

Innovating for Improvement

The Psychological Management of Medically Unexplained Symptoms: a Needs-led Approach to Improving Quality and Outcomes

Birmingham and Solihull Mental Health Foundation Trust



About the project

Project title:

The Psychological Management of Medically Unexplained Symptoms: a Needs-led Approach to Improving Quality and Outcomes

Lead organisation:

Birmingham and Solihull Mental Health Foundation Trust

Partner organisations:

Sandwell and West Birmingham Hospitals NHS Trust – City Hospital

West Midlands Academic Health Sciences Network (WM-AHSN)

Birmingham South Central Clinical Commissioning Group

West Midlands Collaboration for Leadership in Applied Health Research and Care (WM- CLAHRC)

Centre for Mental Health

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Part 1: Abstract

Introduction

Medically unexplained symptoms (MUS) are commonly encountered across all health care settings. Although patients with MUS account for a disproportionate amount of health care resources, quality of care is often lacking, and expertise for assessing and treating complex MUS within acute hospital settings is rare.

The current project from BSMHFT involved embedding specialist MUS expertise in an acute hospital and then working across hospital specialties to create a new care pathway, based on patient need. Patients with severe MUS are often seen in multiple medical specialties concurrently, resulting in fragmented care.

The project involved clinicians working to identify MUS patients using systematic analysis of hospital data to pinpoint frequent attenders at hospital, those attending multiple specialties and high-cost patients. Clinicians then worked with colleagues from acute specialties, to help deliver evidence-based interventions within existing clinical environments an approach that has been shown to improve physical symptoms and potentially reduce attendances.

The project involved a novel data sharing agreement between organisations, with care coordinated across the traditional specialty divides. Patients were selected for participation in the project from City Hospital, part of Sandwell and West Birmingham Hospitals NHS Trust (SWBHT).

In summary, project aims were:

- 1) Develop an algorithm for Complex Case Identification and management.
- 2) Embed specialist expertise in an acute hospital, working across medical specialties to create a new care pathway based on patient need. Including:
 - a) Access to evidence-based psychological therapies (Complex Symptoms Clinic).
 - b) Consultation and liaison to the acute hospital.
 - c) Education and training for secondary care staff in managing MUS.
- 3) Evaluate the quality, cost and effectiveness of the service.
- 4) Produce a care pathway description for other trusts to be shared.

Service Set-up

In the initial stages, setting up the project required considerable effort both in terms of recruitment and training of the new psychotherapists (see Table 1) and service promotion (see Appendices 1 A-E). Communication between the project team and departments within the hospital was also established through presentations at several Quality Improvement meetings, 2 Grand Rounds and attendance at joint clinics with specialist consultants. In terms of setting up the Complex Case Identification (CCI) tool there were also challenges establishing an information sharing protocol, finding the right informatics people to engage with and refining search strategy (See appendix 1 F for complex case identification draft functional analysis report).

Learning points have been many and varied. Standout areas include the degree of time and effort required for service set-up and support of staff to deliver the therapy service, as has working with different IT systems and clinicians from other trusts. In addition, co-ordination and consistency of input from senior clinicians to the project has fluctuated creating challenges around the development and validation of the complex case algorithm and for case consultation. Considerable time was taken to establish information sharing protocols as was developing and refining the actual methodology for complex case identification resulting in a reliance on referrals in to the service, rather than use of the algorithm to identify a start-up population as planned.

Successes have included the establishment of an MUS team with a sense of purpose and shared identity. Successful engagement with hospital staff has meant that demand for the service has been broad, with a range of medical specialities requesting our services.

Table 1. Birmingham Medically Unexplained Symptoms Service team

Job Role	Time Allocated
Research Assistant (Band 5)	1 W.T.E (1 year FTC)
Clinical Psychologist (Band 7)	0.5 W.T.E (1 year FTC)
Nurse Psychotherapist (Band 7)	0.5 W.T.E (1 year FTC)
Consultant Medical Psychotherapist	0.2 W.T.E (seconded 9 months, dropping to 0.1 WTE for final 3 months)
Consultant Clinical Psychologist (Band 8c)	0.2 W.T.E (seconded 9 months, dropping to 0.1 WTE for 3 months)
Consultant Liaison Psychiatrist	0.1 W.T.E - For 3 months only
ST6 Medical Psychotherapist	0.1 WTE for 6 months, Special Interest – Complex Case Identification
Ad Hoc input re test-retest validation, Liaison Psychiatrist.	0.1 WTE, project board.

Implementation and Measurement

Operations of the service required the setting up of weekly triage meetings, clinical case management meetings and supervision of the clinicians. There was a tension between promoting an easy and inclusive referral process verses ensuring those patients in most need were accepted. In an effort to improve the quality of referrals received, a clinicians' referral guide and patient information leaflet were produced (See Appendices 1 B & C).

There were 4 possible outcomes of the triage meeting:

- 1) Accepted for direct intervention via the Complex Symptoms Clinic (CSC)

- 2) Indirect intervention through consultation and liaison to team(s)
- 3) A combination of indirect then direct intervention or
- 4) Not accepted (and either signposted to alternative services and/or explanation to referrer.)

