | Patient/service user group | Setting<br><br>(Country; Primary/secondary/tertiary etc.; involvement of non-NHS services/organisations)‡ | Defining characteristics of approach as described by authors/practitioners | Integrated care factors* | Facilitators for wider implementation (process outcomes described by authors) | Barriers to wider implementation (process outcomes described by authors) | Evaluation?<br><br>(Yes/No)<br><br>Outcome relevant to physical health |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | dietitian involvement.<br><br>Physical space restriction for nursing assessment. | |
| Parks (2015)[62]<br><br>Literature<br><br>Book chapter | To describe the Medicaid "Health Home (HH)" model. | Chronic conditions, including SMI and substance abuse disorders<br><br>Eligible individuals must have either: two chronic conditions; one chronic condition and risk of having a | US<br><br>Primary, behavioural, community and social care services. | An expansion of the patient centred medical home (PCMH) model to further enhance integrated care.<br><br>Service requirements: 1. Comprehensive care plan; 2. Quality-driven, cost-effective, culturally appropriate, person- and family-centred, evidence based services; 3. Include prevention, health promotion, health care, mental health, substance use and long-term services, with linkages to community | Potentially 1-9 | | Most patients will be going to multiple providers, many of whom will not be providing electronic medical record data. Such data is necessary to properly identify and track patient populations and individuals needing HH services. | No<br><br>Chronic disease management |

| Reference<br><br>Source<br><br>Nature of publication | Stated aim/ objective | Patient/service user group | Setting<br><br>(Country; Primary/secondary/tertiary etc.; involvement of non-NHS services/organisations)‡ | Defining characteristics of approach as described by authors/practitioners | Integrated care factors* | Facilitators for wider implementation (process outcomes described by authors) | Barriers to wider implementation (process outcomes described by authors) | Evaluation?<br><br>(Yes/No)<br><br>Outcome relevant to physical health |
|---|---|---|---|---|---|---|---|---|
| | | second or; one serious and persistent mental health condition. | | supports and resources; 4. Continuing care strategies including care management, care coordination, and transitional care from the hospital to community; 5. HH providers do not need to provide all the required services themselves but must ensure the full array of services is available and coordinated; 6. Use information technology to facilitate the HHs work and establish quality improvement efforts.<br><br>HHs required to track avoidable hospital readmissions, calculate cost savings of coordinated care, and monitor the use of health information technology. States are required to track emergency room visits, | | | | |

| Reference<br><br>Source<br><br>Nature of publication | Stated aim/ objective | Patient/service user group | Setting<br><br>(Country; Primary/secondary/tertiary etc.; involvement of non-NHS services/organisations)‡ | Defining characteristics of approach as described by authors/practitioners | Integrated care factors* | Facilitators for wider implementation (process outcomes described by authors) | Barriers to wider implementation (process outcomes described by authors) | Evaluation?<br><br>(Yes/No)<br><br>Outcome relevant to physical health |
|---|---|---|---|---|---|---|---|---|
| | | | | skilled nursing facility admissions and cost-savings.<br><br>Procedure:<br><br>Care manager (CM; often a nurse) uses disease registry to monitor and identify gaps in care and, with other HH team members (e.g. primary care provider, traditional mental health team members), decides who will be responsible for intervening. May or may not be a member of the HH team. CM or delegated team member contacts patient regularly to assess, educate, or intervene as needed. Progress measured using validated standardized tools. CMs use registry to keep track of their panel of patients and ensure they are | | | | |

