Fibromyalgia

Rationale for inclusion of MUS

Whilst not initially included in the scope of this review, literature on MUS was identified during the screening of articles relating to fibromyalgia.

Authors' descriptions of MUS often included symptoms relevant to the three diagnoses which are the focus of this review, such as non-epileptic attacks, unexplained pain, and loss of movement.

Therefore, it was identified that articles on pathways for MUS would have relevance for this review.

MUS – Key

Themes

- Multidisciplinary/ interdisciplinary working
- Group session
- Education
- Mental health
- Relationships
- Specialist input
- Medication
- Alternative therapies

Effectiveness *

- Findings reported positive effects
- Findings reported no improvement/ negative effects
- Findings did not report on effectiveness

NB: The purpose of these cards is not to provide recommendations or evidence, but to aid discussion and critical reflection on ideas for new pathways.

(Authors Own Examples)

Management of Functional Disorders: A Scoping Review

Cooper, K., Stephen, A. Harrison, S. Moss, R. Donaldson, L. Winfield, H. Burnett, V. and Alexander, L. (2021)

This series of linked scoping reviews aimed to provide a map of the available literature on three functional disorders (FND, Fibromyalgia, and IBS) to inform future development of pathways and treatments/interventions.

Across all three conditions, pathways which were **GP-led or embedded in primary care** were commonly reported, along with those taking a **multidisciplinary approach**. **Stepped or matched care** was reported in relation to FND and Fibromyalgia, with the need for more **diverse approaches** was cited. A range of treatments were identified for all three functional disorders.

A **lack of research evaluating patient pathways*** was identified, particularly for IBS, highlighting the need for further research in this field.

Themes

- Multidisciplinary/ interdisciplinary working
- Group session
- Education
- Mental health
- Relationships
- Specialist input
- Medication
- Alternative therapies

Fibromyalgia Key

Effectiveness *

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- Findings reported no improvement/ negative effects
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(Authors Own Examples)

Narrative Review of pathways including Primary care, Secondary care, Complementary care

Lack of evidence-based models of care covering different aspects of health care along entire patient journey. **No clear benefit for ongoing care in Secondary care** settings (based on limited evidence). Unmet needs include **supportive attitudes by healthcare professionals**, **timely diagnosis**, and **appropriate ongoing care**.
Care preferences of patients largely unknown.
Need for a **new model of care**.

(Kivell 2021 UK)

Guideline-based recommendations for symptom management in primary care

Strengthening doctor-patient relationship via doctor recognition of illness, taking patient seriously and demonstrating empathy. Good doctor-patient communication being essential and patients needing shared understanding and validation of their distress. Explanation of symptoms is clearly recommended as essential. A stepped-care approach with regular follow-up and proactive care with GP/other key healthcare professional co-ordinating care with close collaboration between care providers is clearly recommended.

(Hide Vannop 2017 Netherlands)

Primary care symptom management by GPs

Doctor-patient communication identified as essential to treatment along with a safe and therapeutic environment. GPs should focus on symptom management and self-care and deliver proactive care with regular follow-up appointments based on patient need. GPs should control and co-ordinate the care process. A stepped care-approach based on symptom severity is recommended.

(Vitik Vannop 2018 Netherlands)

Specialist primary-secondary liaison clinic

Assessment, diagnosis, and BOPT were provided to patients. Most referrals came from GPs and fellow mental health professionals.

Only a small number of GPs made referrals. Some patients did not attend the initial assessment appointment. Following assessment, some patients were referred to BOPT, some to secondary mental health care services, and some for other forms of psychotherapy. Results for a group of 41 patients identified with a primary diagnosis of somatoform disorder and referred for BOPT, only 12 participated in the assessment and treatment process.

(Wilson 2010 UK)

Primary care treatment package including psychoeducation plus intervention either group BOPT (body-oriented psychotherapy) or group MBSR (mindfulness-based stress reduction).

Significant improvements were seen in somatic levels and quality of life ratings and healthcare costs and utilisation were reduced.

(Wilson 2010 UK)

Psychotherapy service using intensive short-term dynamic psychotherapy (ISTDP) embedded in primary care.
1: Presentation. **2**: History taking, rule out medical causes/rule in MUS, psychoeducation. **3**: Self-guided treatment, follow-up with clinician, gain agreement with patient, work towards restoring function. **4**: ISTDP assessment and follow-up. **5**: ISTDP treatment. Staff education workshops also implemented.

Decreases in physical symptoms and clinician visits were observed post-treatment and both patients and clinicians generally reported high satisfaction with the service.

(Coyne 2011 Canada)

GP-led or embedded in primary care

Multidisciplinary primary care liaison psychiatry service for frequent primary and secondary care attenders.

Patient activity in primary and secondary care was reduced, as was activity cost following implementation of service.