The team worked hard to engage those patients accepted into the CSC via phone calls to explain the service and optimise uptake. Everyone was offered the option of an extended assessment which lasted between 1-5 hours, over 1-3 sessions. If no further involvement was indicated, a therapeutic letter was devised and sent to the patient and relevant others (see Appendix 1- G for example). If further therapy was agreed this was either Psychodynamic Interpersonal Therapy (PIT) or CBT, to a maximum of 12 sessions. Everyone was invited to complete a comprehensive range of baseline data and those who continued on into treatment completed measures at the end of therapy. Clinician's ratings were also taken (see Part 2 for details).

Case consultation intervention was undertaken involving file reviews, liaison with relevant stakeholders, construction of a formulation and recommendations/guidance for future management (in both verbal and written formats) was given and clinician measures of MUS severity completed.

In addition, two ½ day training courses were also provided to hospital staff as a method of indirect intervention, aiming to improve assessment and consultation skills for people with MUS with pre/post training measures taken.

In addition to the raft of PROMs, PREMs and CROMs, an independent economic evaluation is being completed by CSU establishing pre and post healthcare utilization costs of the referred and algorithm-defined samples. Project time scales at this time mean we have established baseline costing at this time but information governance challenges have thwarted attempts at establishing costings for a comparison group and it's too early to determine our impact of future healthcare utilisation and costs.

In terms of learning it was clear that all MUS work requires considerable time and effort to engage both the referred and the referrer. Patients are typically highly ambivalent about referral and engagement can be very influenced by referrer behaviours. In addition, effort to research and liaise with other medical specialties, prior to patient engagement, is complex and time consuming. Our efforts to address these challenges (training, patient and clinician leaflets, ease of referral, open appointment system, intranet resources) have resulted in almost 2/3rds of the ¾'s referred accepting extended assessment. Equally, consultation work is highly resource intensive and complex, involving liaison with multiple specialties, often across different hospitals therefore there was limited clinical resource to develop this further.

Delineating MUS, as opposed to those with long term medical conditions and co-

morbid psychological difficulties, was tricky for some referrers as was ensuring all medical tests were complete and an explanation was given to the patient, prior to the referral being made (often, another speciality was offering more tests at the same time). We learnt that much more work can be done to optimise referrer behaviours so to optimise patient engagement.

Successes have included training 31 staff (with requests for more training received) and intervention with 46 people so far. We have also had a fairly consistent level of referral throughout the project from a range of specialities and cases of increasing complexity found throughout the project.

Furthermore, our initial results indicate that the service is well-regarded by both staff and patients. Qualitative feedback indicates that the service is sought-after and seen as valuable by referrers. Feedback from training indicates that this was viewed as excellent by a majority of staff and helped to improve people's knowledge and skills regarding MUS. Data from the CSC indicates that patients experience interventions as beneficial and quantitative outcome data suggests that therapy within the CSC leads to reduced physical symptomology and psychological distress. The impact this has in financial terms remains to be seen.

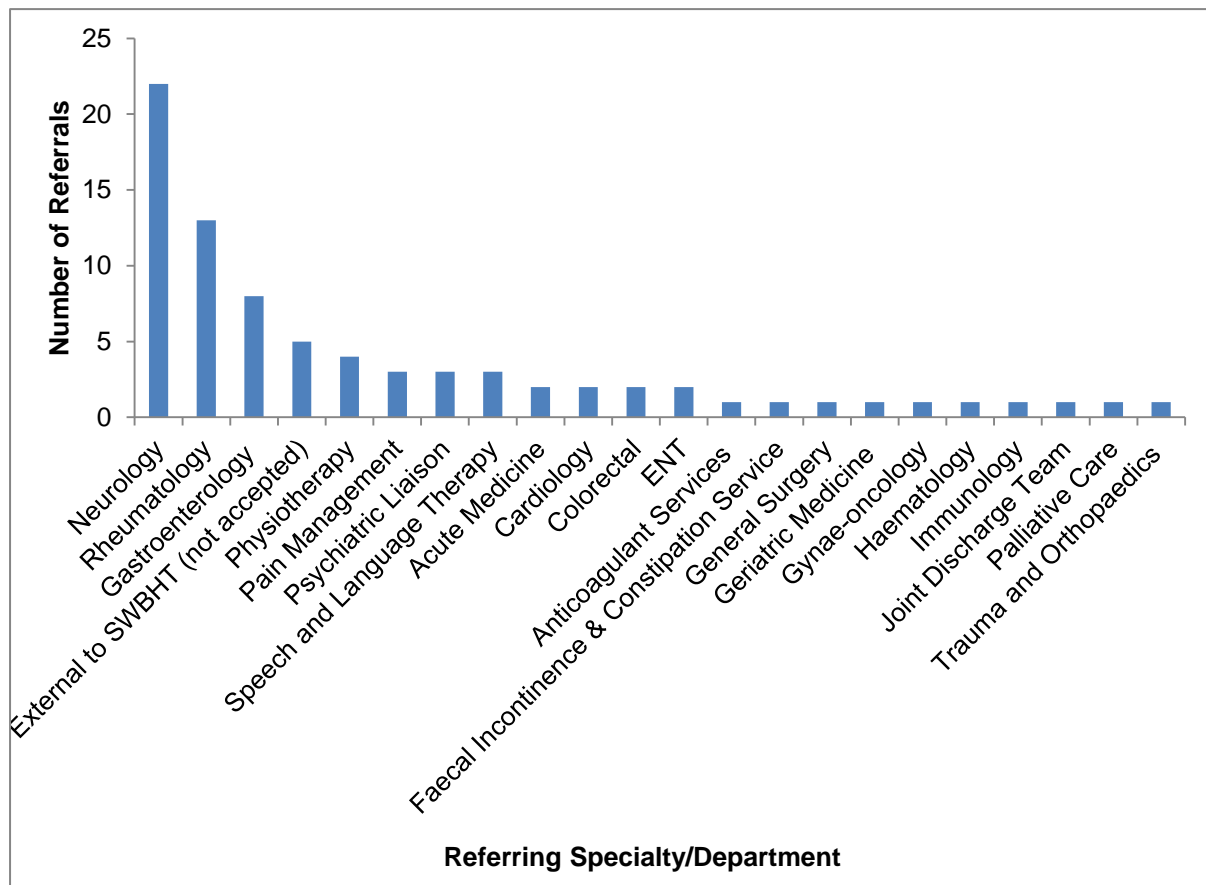
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Part 2: Progress and outcomes