| Reference<br><br>Source<br><br>Nature of publication | Stated aim/ objective | Patient/service user group | Setting<br><br>(Country; Primary/secondary/tertiary etc.; involvement of non-NHS services/organisations)‡ | Defining characteristics of approach as described by authors/practitioners | Integrated care factors* | Facilitators for wider implementation (process outcomes described by authors) | Barriers to wider implementation (process outcomes described by authors) | Evaluation?<br><br>(Yes/No)<br><br>Outcome relevant to physical health |
|---|---|---|---|---|---|---|---|---|
| | | | | followed up regularly. Regular HH team meetings to review their panel of eligible patients and prioritise those with greatest immediate need or opportunity for improvement. The team works from a single care plan designed to address all physical health, behavioural health and wellness needs. HH team may be housed in one location or function virtually from different settings. | | | | |
| Pirraglia (2012)[41]<br><br>Literature<br><br>Observational cohort study | Cohort study. To test whether implementation of primary care co-located in mental health setting impacts on health service use and cardiovascular risk factor control. | US veterans with serious mental illness | USA<br><br>Mental health outpatient unit. | Serious Mental Illness Primary Care Clinic (SMIPCC). Open for 1 session per week/open access to coincide with mental health appointment where possible; walk-in care is allowed and patients seen the same day; staffed by single primary care provider and a patient care | 4. | Open access. | Limited generalisabilty beyond VA population. | Yes.<br><br>Clinic attendance and attainment of targets for LDL cholesterol, triglycerides, |

| Reference<br><br>Source<br><br>Nature of publication | Stated aim/ objective | Patient/service user group | Setting<br><br>(Country; Primary/secondary/tertiary etc.; involvement of non-NHS services/organisations)‡ | Defining characteristics of approach as described by authors/practitioners | Integrated care factors* | Facilitators for wider implementation (process outcomes described by authors) | Barriers to wider implementation (process outcomes described by authors) | Evaluation?<br><br>(Yes/No)<br><br>Outcome relevant to physical health |
|---|---|---|---|---|---|---|---|---|
| | | | | assistant. | | | | BP, and BMI. |
| Rubin (2005)[51]<br><br>From [85]<br><br>RCT/process evaluation | To evaluate the addition of an internist to the care of patients on psychiatric inpatient units. | People hospitalized with chronic mental illness | USA<br><br>Inpatient psychiatric units. | Participants seen within 24 hours of admission by an Internist (working with usual care team). Data collected on medical history, followed by physical examination, and communication with primary care provider about the completion of health maintenance services (e.g., scheduling breast screening, vaccinations, lipid screening), chronic medical problems and medications (either as an inpatient or on discharge). Internist also ordered specialty consultations and formulated smoking and alcohol cessation plans. | 4.6.7. | NR | Referrals to expensive health maintenance services such as mammography. | Yes.<br><br>Care processes, e.g. Number of health maintenance services completed. |
| Shackelford (2013)[63] | Describe the population receiving primary care services in a community mental | Mental health clinic users. Primarily indigent patients from a | USA<br><br>Outpatient community | Primary care clinic operates 3.5 days per week, staffed by two nurse practitioners and one family physician. Informal referral in which a | 4. 6. | The organization of services in this study lends itself to accommodate a "stepped care" | - | No |

| Reference<br><br>Source<br><br>Nature of publication | Stated aim/ objective | Patient/service user group | Setting<br><br>(Country; Primary/secondary/tertiary etc.; involvement of non-NHS services/organisations)‡ | Defining characteristics of approach as described by authors/practitioners | Integrated care factors* | Facilitators for wider implementation (process outcomes described by authors) | Barriers to wider implementation (process outcomes described by authors) | Evaluation?<br><br>(Yes/No)<br><br>Outcome relevant to physical health |
|---|---|---|---|---|---|---|---|---|
| Literature<br><br>Journal article | health clinic. | large urban area. | mental health clinic with a co-located primary care clinic. | mental health provider directly places their patient on the clinic schedule or discusses the referral with the primary care nurse liaison. Though no formal referral criteria, the aim was to capture people with a chronic medical illness who are unable to navigate a traditional primary care setting. | | approach (i.e. patients level of care being altered according to objectively measured need).- | | |
| Solomon (2014)[64]<br><br>Literature<br><br>Pilot RCT | To assess the barriers and facilitators to implementation of a transitional care model (TCare) for patients with serious mental illness. | People with serious mental illness, including major depression; bipolar disorder; schizoaffective disorder; schizophrenia; psychosis (not otherwise | USA<br><br>Setting: Upon transition from hospital discharge to community. | TCare (based on targeted case management model; Naylor et al 2013).<br><br>Ten essential elements of targeted care management: 1. coordination of care by an advanced practice nurse (APN); 2. a plan developed prior to hospital discharge; 3. Home visits by APN for ~90 days post-hospital discharge | 7. | Integration of TCare into the hospital discharge planning process.<br><br>Team approach involving peers/social worker (to assess patient's social environment/ stability of housing, | Intensity of physical health need. (Patients with more pressing physical health needs were more receptive to TCare).<br><br>Poor communication and co-ordination | No.<br><br>Rehospitalisation; use of emergency services; medication/health care appointment management and adherence. |