(Wright 2017 UK)

Symptom Clinic Intervention delivered by GPs

1: Recognition – GP hears, seeks to understand and validates patient experience and recognises symptoms as within area of authority. **2**: Explanation - GP explains symptoms in terms of adaptive/other processes. **3**: Action - GP proposes and negotiates symptom management strategies. **4**: Learning - GP and patient reflect on use of explanation and action in practice.

Acceptability and improvement in some patient symptoms were reported by some patients and need for further training with a focus on symptom explanation and management was identified.

(Wilson 2010 UK)

The PACFIND study
NHS services for people with fibromyalgia are highly disparate, with few professionals reporting access to care pathways. Diagnosing fibromyalgia is variable and education and pharmacotherapy are mainstays of treatment and management. The greatest perceived unmet need for people with fibromyalgia is **a lack of available services**. The need for new models of primary and community care that offer timely diagnosis, interventions to support self-management with access to specialist services if needed, is paramount.

(Wright 2018 UK)

Patient Centred Medical Home model (PCMH)

Effective management of patients in **Primary care**.

Patients as **active partners**; IT to support **education**, **communication**, **data** collection and **performance** measurement; involvement of **multiple healthcare professionals**; multifaceted treatment approach (patient **education**, **pharmacological** and **nonpharmacological** treatment); symptom prioritisation; **managing patient expectations**.

(Wright 2018 UK)

Pathway development by expert working group - collaboration between Map of Medicine and British Pain Society

Multidisciplinary community-based approach for the majority of patients; **specialist referral** as required; **information and explanation** important for the patient; **multimodal treatment**, **pain specialists should work with primary care in the community setting** to share their expertise and support primary care physicians. **Improved access and earlier intervention** has the potential to improve outcomes.

(Lok 2017 UK)

European Alliance of Associations for Rheumatology (EULAR recommendations)

Patient pathway originating in **primary care** but **supported by a range of health care providers**, including **specialist care when necessary**.

Multidisciplinary and **graduated** approach, **shared decision-making** with the patient to **tailor** treatment to patient needs, taking into account pain features, patient preferences and comorbidities. Patient management in **Primary Care** setting, with specialist consultation for patients with atypical symptoms suggestive of alternate diagnosis. **Self-management** key. **Stepwise approach** starting with confirmation of diagnosis and then a combination of nonpharmacological and pharmacological treatment.

(Macfarlane 2016 UK)

"Moving forwards with fibromyalgia"

GPs diagnose and provide details of how to access **group education** in the form of **seminars & workshops**. **Patients opt-in** to initial education sessions.
Screening tools are then used to guide patients along pathway to access **matched care**.
Multidisciplinary paper triage used for complex presentation or when group education not suitable. Clinical pathway highly rated by patients. Limited data but potentially promising pathway.

(Wingate 2018 UK)

Stepped or matched care

Multidisciplinary services across care levels adopting a biopsychosocial approach

Services should be person-centred, needs-based and accessible. Healthcare professionals should integrate both physical and mental health approaches in their care with education and training being essential to ensuring relevant skills are maintained and developed.

(Joint Commissioning Panel for Mental Health 2017 UK)

Management by physicians across all levels of care

Recommendations to **1**: Respect the patient narrative. **2**: Establish regular follow-up appointments. **3**: Treat obvious comorbid psychiatric syndromes. **4**: Normalise symptoms and uncertainty. **5**: Make specialty referrals sparingly. **6**: Not rush to write prescriptions but consider appropriate pharmacology. **7**: Regard the patient-physician relationship as paramount.

(Lepkifker 2018 UK)

Multidisciplinary approach

Blended care program for MUPS

A multidisciplinary functional rehabilitation program with blended care elements of cognitive behavioural therapy, physical therapy, case management, and psychoeducation, embedded in a day treatment setting. This was designed for members of the Dutch armed forces.

(Maarsman 2017 Netherlands)

Multidisciplinary management including rheumatologist, rheumatology nurse, physiotherapist, exercise therapist, physiotherapist specialising in chronic pain management, psychiatrist and dietician. **Weekly "team huddle"** to discuss patients, **patient education**, **emotional and social support**, and clinical intervention provided in structured yet comprehensive manner to small group of patients. Interprofessional team, group approach, education, exercise and team huddles valuable components. Model thought to improve quality of care, patient satisfaction and trend to improvement in outcome measures. **Integrated care** (accomplished though team huddles) may be superior to care offered in parallel with the different health care providers. Can provide family physicians with structured management pathway and reduce need for specialist interventions.

(Fitz 2017 Canada)

"Gateway Clinic"

Multidisciplinary approach to fibromyalgia management based on **4 pillars of health (food, movement, relaxation, sleep)** involving **12-weeks acupuncture**, **anti-inflammatory diet**, **meditative therapies** (Qi Gong & mindfulness), **daily drop-in stress management auricular acupuncture**, **pacing & exercise**, **medication & supplementation**.
Good compliance with acupuncture and dietary changes and 34% reduction in symptoms.