Outcomes

The Complex Symptoms Clinic (CSC) has received 79 referrals since October 2015, with an average of 7.9 referrals per month. We aim to make contact with the referrer within a week of referral, which has been achieved in 92% of cases. Referrals have, so far, been from clinicians within the City and Sandwell Hospital Trust (SWBHT) and not from the search strategy devised to interrogate the data. Referrals have been received from 21 different specialties and departments within SWBHT (see Figure 1).

Figure 1. Number of referrals to Complex Symptoms Clinic by referring specialty / department



The mean age for people referred is 44.2 years (range 19-88). 61(77.2%) are female and 18 (22.3%) are male. See Figure 2 for ethnicity information

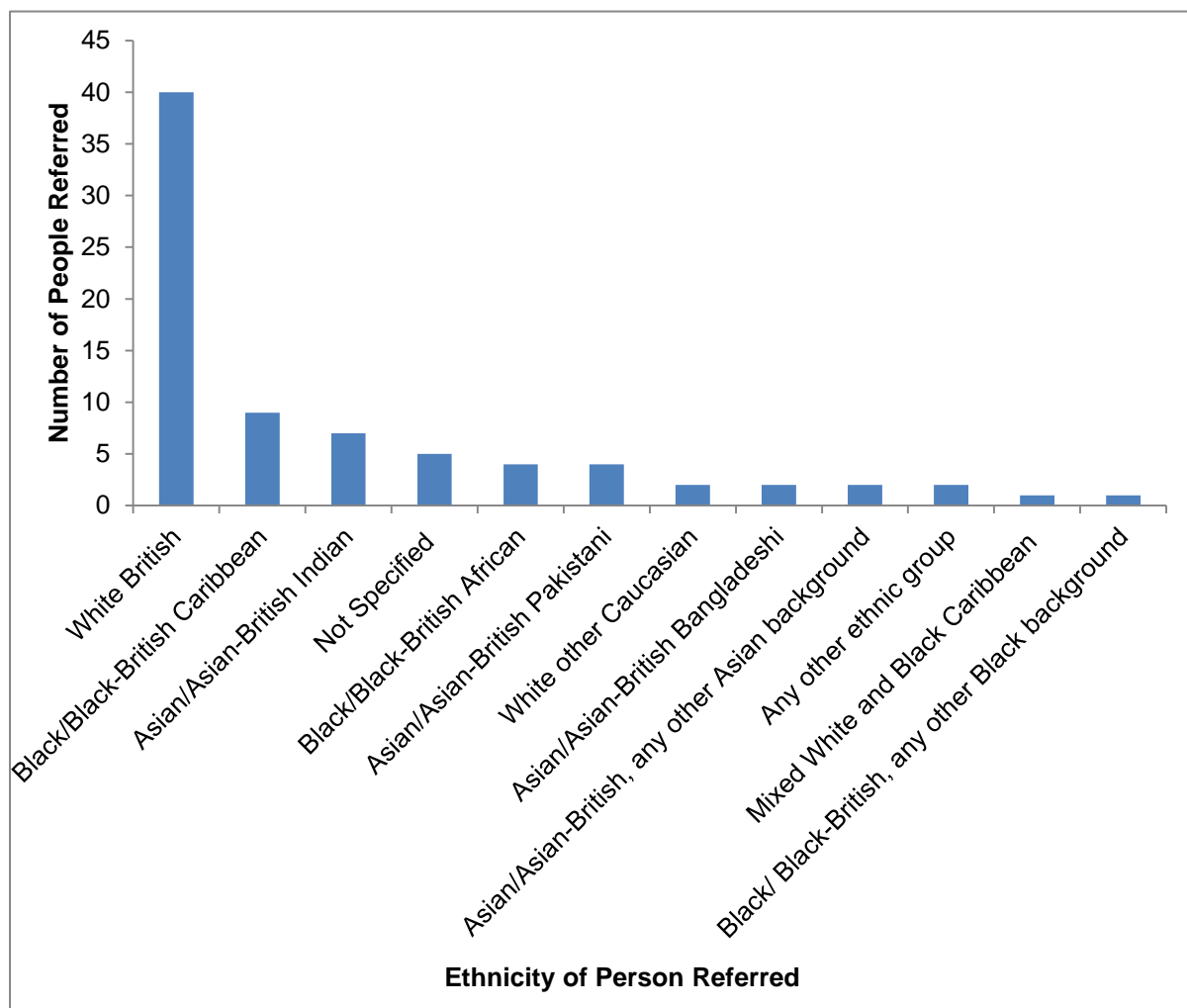
Individuals referred for direct therapy are contacted within an average of:

- 15 working days following their initial referral (median = 7)
- 6 working days following their referral's acceptance at triage (median = 2)

After the referral has been accepted, people are given an appointment (through negotiation) within 30 working days in 94% of cases.