| Reference<br><br>Source<br><br>Nature of publication | Stated aim/ objective | Patient/service user group | Setting<br><br>(Country; Primary/secondary/tertiary etc.; involvement of non-NHS services/organisations)‡ | Defining characteristics of approach as described by authors/practitioners | Integrated care factors* | Facilitators for wider implementation (process outcomes described by authors) | Barriers to wider implementation (process outcomes described by authors) | Evaluation?<br><br>(Yes/No)<br><br>Outcome relevant to physical health |
|---|---|---|---|---|---|---|---|---|
| | | specified). | | and available 7 days a week; 4. Coordination with physicians in community, including accompanying patient on visits; 5. inclusive focus on health needs of patient; 6. Involvement of both patient and family in patient care through education and support; 7. early detection and quick "response to health care risks and symptoms"; 8. Patient, family caregiver, and providers functioning as a team; 9. collaboration of nurse and physician; and 10. Information sharing among all team members.<br><br>Here, the pilot intervention consisted of a 90-day programme delivered by a psychiatric nurse practitioner (trained in medical and | | etc.) and a consulting psychiatrist.<br><br>Focus on implementation at multiple systems level. | between providers. (use of electronic health records/psychiatric advance directives is suggested). | |

| Reference<br><br>Source<br><br>Nature of publication | Stated aim/ objective | Patient/service user group | Setting<br><br>(Country; Primary/secondary/tertiary etc.; involvement of non-NHS services/organisations)‡ | Defining characteristics of approach as described by authors/practitioners | Integrated care factors* | Facilitators for wider implementation (process outcomes described by authors) | Barriers to wider implementation (process outcomes described by authors) | Evaluation?<br><br>(Yes/No)<br><br>Outcome relevant to physical health |
|---|---|---|---|---|---|---|---|---|
| | | | | psychiatric assessment/treatment/prescribing). Programme includes assessment, planning, assistance in accessing medical care and social services (based on needs of patient), attendance at appointments and monitoring of services received. A psychiatrist was available for consultation. | | | | |
| Stark (2014)[65]<br><br>From field expert contact<br><br>Specification for evaluation of the Lester tool (2014) | A proposal to test the implementation of the Lester tool (updated 2014 version) to screen for cardiovascular conditions in patients being treated for SMI. | Patients with SMI | UK<br><br>Four Strategic Clinical Network (SCN) pilot sites:<br><br>1.Cheshire and Merseyside SCN<br><br>2.Northern SCN<br><br>3.Northern SCN<br><br>4.South West SCN | 1. Embedding the Lester tool as a standard of physical care in an acute male inpatient mental health unit. Identify training needs and development of care pathways.<br><br>2. Develop and co-ordinate physical health link nurses using appropriate training and support. Develop clinical pathways arising from implementation of Lester tool | 1.6.8. | NR | NR | No.<br><br>Pilot work on-going from October 2014. Final report due December 2015. |

| Reference<br><br>Source<br><br>Nature of publication | Stated aim/ objective | Patient/service user group | Setting<br><br>(Country; Primary/secondary/tertiary etc.; involvement of non-NHS services/organisations)‡ | Defining characteristics of approach as described by authors/practitioners | Integrated care factors* | Facilitators for wider implementation (process outcomes described by authors) | Barriers to wider implementation (process outcomes described by authors) | Evaluation?<br><br>(Yes/No)<br><br>Outcome relevant to physical health |
|---|---|---|---|---|---|---|---|---|
| | | | | and to link with external NHS agencies and community services.<br><br>3. Electronic physical health monitoring system for inpatients (based on Lester tool) to improve data quality between Trust and primary care/community. Increase service user awareness of physical wellbeing.<br><br>4. Expand inpatients physical health programme (based on Lester tool) to more inpatients and into community. Expand remit beyond CVD to dental and sexual health. Improve communication with primary care. | | | | |