(John 2015 UK)

Stepped-care

Step 1: Basic Psychosomatic Care from primary care physician.

Step 2: If more severe, refer for early psychotherapeutic assessment.

Step 3: If particularly severe, utilise a multimodal therapeutic approach. Recommends collaborative care, co-ordinated by primary care physician with re-assessment after 3 months.

(Kroenke 2012 Germany)

Guideline-based healthcare network for patients as high risk of somatoform disorder – Sofa-Net

1: Early diagnosis via screening using PHQ. **2**: Early treatment via stepped-care approach: 1 session of psychotherapy within 4 weeks or referral to psychotherapy or inpatient clinics within 8 weeks. **3**: Network pathways through referral via email/directory and efficient communication via short report forms. **4**: Network activities to improve treatment quality via case conferences, network meetings, quality circle meetings. **5**: Patient education via patient information booklet, psychnet website, psycho-education group.

Sofa-Net facilitated referrals of high-risk patients to mental healthcare better than CAU and was endorsed by practitioners through questionnaires, interviews and focus group qualitative evaluation but failed to improve clinical outcomes of patients.

(Jaeger 2017 Germany)

Stepped-care

Step 1: Milder distress treated in primary care.

Step 2: Severe/complex cases treated in secondary care either through a specialised clinic for single syndromes and diagnoses or specialist services for Bodily Distress Syndrome (BDS) including functional somatic syndromes and somatoform disorders.

(Schröder 2017 Netherlands)

IAPT stepped-care model

1: New cases seen in primary care by acute/primary care staff for diagnosis and early management. **2**: Mild-moderate cases seen in IAPT setting by PWPs for low intensity interventions such as psycho-education groups, guided self-help. **3**: Moderate cases seen in IAPT setting by high-intensity workers for high-intensity interventions such as individual CBT and counselling. **4**: Moderate-severe or complex cases seen in secondary care by psychologists/psychotherapists/liaison psychiatrists for individual psychotherapy.

High satisfaction was perceived among service-users and workers, and training needs of IAPT workers were identified.

(Mitha 2013 UK)

Stepped-care: Sofa-Net

A primary care-centred, guideline-based, stepped, collaborative and co-ordinated healthcare program.

Survey results showed high staff satisfaction and a staff perception of improved management, early detection, and referral. Focus groups identified interdisciplinary communication and contact as important facilitators for the functioning of Sofa-Net.

(Shaabo-Mass 2020 Germany)

Irritable Bowel Syndrome

Rationale for inclusion of MUS

Whilst not initially included in the scope of this review, literature on MUS was identified during the screening of articles relating to IBS.

Authors' descriptions of MUS often included symptoms relevant to the three diagnoses which are the focus of this review, such as non-epileptic attacks, unexplained pain, and loss of movement.

Therefore, it was identified that articles on pathways for MUS would have relevance for this review.

MUS - Key

Themes

- Multidisciplinary/ interdisciplinary working
- Group session
- Education
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- Alternative therapies

Effectiveness *

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(Fashoyin Fear Counsiglio)

Management of Functional Disorders: A Scoping Review

Cooper, K., Stephen, A, Harrison, L, Moss, R, Donaldson, L, Winfield, H, Burnet, V, and Alexander, L (2021)

This series of linked scoping reviews aimed to provide a map of the available literature on three functional disorders (FD), Fibromyalgia, IBS, and Functional Neurological Disorder, pathways and treatments/interventions.

Across all three conditions, pathways which were **GP-led or embedded in primary care** were commonly reported, along with those taking a **multidisciplinary approach**. **Stepped or matched care was reported** across two of the three conditions for IBS, the need for more **diverse approaches** was a large theme, and **diagnosis** was common for all three functional disorders.

A lack of research evaluating patient pathways* was identified, particularly for IBS, highlighting the need for further research in this field.

Irritable Bowel Syndrome (IBS) Key

Themes

- Multidisciplinary/ interdisciplinary working
- Group session
- Education/ Resources
- Mental health
- Relationships
- Specialist input
- Medication
- Diet

Effectiveness *

- Findings reported positive effects
- Findings reported no improvement/ negative effects
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(Fashoyin Fear Counsiglio)

GP-led or embedded in primary care

Guideline-based recommendations for symptom management in primary care

Strengthening doctor-patient relationship via doctor recognition of illness, taking patient seriously and demonstrating empathy. Good doctor-patient communication being essential and patients needing shared understanding and validation of their distress. Explanation of symptoms is clearly recommended as essential. A stepped-care approach with regular follow-up and proactive care with GP/other key healthcare professional co-ordinating care with close collaboration between care providers is clearly recommended.

(Van Kerkhoven 2010 Netherlands)

Specialist primary-secondary liaison clinic

Assessment, diagnosis, and BOPT were provided to patients. Most referrals came from GPs and fellow mental health professionals.