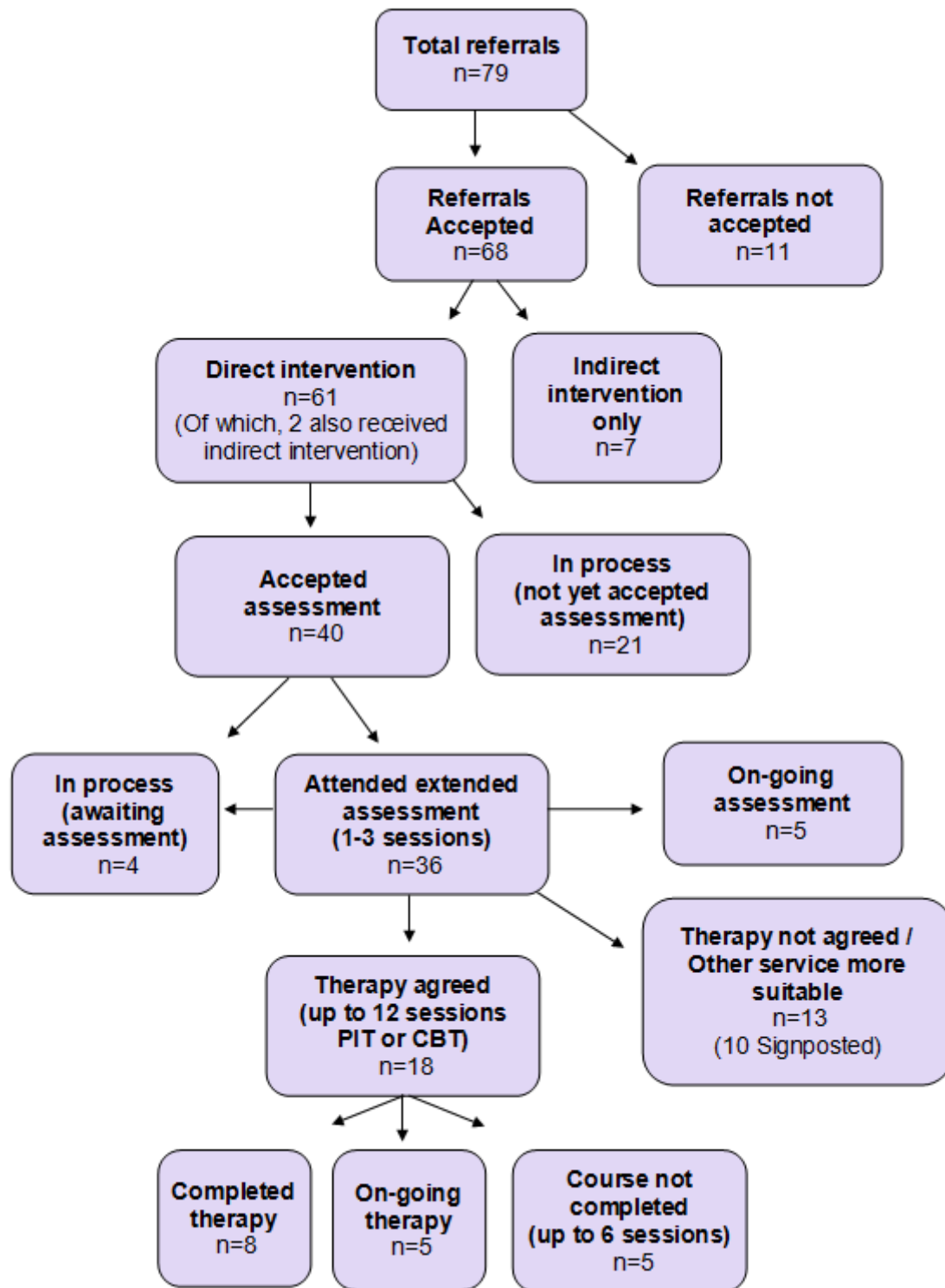
The process for arranging direct intervention assessments has been adapted over time to promote greater efficiency. Within the last 3 months, an opt-in procedure has been adopted, asking referred individuals to make contact and opt-in before an initial assessment is arranged. This adaptation has reduced DNAs for direct intervention assessments and thus therapists' time is more efficiently allocated to people ready to engage with the service.

Figure 2. Number of referrals to Complex Symptoms Clinic by patient ethnicity



61 (77.2%) people referred have been accepted for direct interventions: assessments and psychotherapy via the CSC, of which 40 (65.5%) accepted. Person-centred care is delivered through individualised assessment, formulation, intervention and post-intervention therapeutic letters (see Appendix 1 G). A small number of referrals (7, 8.9%) were suitable for consultancy, liaison and signposting provided by CSC clinicians to relevant healthcare professionals. See Figure 3 for further information.

Figure 3. Flowchart summary of CSC referrals



Training events have also been arranged by the project team to support the project through raising awareness of MUS and increasing appropriate referrals to the CSC. These also served as a form of indirect intervention, as they aimed to improve staff's

consultations behaviours in relation to people with MUS, yet its impact is difficult to directly quantify. 2 x ½ day events have taken place with 31 staff members total in attendance.