| Reference<br><br>Source<br><br>Nature of publication | Stated aim/ objective | Patient/service user group | Setting<br><br>(Country; Primary/secondary/tertiary etc.; involvement of non-NHS services/organisations)‡ | Defining characteristics of approach as described by authors/practitioners | Integrated care factors* | Facilitators for wider implementation (process outcomes described by authors) | Barriers to wider implementation (process outcomes described by authors) | Evaluation?<br><br>(Yes/No)<br><br>Outcome relevant to physical health |
|---|---|---|---|---|---|---|---|---|
| Tallian (2010)[66]<br><br>Literature<br><br>Conference abstract | To describe the implementation of a pharmacist-managed Medication Therapy Management Services (MTMS) at an outpatient mental health clinic. | Mental health patients | US, California<br><br>University hospital outpatient clinic in collaboration with University School of Pharmacy, County Mental Health Services, California Mental Health Care Management Program | Credentialed psychiatric pharmacists providing direct patient-care activities under a collaborative practice protocol with psychiatrists, to patients referred by residents and attending physicians. Included: psychiatric evaluation, medication management, laboratory and adverse effects monitoring, medication adherence assessment, lifestyle, counselling, therapy referral, clinical practice integration. | 2 | - | Delay in patient referrals, space allocation, acceptance of pharmacists' role at the clinic, changing needs of clinic and County due to diminished state funds. | No<br><br>Laboratory and adverse effect monitoring. |
| Ungar (2013)[67]<br><br>Literature<br><br>Journal article (service description | To pilot a "Reversed shared care" clinic | Mental health patients without access to a primary care physician | Canada<br><br>Urban community teaching hospital Mental Health Department. | A public insurance-funded primary care family physician and Assertive Community Treatment (ACT) nurse available for appointments one morning per week. Co-located in hospital Mental Health Community Day Treatment, Outpatient, and Outreach services. | 4. 5. 6 | System-wide and integrated vision of service delivery and resource allocation from decision makers.<br><br>Willing and interested primary | Lack of administrative and institutional support due to perceived increased financial cost and unnecessary co-location, absence of a specified/earmark | No |

| Reference<br><br>Source<br><br>Nature of publication | Stated aim/ objective | Patient/service user group | Setting<br><br>(Country; Primary/secondary/tertiary etc.; involvement of non-NHS services/organisations)‡ | Defining characteristics of approach as described by authors/practitioners | Integrated care factors* | Facilitators for wider implementation (process outcomes described by authors) | Barriers to wider implementation (process outcomes described by authors) | Evaluation?<br><br>(Yes/No)<br><br>Outcome relevant to physical health |
|---|---|---|---|---|---|---|---|---|
| and pilot) | | | | | | care family physician and committed, passionate staff. | ed budget. | |
| Vanderlip (2014)[68]<br><br>Literature<br><br>Journal article (survey) | To examine the identification, management, and referral of primary care activities of Assertive Community Treatment (ACT) teams across the United States. | Persons suffering persistent mental illness who also demonstrate difficulty engaging in care. | USA<br><br>Community-based settings | ACTs provide intensive psychosocial rehabilitation support, combining the services of a psychiatrist, psychiatric nursing, and supportive community living aids in community based settings. They are charged with medication management and assisting with vocational, substance abuse, and housing services. ACT can support the dissemination of evidence-based practices such as integrated dual-diagnosis treatment and wellness and recovery planning. Attention to physical health needs is a stated goal of the model. | 5. 7. | Nurse care managers acting as liaisons to primary care for people with SMI.<br><br>More education of ACT clinicians on recommended preventive health screening and standardization of an intake process to identify physical health needs. | Deficiencies in training of team members limit their capabilities in taking responsibility for medical care.<br><br>Failure to take full advantage of staff in addressing medical care. | No |