Only a small number of GPs made referrals. Some patients did not attend the initial assessment appointment. Amongst those attending some patients were referred to BOPT, some to secondary mental health care services, and some for other forms of psychological therapy. Out of the group of 41 patients identified with a primary diagnosis of somatoform disorder and referred for BOPT, only 12 participated in the assessment and treatment process.

(Wilson 2014 UK)

Psychotherapy service using intensive short-term dynamic psychotherapy (ISTDP) embedded in primary care.

1: Presentation. **2**: History taking, rule out medical causes/rule in MUS, psychoeducation. **3**: Self-guided treatment, follow-up with clinician, gain agreement with patient, work towards restoring function. **4**: ISTDP assessment and follow-up. **5**: ISTDP treatment. Staff education workshops also implemented.

Decreases in physical symptoms and clinician visits were observed post-treatment and both patients and clinicians generally reported high satisfaction with the service.

(Lipsker 2017 Denmark)

Primary care treatment package including psychoeducation plus intervention either group BOPT (body-oriented psychotherapy) or group MBSR (mindfulness-based stress reduction).

Significant improvements were seen in somatic levels and quality of life ratings and healthcare costs and utilisation were reduced.

(Wilson 2010 UK)

Symptom Clinic Intervention delivered by GPs

1: Recognition – GP hears, seeks to understand and validates patient experience and recognises symptoms as within area of authority. **2**: Explanation - GP explains symptoms in terms of adaptive/other processes. **3**: Action - GP proposes and negotiates symptom management strategies. **4**: Learning – GP and patient reflect on use of explanation and action in practice.

Acceptability and improvement in somatic symptom scores were reported by some patients and need for further training with a focus on symptom explanation and management was identified.

(Wilson 2006 UK)

Primary care symptom management by GPs

Doctor-patient communication identified as essential to treatment along with a safe and therapeutic environment. GPs should focus on symptom management and self-care and deliver proactive care with regular follow-up appointments based on patient need. GPs should control and co-ordinate the care process. A stepped care-approach based on symptom severity is recommended.

(Olde Hartman 2013 Netherlands)

Multidisciplinary primary care liaison psychiatry service for frequent primary and secondary care attenders.

Patient activity in primary and secondary care was reduced, as was activity cost following implementation of service.

(Wassil 2017 UK)

Guideline-based healthcare network for patients at high risk of somatoform disorder – Sofu-Net

1: Early diagnosis via screening using PHQ. **2**: Early treatment via stepped-care approach. Patients with persistent symptoms 4 weeks are referred to psychotherapy or inpatient clinics within 8 weeks. **3**: Network pathways through referral via email/directory and efficient communication via short report forms. **4**: Network activities to improve treatment quality through co-ordinating centre, network meetings, quality circle meetings. **5**: Patient education via patient information booklet, psychnet website, psycho-education group.

Sofu-Net facilitated referrals of high-risk patients to mental healthcare better than CAU and was endorsed by practitioners through continuation of engagement and affirmative evaluation but failed to improve clinical outcomes of patients.

(van Elf 2017 Germany)

Multidisciplinary approach

Diagnosis of IBS algorithm and Management of IBS algorithm both supplied as interactive desktop apps.

GP teaching sessions led by a **specialist dietitian and/or consultant gastroenterologist. FC testing** to exclude inflammatory pathologies, **community-based dietitian-led group intervention service** using dietary interventions such as **low FODMAP diet** for patients with IBS with no alarm symptoms, normal blood tests and FC results and intractable symptoms.

Proportion of **new patient slots reduced** over 10-months while **overall costs reduced** for patients with no alarm symptoms and likely IBS aged 16–45 years. FC results confirmed research findings that most patients had IBS. Most patients had **satisfactory control of their IBS after specialist dietetic input** with 74% reporting **improved quality of life**.

(Williams 2010 UK)

Primary Care Medical Home

Nurse facilitated education session, **MPT** focused **goal setting session**, **brief** and **comprehensive consultant & dietitian** group sessions followed by **individual** assessment by **primary care physician with special interest** in Gastroenterology or a gastroenterologist. Compared with usual care pathway this model had **shorter median wait times, fewer endoscopic exams, less gastroenterology re-referrals, and less use of the emergency department**. Outcomes were no different between the pathways. Patients who attend the nurse-led, shared medical appointment have improved access to care and reduced resource utilisation without increased risk of significant gastrointestinal outcomes.

(Kinsey 2017 Canada)

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Multidisciplinary services across care levels adopting a biopsychosocial approach

Services should be person-centred, needs-based and accessible. Healthcare professionals should integrate both physical and mental health approaches in their care with education and training being essential to ensuring relevant skills are maintained and developed.