Outcomes include a range of PROMS, CROMS and PREMS, with pre/post measures for CSC direct interventions and narrative feedback (patient satisfaction forms, training feedback forms and discussions, referrer and patient semi-structured feedback interviews). See Table 2.

All pre/post therapy data is accessed by the clinical team in collaboration with service users, carers and or referring clinicians. Pre/post therapy measures in the main are validated instruments with the exception of patient, carer, referrer satisfaction and knowledge measures which have had to be individually tailored to the service, but have both face and ecological validity.

The total number of people having been referred is positive as have numbers attending for extended assessment however the rate of opt in to therapy is at chance, perhaps reflective of lack of preparation of the patient by the referrer and the perceived disconnect between psychological and physical experience. Thus the actual numbers at this stage completing a full therapeutic intervention is relatively low, despite encouraging data on their response and experience (see below). While this clearly limits generalizability and conclusions, it does suggest that implementing a novel, multi-specialty service is attainable in secondary care and that those who attend, even for assessment only may demonstrate clinical improvement.

Healthcare utilisation data is provided by our Commissioning Support Unit supported by an Information Sharing Protocol. We provide NHS numbers for each patient and they extract service utilisation and cost data from relevant healthcare systems.

CSU data is reliable to the extent that provider Trust such as Acute Hospitals record, collate and provide this information to commissioners in order to receive payment for their services however some limitations through information governance have limited comparison group costings, at this time.

Results – Complex Symptoms Clinic

With regards to the outcomes for direct interventions with the CSC, statistical analysis of pre/post intervention measures was completed for 8 individuals.

As the data were not normally distributed, Wilcoxon signed-rank tests were used to compare pre/post intervention scores. The results indicated improvements on all measures, including statistically significant improvements in somatic symptom severity (PHQ-15; $p=0.042$) and psychological distress (CORE-10; $p=0.043$) and neared significance on clinician-rated functioning (Karnofsky; $p=0.057$). See figures 4-11.

Table 2. Outcome measures listed in original application and those currently in use.

Outcome: Original Application	Measure: Original Application	Measure: Currently in Use
Improved Patient/Carer Experience and Satisfaction	<u>Post therapy:</u> ● Semi-structured interviews with patients and carers	<u>Unchanged, with added:</u> ● Patient satisfaction questionnaire ● Friends and family test.
Patient's Reduced Symptomatic Distress, Psychological Distress and Risk, Improved Wellbeing and Functioning	<u>Pre/Post therapy:</u> ● CORE-OM ● PHQ-15 ● WSAS ● CORE-10 Pre measures taken during initial assessment, post measures taken during final therapy session.	<u>Pre/ Post therapy:</u> ● PHQ-9 ● GAD-7 ● PHQ-15 ● WSAS ● EQ-5D-5L & VAS ● CORE-10 (Completed each session, used to measure suicide risk) ● Karnofsky scale (patient & clinician administered) ● MUS severity scale ● HONOS
Patient's Reduced Health Care Utilisation	Baseline from previous study, plus 12 month review using Commissioning support unit and hospital data focusing on costs of health care utilisation including: attendance, tests and procedures, admissions to hospital and GP consultations	Unchanged
Referrer & Hospital Staff's Improved Relationships/ Consultations, Satisfaction and Knowledge of MUS	Semi-structured interviews conducted with referrers	<u>Unchanged, with added:</u> ● Pre/Post training knowledge and skills questionnaire ● Post training satisfaction questionnaire ● Post-training narrative feedback (group discussion)