| Reference<br><br>Source<br><br>Nature of publication | Stated aim/ objective | Patient/service user group | Setting<br><br>(Country; Primary/secondary/tertiary etc.; involvement of non-NHS services/organisations)‡ | Defining characteristics of approach as described by authors/practitioners | Integrated care factors* | Facilitators for wider implementation (process outcomes described by authors) | Barriers to wider implementation (process outcomes described by authors) | Evaluation?<br><br>(Yes/No)<br><br>Outcome relevant to physical health |
|---|---|---|---|---|---|---|---|---|
| | | | | Many commonalities with the medical home concept (enhanced access and continuity, patient education and empowerment, comprehensive evidence-based treatment). ACTs teams are designed to function as "mental health homes" and have evolved in parallel with growing PCMH movement. | | | | |
| Vinas-Cabrera (2013)[34]<br><br>Literature<br><br>Before and after study. Written in Spanish. | To evaluate the effectiveness of a joint team intervention between primary care and mental health to improve information recording on cardiovascular risk factors. | Patients diagnosed with psychosis | Spain<br><br>Primary care/mental health care settings | Shared clinical sessions; joint GP-mental health protocol.<br><br>Patients were selected from primary care | 1.<br><br>2. | NR in abstract | NR in abstract | Yes.<br><br>Information recording on smoking; BP; BMI; total cholesterol; HDL cholesterol; triglycerides; glucose; waist circumference; cardiovascular risk. |

| Reference<br><br>Source<br><br>Nature of publication | Stated aim/ objective | Patient/service user group | Setting<br><br>(Country; Primary/secondary/tertiary etc.; involvement of non-NHS services/organisations)‡ | Defining characteristics of approach as described by authors/practitioners | Integrated care factors* | Facilitators for wider implementation (process outcomes described by authors) | Barriers to wider implementation (process outcomes described by authors) | Evaluation?<br><br>(Yes/No)<br><br>Outcome relevant to physical health |
|---|---|---|---|---|---|---|---|---|
| ENGLISH ABSTRACT ONLY | | | | | | | | |
| Von Esenwein (2014)[38]<br><br>Literature<br><br>Literature review | Review of grey literature to identify electronic health record (EHR) systems to integrate and improve the mental and physical outcomes of people with SMI. | People with SMI | USA<br><br>Cross setting partnerships: Mental health -Community Mental Health Centres (CMHC) and primary care-(Federally Qualified Health Centres (FWHC)).<br><br>Department of Veterans Affairs (VA)/VA sites and outside VA system. | General EHR examples: examining mortality after cardiac surgery; disease monitoring; disease self-management training.<br><br>Personal health records (PHR); smartphone apps; appointment/medication reminders by text.<br><br>Programmes: Primary and Behavioural Health Care Integration Grant Programme – funding for CMHCs. To include enhanced computer systems, management information systems and electronic health record integration. | 1. | Electronic PHR shifts locus of control to patient.<br><br>Funding and training incentives to implement EHR.<br><br>Allowing patients to opt-in to release health information into the shared system to overcome medico-legal barriers. | Patient: People with low digital literacy and/or psychosocial challenges (poverty, social isolation, unstable living and work conditions).<br><br>Provider: time-consuming; system compatibility and patient confidentiality (including legal protections); staff training; lack of financial incentives to implement | Yes.<br><br>Primary care service use; hospitalisation; physical health measures (unspecified) |

| Reference<br><br>Source<br><br>Nature of publication | Stated aim/ objective | Patient/service user group | Setting<br><br>(Country; Primary/secondary/tertiary etc.; involvement of non-NHS services/organisations)‡ | Defining characteristics of approach as described by authors/practitioners | Integrated care factors* | Facilitators for wider implementation (process outcomes described by authors) | Barriers to wider implementation (process outcomes described by authors) | Evaluation?<br><br>(Yes/No)<br><br>Outcome relevant to physical health |
|---|---|---|---|---|---|---|---|---|
| | | | | Rhode Island example: "Current Care" (system to share electronic patient information between primary and specialist care, pharmacy, hospital and emergency departments) and "Direct Secure Messaging" (point-to-point electronic messaging between providers).<br><br>California example: e-prescribing; electronic care pathways to track patients.<br><br>Provision of grants and training; integration toolkit for providers.<br><br>Missouri example: "Pay to Play" incentives for providers to use CyberAccess | | | | |