(Joint Commissioning Panel for Mental Health 2017 UK)

Management by physicians across all levels of care

Recommendations to **1**: Respect the patient narrative. **2**: Establish regular follow-up appointments. **3**: Treat obvious comorbid psychiatric syndromes. **4**: Normalise symptoms and uncertainty. **5**: Make specialty referrals sparingly. **6**: Not rush to write prescriptions but consider appropriate pharmacology. **7**: Regard the patient-physician relationship as paramount.

(Lacy 2015 USA)

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A primary care-centred, guideline-based, stepped, collaborative and co-ordinated healthcare program.

Survey results showed high staff satisfaction and a staff perception of improved management, early detection, and referral. Focus groups identified interdisciplinary communication and contact as important facilitators for the functioning of Sofu-Net.

(Shaddo-Mecu 2020 Germany)

Stepped-care

Step 1: Basic Psychosomatic Care from primary care physician.

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Step 3: If particularly severe, utilise a multimodal therapeutic approach. Recommends collaborative care, co-ordinated by primary care physician with re-assessment after 3 months.

(Schaefer 2017 Germany)

Stepped or matched care

Stepped-care

Step 1: Milder distress treated in primary care.

Step 2: Severe/complex cases treated in secondary care either through a specialised clinic for single syndromes and diagnoses or specialist services for Bodily Distress Syndrome (BDS) including functional somatic syndromes and somatoform disorders.

(Schaefer 2017 Germany)

Blended care program for MUPS

A multidisciplinary functional rehabilitation program with blended care elements of cognitive behavioural therapy, physical therapy, case management, and psychoeducation, embedded in a day treatment setting. This was designed for members of the Dutch armed forces.

(Kuijpersen 2015 Netherlands)

Improving Access to Psychological Therapies (IAPT) stepped-care model

1: New cases seen in primary care by acute/primary care staff for diagnosis and early management. **2**: Mild-moderate cases seen in IATP setting by PWPs (Psychological Wellbeing Practitioners) for low intensity interventions such as psycho-education groups, guided self-help. **3**: Moderate cases seen in IATP setting by high-intensity CBT practitioners for intensive interventions such as individual CBT and counselling. **4**: Moderate-severe or complex cases seen in secondary care by psychologists/psychotherapists/liaison psychiatrists for individual psychotherapy.

High satisfaction was perceived among service-users and workers, and training needs of IAPT workers were identified.

(Wright 2010 UK)

ADAM-FGID

Non-specialist-dependent, algorithm-based approach for diagnosis and management of functional GI disorders.

Involves **structured screening process** for organic disease with medical history and flag questionnaires and bloodstool tests. Abnormal results **reviewed by a gastroenterologist** and, if required, referred for endoscopy and biopsy. Participants without alarms classified using Rome III criteria, and a **letter outlining their FGID diagnosis and management including coping strategies & resources are sent to patients & primary healthcare providers**. Resources include **low-FODMAP diet, CBT, and self-help psychological resources**.

ADAM-FGID found to be **feasible and acceptable** to patients and healthcare providers. Good patient buy-in. Patients reported being **reassured** by the approach and found the **management options useful**. Primary healthcare providers acknowledged **increased confidence in providing views** for endoscopic procedures and to provide **reassurance** to both patients and themselves. Further RCT with adequate power is needed to conclusively establish safety and efficacy.

(Lacknier 2015 Australia)

Diverse approaches

Low FODMAP diet (12 dietitian-lead and 2 nursing-led)

The evidence base supports the use of **dietitian-led education, in both one-to-one and group service delivery models**.

Group education demands further evaluation for the dietary management of IBS as preliminary evidence suggests it is a clinically effective and economic model of care. Cost and resource implications of implementation of the diet is of concern particularly as there is no evidence on the clinical effectiveness or risks associated with such practices and the importance of monitoring nutritional status. There has been increased recognition in clinical practice. Dietitians are the only qualified health professionals to deliver evidence-based therapy. Furthermore, dietitians are governed by an ethical code of practice and continue to generate instrumental research data in the evolving area of the dietary management of IBS.

(O'Keeffe 2017 UK)

Integrated care pathway with direct access to dietitian-led refractory IBS (RIBS) service

For patients aged <45. Patients who do not respond are discussed in a consultant-led MDT with advice, review or investigation arranged as appropriate.

70% of patients report **satisfactory relief** of IBS symptoms following dietary manipulation. The service has led to a **reduction** in patients with ROME criteria IBS referred to GI consultants and for costly invasive lower GI investigations.

GPs **adhere to the pathway** and request FC tests appropriately (76% return of negative or intermediate results). No cases of IBD have been missed in this patient cohort to date. Ongoing **audit and education** required.

(Chase 2016 UK)

Integrated care pathway with direct access to dietitian-led refractory IBS (RIBS) service

For patients aged <45. Patients who do not respond are discussed in a consultant-led MDT with advice, review or investigation arranged as appropriate (same as before, extended to older group).