Figure 4. Graph of mean pre/post intervention anxiety scores

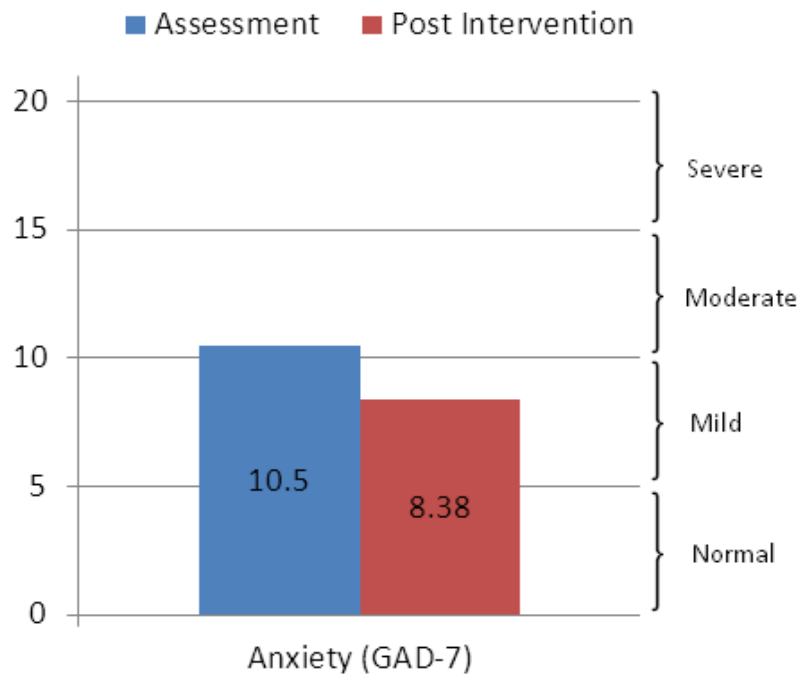


Figure 5. Graph of mean pre/post intervention somatic symptom severity scores

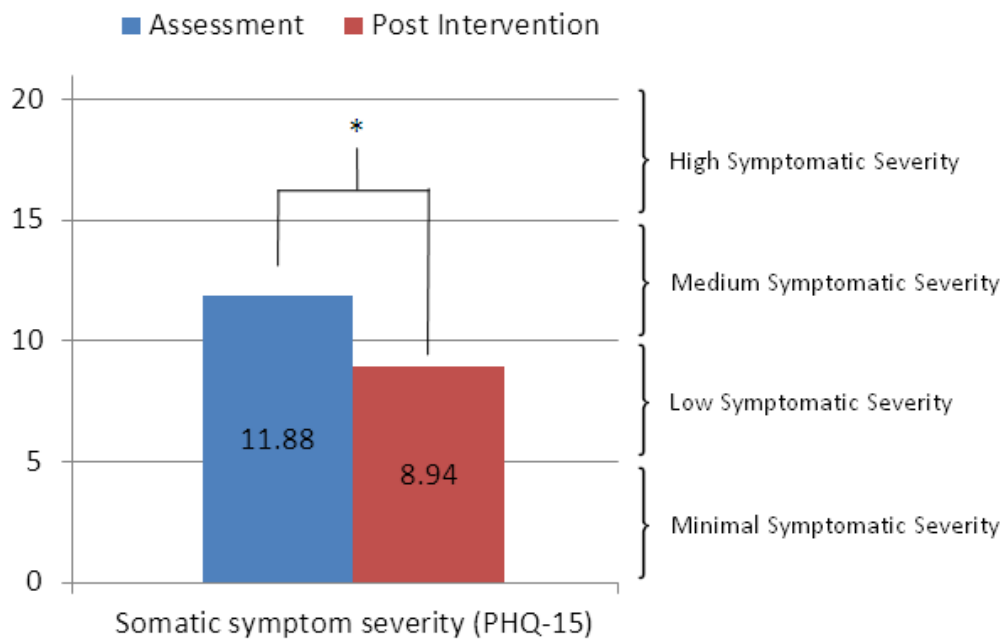


Figure 6. Graph of mean pre/post intervention depression scores

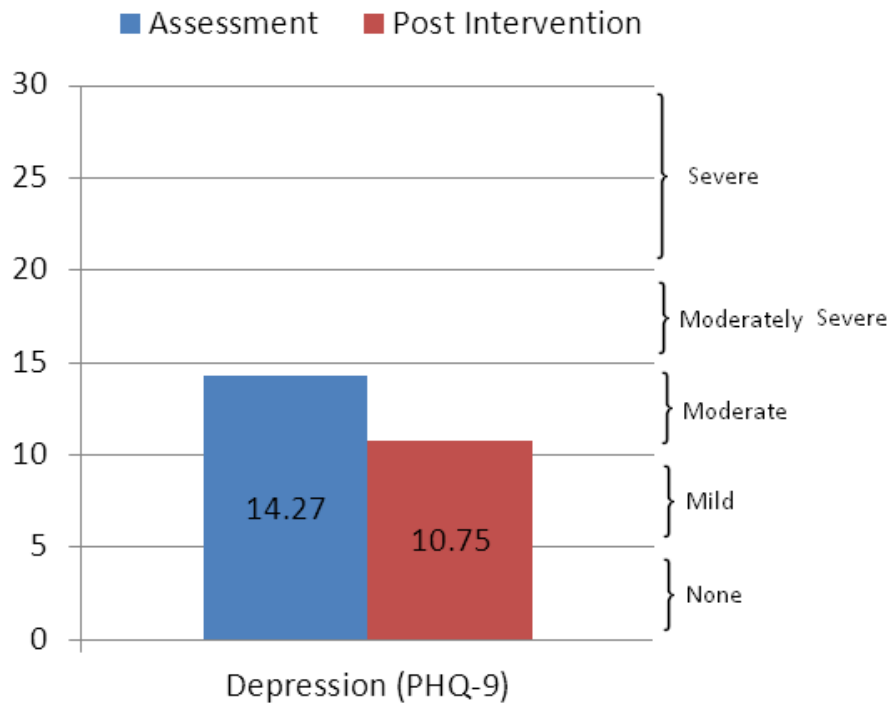


Figure 7. Graph of mean pre/post intervention psychological distress scores

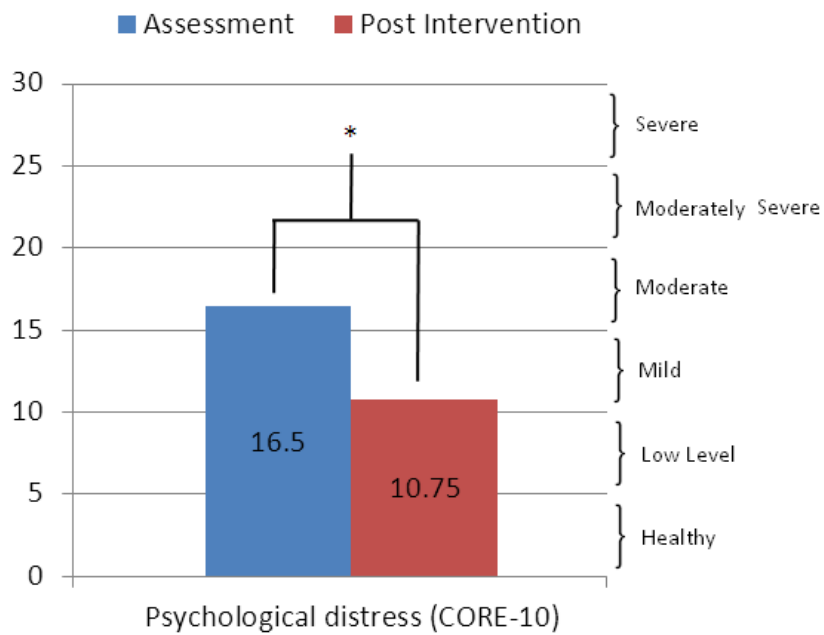