| Reference<br><br>Source<br><br>Nature of publication | Stated aim/ objective | Patient/service user group | Setting<br><br>(Country; Primary/secondary/tertiary etc.; involvement of non-NHS services/organisations)‡ | Defining characteristics of approach as described by authors/practitioners | Integrated care factors* | Facilitators for wider implementation (process outcomes described by authors) | Barriers to wider implementation (process outcomes described by authors) | Evaluation?<br><br>(Yes/No)<br><br>Outcome relevant to physical health |
|---|---|---|---|---|---|---|---|---|
| | | | | (webportal with real-time transmission of health information).<br><br>Tennessee example : Telehealth consultations with psychiatrists who have access to shared electronic health record.<br><br>New York state example: Psychiatric Services and Clinical Knowledge Enhancement System (PSYCKES) web-based tools to access administrative data. | | | | |
| Welthagen (2004)[69]<br><br>From [85] | To evaluate the feasibility of primary care services co-located within an acute psychiatric unit. | Adults<br><br>with SMI (over 70% had schizophrenia/ bipolar affective | UK<br><br>Acute psychiatric hospital | Weekly 3-hour sessions (appointment times 30 minutes each) offering primary care services on 3 acute psychiatry wards. Services included physical diagnoses and treatments, | 4.6. | Professional, kind, and understanding nature of primary care doctor. | Patient anxiety about seeing someone other than a psychiatrist. | No. |

| Reference<br><br>Source<br><br>Nature of publication | Stated aim/ objective | Patient/service user group | Setting<br><br>(Country; Primary/secondary/tertiary etc.; involvement of non-NHS services/organisations)‡ | Defining characteristics of approach as described by authors/practitioners | Integrated care factors* | Facilitators for wider implementation (process outcomes described by authors) | Barriers to wider implementation (process outcomes described by authors) | Evaluation?<br><br>(Yes/No)<br><br>Outcome relevant to physical health |
|---|---|---|---|---|---|---|---|---|
| Feasibility study | | disorder) | | referrals to specialists, health promotion and education.<br><br>Advice also offered to ward doctors and nurses, including advice on patient management to junior psychiatrists. | | | High demand for services.<br><br>Generalisability beyond acute setting. | |

| Reference<br><br>Source<br><br>Nature of publication | Stated aim/ objective | Patient/service user group | Setting<br><br>(Country; Primary/secondary/tertiary etc.; involvement of non-NHS services/organisations)‡ | Defining characteristics of approach as described by authors/practitioners | Integrated care factors* | Facilitators for wider implementation (process outcomes described by authors) | Barriers to wider implementation (process outcomes described by authors) | Evaluation?<br><br>(Yes/No)<br><br>Outcome relevant to physical health |
|---|---|---|---|---|---|---|---|---|
| Yeomans (2014)[48]<br><br>From field expert contact<br><br>Cross sectional retrospective study. | To evaluate a computer –based physical health screening template for use with primary care information systems | People with SMI | UK (Bradford and Airedale)<br><br>Primary care | Computer template designed to be compatible with the primary care information system (SystmOne). Template to support a standard annual physical health check based on NICE guideline for physical health checks in schizophrenia. Also to help GPs submit data returns for the Quality and Outcomes Framework (QOF).<br><br>Template includes pre-existing data from patient records and facilitates the allocation of tasks (e.g., ordering blood tests) to the primary care team. Results are returned through usual channels in the computer system.<br><br>Members of staff were offered training on use of the template. | 1 | Use of computer-based template (versus paper-based template). | Accuracy of data recording.<br><br>Availability of QOF incentive for annual health checks in primary care. | Yes.<br><br>Uptake of the template in primary care.<br><br>Quality and rate of cardiovascular health screening/early detection of high cardiovascular risk. |

Key:
* 1. Information sharing systems – e.g. individual electronic records, other IT solutions
2. Shared protocols – setting out the responsibility of each organization (or part of organization) in delivering and agreed service and/or outcome.
3. Joint funding and commissioning – pooled funding and services commissioned across boundaries
4. Co-location of services – e.g. co-location of primary care and specialist mental health staff
5. Multidisciplinary teams – e.g. Community Mental Health Teams (CMHTs)
6. Liaison services – e.g. physical care liaison services in mental health settings
7. Navigators – e.g. a single named individual who can help people navigate their way through complex systems
8. Research
9. Reduction of stigma

‡ We are interested in integration *within* the NHS, but some relevant models may nevertheless touch on other agencies or sectors.