Average reduction in symptom severity of almost 50%. 67% report **satisfactory relief** of gut symptoms. Authors conclude that treatment within a **dietitian-led service, combined with an appropriate, policed care pathway and MDT support is a safe and clinically effective management strategy** for patients over the age of 45 with diagnosed IBS symptoms.

(Chase 2016 UK)

Integrating psychological therapies into medical care for FGIDs

Integrated medical & psychological care is associated with **reduction in stigma** associated with **psychological care, improved access, communication and collaboration** among providers, **patient satisfaction**, and **lower** overall healthcare **cost** with **improved quality**. Can be **multidisciplinary, interdisciplinary, or transdisciplinary**.

Authors suggest that an interdisciplinary approach that considers **interaction between biological & psychological processes, as well as individual contributions, is likely to be most helpful**. e-treatments and other telemedicine approaches may need to be considered to **expand availability of psychological therapies in rural and/or underserved areas**.

(Mead Hagan 2015 USA)

Diverse approaches needed for better outcomes

Reviewed 4 models: i) gastroenterologists-only outpatient specialist care; ii) nurse-led care; iii) psychological services integrated into gastroenterology clinic; and iv) education about FGID (Functional gastrointestinal disorders) to supplement routine care.

Gastroenterologist-only clinics, typically with an investigational and pharmacological focus, **do not often achieve positive clinical outcomes**. **More diverse approaches** may produce better outcomes. Direct comparisons of these models of care are needed.

(Bennett-Stokes 2017 USA)

Constant Care G on eHealth web program for a range of GI conditions including IBS

Continual disease-monitoring with algorithm that provides **personalised feedback** and **education** package in learning & video class, web-based disease **monitoring** package (patients can log symptoms, medication, and other data including GI, facial inflammation burden score* calculated from FC + clinical activity indices – visualised using traffic light system) and **algorithm that provides individualised treatment**. Physician has electronic list of patients using Constant Care and their disease status and can perform **daily web ward round**.

Benefits include **quick and easy access** to medical care, **improved access to care and personalised treatment**. Self-management promotes **patient engagement and empowerment** (e.g., group of patients with IBS-D using Constant Care for disease maintenance treatment). Patients with less aggressive disease courses, or in maintenance of remission, can be managed by nurses or other healthcare staff, **reducing the burden on the healthcare system**. However, we have yet to prove if eHealth monitoring can change the natural disease course, in IBD and IBS.

(Kirchner 2017 Denmark)

Functional Neurological Disorder

Rationale for inclusion of MUS

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Authors' descriptions of MUS often included symptoms relevant to the three diagnoses which are the focus of this review, such as non-epileptic attacks, unexplained pain, and loss of movement.

Therefore, it was identified that articles on pathways for MUS would have relevance for this review.

MUS - Key

Themes

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- Group session
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- Alternative therapies

(Adelmo Ma Cuamatzi)

Effectiveness *

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- Findings reported no improvement/ negative effects
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NB: *The purpose of these cards is not to provide recommendations or evidence, but to aid discussion and critical reflection on ideas for new pathways.*

Management of Functional Disorders: A Scoping Review

Cooper, K., Duncan, R., Hamilton, L.Moss, R. Donaldson, J. Winfield, H.,Burnett, K. and Alexander, L (2021)

This series of linked scoping review aimed to provide an overview of management in three functional disorders (FND, Fibromyalgia, IBS) in relation to patient management pathways and treatments/interventions.

Across all three conditions, pathways which were **GP-led or embedded in primary care** were commonly reported, along with those which were **Stepped or matched care**. **Stepped or matched care was reported** across FND and fibromyalgia, while for IBS, the need for more **diverse approaches** was cited. A range of treatments were identified for all three functional disorders.

A **lack of research evaluating patient pathways*** was identified, particularly for IBS, highlighting the need for further research in this field.

FND - Key

Themes

- Multidisciplinary/ interdisciplinary working
- Group session
- Education
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- Alternative therapies

(Adelmo Ma Cuamatzi)

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GP-led or embedded in primary care

Specialist primary-secondary liaison clinic

Assessment, diagnosis, and BOPT were provided to patients. Most referrals came from GPs and fellow mental health professionals.

Only a small number of GPs made referrals. Some patients did not attend the initial assessment appointment. Following assessment, some patients were referred to BOPT, some to secondary mental health care services, and some for other forms of psychological therapy. Out of the group of 41 patients identified with a primary diagnosis of somatoform disorder and referred for BOPT, only 12 participated in the assessment and treatment process.

(Adelmo 2014)(4)

Guideline-based recommendations for symptom management in primary care

Strengthening doctor-patient relationship via doctor recognition of illness, taking patient seriously and demonstrating empathy. Good doctor-patient communication being essential and patients needing shared understanding and validation of their distress. Explanation of symptoms is clearly recommended as essential. A stepped-care approach with regular follow-up and proactive care with GP/other key healthcare professional co-ordinating care with close collaboration between care providers is clearly recommended.