Figure 8. Graph of mean pre/post intervention functional impairment scores

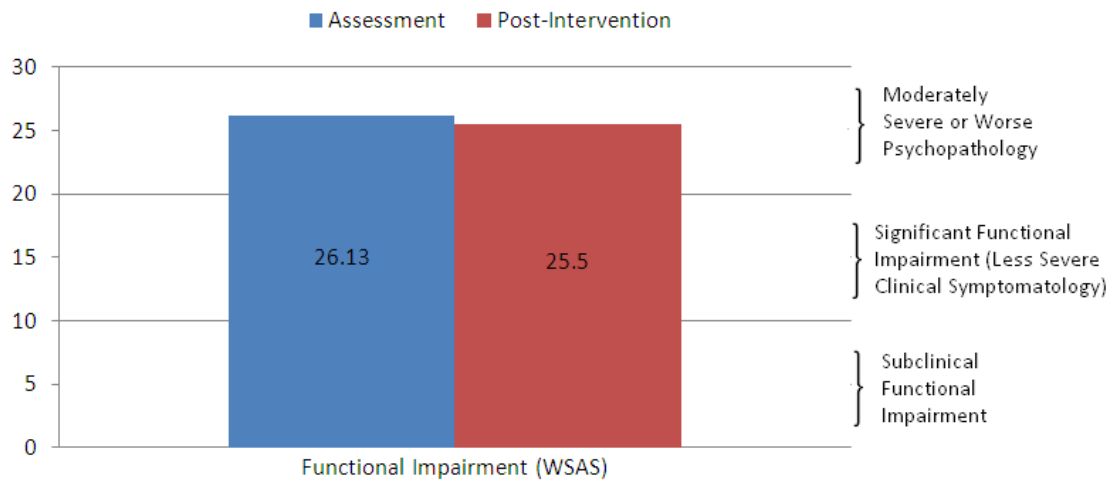


Figure 9. Graph of mean pre/post intervention health-related quality of life scores (within the domains of mobility, self-care, usual activities, pain/discomfort, anxiety/depression)

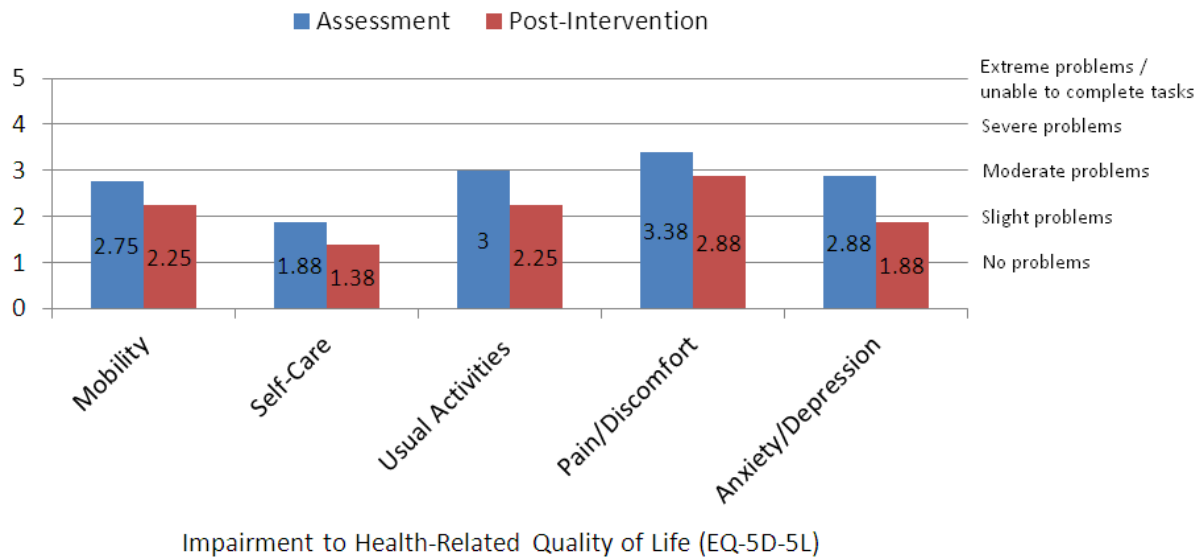


Figure 10. Graph of mean pre/post intervention patient-rated health status scores