(Van Ravesteyn 2017)(Netherlands)

Symptom Clinic Intervention delivered by GPs

1: Recognition - GP hears, seeks to understand and validates patient experience and recognises symptoms as within area of authority. **2**: Explanation - GP explains symptoms in terms of adaptive/other processes. **3**: Action - GP proposes and negotiates symptom management strategies. **4**: Learning - GP and patient reflect on use of explanation and action in practice.

Acceptability and improvement in somatic symptom scores were reported by some patients and need for further training with a focus on symptom explanation and management was identified.

(Morse 2010)(4)

Primary care symptom management by GPs

Doctor-patient communication identified as essential to treatment along with a safe and therapeutic environment. GPs should focus on symptom management and self-care and deliver proactive care with regular follow-up appointments based on patient need. GPs should control and co-ordinate the care process. A stepped care-approach based on symptom severity is recommended.

(Van Ravesteyn 2014)(Netherlands)

Psychotherapy service using intensive short-term dynamic psychotherapy (ISTDP) embedded in primary care.

1: Presentation. **2**: History taking, rule out medical causes/rule in MUS, psychoeducation. **3**: Self-guided treatment, follow-up with clinician, gain agreement with patient, work towards restoring function. **4**: ISTDP assessment and follow-up. **5**: ISTDP treatment, Staff education workshops also implemented.

Decreases in physical symptoms and clinician visits were observed post-treatment and both patients and clinicians generally reported high satisfaction with the service.

(Lewis 2013)(Canada)

Primary care treatment package including psychoeducation plus intervention either group BOPT (body-oriented psychotherapy) or group MBSR (mindfulness-based stress reduction).

Significant improvements were seen in somatic levels and quality of life ratings and healthcare costs and utilisation were reduced.

(Morse 2010)(4)

Multidisciplinary primary care liaison psychiatry service for frequent primary and secondary care attenders.

Patient activity in primary and secondary care was reduced, as was activity cost following implementation of service.

(Mazel 2017)(4)

Guideline-based healthcare network for patients at high risk of somatoform disorder - Sofu-Net

1: Early diagnosis via screening using PHQ. **2**: Up-to-date information on care aspects, telephone consultations within 2 weeks or referral to psychotherapy or inpatient clinics within 8 weeks. **3**: Network pathways through referral via email/directory and efficient communication via short report forms **4**: Network activities to improve treatment quality through co-ordinating centre, supervision, training, and 3 meetings. **5**: Patient education via patient information booklet, psychnet website, psycho-education group.

Sofu-Net facilitated referrals of high-risk patients to mental healthcare better than CAU and was endorsed by practitioners through continuation of engagement and informational/educative. Failed to improve clinical outcomes of patients.

(Lowe 2011)(Germany)

Stepped or matched care

Stepped-care

Step 1: Mild/ distress treated in primary care.

Step 2: Severe/complex cases treated in secondary care either through a specialised clinic for single syndromes and diagnoses or specialist services for Bodily Distress Syndrome (BDS) including functional somatic syndromes and somatoform disorders.

(Schade 2011)(Germany)

IAPT stepped-care model

1: New cases seen in primary care by acute/primary care staff for diagnosis and early management. **2**: Mild-moderate cases seen in IATP setting by PWPs for low-intensity interventions such as psycho-education groups, guided self-help. **3**: Moderate cases seen in IATP setting by high-intensity workers for high-intensity interventions such as individual CBT and counselling. **4**: Moderate-severe and complex cases seen in secondary care by psychologists/psychotherapists/liaison psychiatrists for individual psychotherapy.

High satisfaction was perceived among service-users and workers, and training needs of IAPT workers were identified.

(McCrae 2011)(4)

Stepped-care

Step 1: Basic Psychosomatic Care from primary care physician.

Step 2: If more severe, refer for early psychotherapeutic assessment.

Step 3: If particularly severe, utilise a multimodal therapeutic approach. Recommends collaborative care, co-ordinated by primary care physician with re-assessment after 3 months.

(Schaefert 2012)(Germany)

Stepped-care: Sofu-Net

A primary care-centred, guideline-based, stepped, collaborative and co-ordinated healthcare program.

Survey results showed high staff satisfaction and a staff perception of improved management, early detection, and referral. Focus groups identified interdisciplinary communication and contact as important facilitators for the functioning of Sofu-Net.

(Fliessbach-Weiss 2020)(Germany)

Stepped care

Step 1: Neurologist explains diagnosis and signposts to self-help information.

Step 2: When explanation alone is unsuccessful, brief treatments (e.g. physiotherapy, occupational therapy, psychotherapy) can be provided by a therapist familiar with functional symptoms.

Step 3: For severe symptoms, patients may require more complex assessment and treatment from consultant level clinicians.

(Healthcare Improvement Scotland 2012)(UK)

Matched care model

The integrated service should represent a core group of staff working with this patient population on a regular basis, including clinical neuropsychology and psychiatry. Liaison with other clinical services will allow the team to match patients' care needs to different specific therapeutic interventions and skill levels. Neurologists referring to the service should be supported by the integrated team.

(APA Division of Neuropsychology 2011)(UK)

Stepped care

Step 1: Neurologist provides diagnosis explanation and initial management.

Step 2: Brief therapy (most commonly delivered by a physiotherapist for FMD).

Step 3: More complex multidisciplinary care involving the full rehabilitation team as well as psychiatry/psychology treatment.

(Jalal 2014)(Netherlands)

Multidisciplinary approach

Management by physicians across all levels of care

Recommendations to **1**: Respect the patient narrative. **2**: Establish regular follow-up appointments. **3**: Treat obvious comorbid psychiatric syndromes. **4**: Normalise symptoms and uncertainty. **5**: Make specialty referrals sparingly. **6**: Not rush to write prescriptions but consider appropriate pharmacology. **7**: Regard the patient-physician relationship as paramount.

(Lipsch 2011)(4)

Blended care program for MUPS

A multidisciplinary functional rehabilitation program with blended care elements of cognitive behavioural therapy, physical therapy, case management, and psychoeducation, embedded in a day treatment setting. This was designed for members of the Dutch armed forces.

(Seymenov 2017)(Netherlands)

Multidisciplinary services across care levels adopting a biopsychosocial approach

Services should be person-centred, needs-based and accessible. Healthcare professionals should integrate both physical and mental health approaches in their care with education and training being essential to ensuring relevant skills are maintained and developed.

(Joint Commissioning Panel for Mental Health 2017)(UK)

Integrated treatment

Psychotherapy and psychiatric management at same clinic.

Initial treatment retention in this population is higher when integrated mental health treatment is offered at the same institution than when divided treatment is offered, with the difference showing a trend toward statistical significance.

Focused on Psychogenic Nonepileptic Seizures.

(Bloom 2013)(4)

Interdisciplinary FND clinic

Each involved discipline offers their own expertise in holistic patient care. Necessary elements include a thorough initial assessment, a robust triage system for referral to appropriate treatment, and follow-up.

(Gilmour 2020 Canada, Portugal, UK)

Multidisciplinary management

Management of people with PNES (psychogenic non-epileptic seizures) should rely on a multidisciplinary team including a psychiatrist and psychologist.

(Gaggioni 2014)(4)

Interdisciplinary chronic pain rehabilitation program

This involved medication management, education, relaxation, physical therapy, and occupational therapy.

Results showed significant reductions in pain-related disability, depression, anxiety, and stress.

(Jeanette 2011)(4)

Interdisciplinary inpatient management

Following diagnosis, the following steps take place.
1: Medication adjustment.
2: Period of inpatient physical therapy and/or occupational therapy assessments that serve as primary treatment and determine the patient's post-discharge needs.
3: coordinate care with outpatient providers.
4: If necessary, coordinate an outpatient mental health plan including referrals.
5: create an opportunity for the patient to ask follow-up questions and participate in discharge planning.

(Wallace 2014)(4)

Early multidisciplinary intervention involving neurology and psychiatry.

The intervention was effective in alleviating physical complaints, and reducing sick leave and health care use.

(Aybek 2012)(Netherlands)

Multimodular Psychotherapeutic Intervention

Delivered in 2 phases:

Phase 1 (Basic intervention): MDT assessment, presentation of diagnosis, and group psychoeducation.

Phase 2: Identification of predisposing, precipitating and perpetuating factors. Group stress and anxiety management treatment can be delivered, as well as specific individualised psychotherapy for comorbid conditions.

(Sigmund 2014)(4)

Outpatient-based multidisciplinary treatment programme

This involved neuropsychiatry, cognitive behavioural therapy, physiotherapy, and occupational therapy.

Sustained improvements were seen in a range of measures including somatic symptoms, health status, and health and social functioning.

(Hinterberg 2020)(4)

Multidisciplinary care (neurology and psychiatry)

A movement toward a common terminology for these types of patients would allow for more appropriate crosstalk between disciplines. Cross-disciplinary educational interventions for healthcare staff would improve collaborative care. The creation of specialty care clinics by psychiatry and neurology would provide direct collaboration in patient care.

(Kranick 2011)(4)

Outpatient follow-up appointments

Routine scheduling of postdischarge follow-up neurology appointments.

Implementation of scheduled follow-ups was successful. Follow-up attendance was low. For patients who attended clinic, the intervention did not improve establishment of psychiatric care, compliance with medication recommendations, understanding of diagnosis, or event frequency.

Focused on Psychogenic Nonepileptic Seizures.

(Wallace 2011)(4)