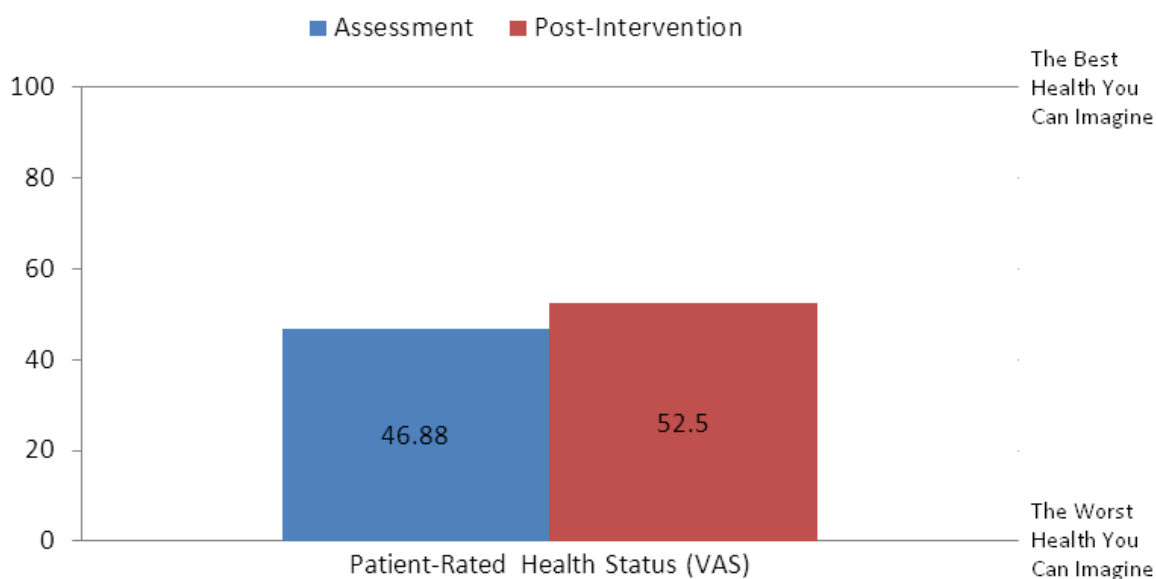
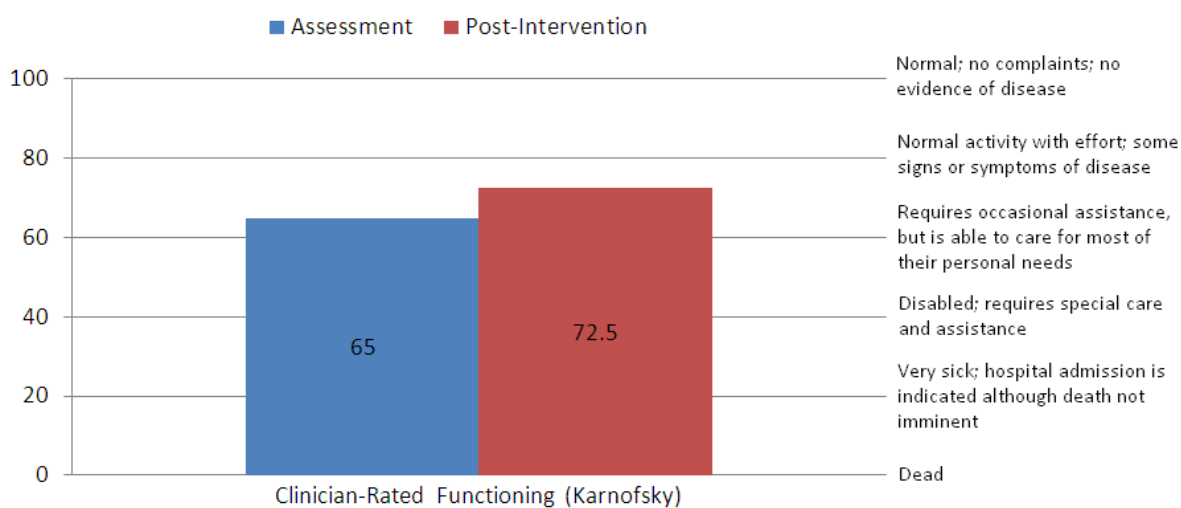


Figure 11. Graph of mean pre/post intervention clinician-rated functioning scores



In addition to these outcomes, two patients were rated by clinicians as having decreased in MUS severity following therapy on the MUS severity index (from 'severe' to 'moderate' and from 'moderate' to 'normal/mild'.)

These findings were supported by the qualitative data from patient feedback interviews. Semi-structured follow-up interviews were conducted with 23 patients

(and 1 family member) who were referred to the CSC for direct intervention. These were then analysed via thematic analysis (see Appendix 1 H for full summary). NB names have been changed in quotes, to protect confidentiality.

- **People reported that therapy led to an improvement in symptoms:**

“Talking to her [therapist] definitely helped and to be honest things have improved a lot. Yeah, I’ve not had any sort of episodes since December.” (‘Tasha’)

- **People reported that therapy led to a better understanding of symptoms:**

“I’ve never really understood what’s going on, I’ve always felt like I’m the only person in the world that’s got it and there’s no way of ever overcoming it. Whereas that has really changed, I see my body as having kept me safe from my mind ... I’m much more able to think ‘actually I don’t feel very well today and I’m not going to try and push it’.” (‘Helen’)

- **People reported that therapy led to improvements in wellbeing:**

“Things are definitely less black and white. I’ve become more accepting of things... I’ve had a long-standing issue with my dad, like forever, and that’s really changed... I feel like I’ve started to be able to be a little bit more assertive and accept my dad for who he is and what he’s done in the past and understand that I can still love him and be let down by him.” (‘Helen’)

- **People felt they were seen quickly:**

“She [the therapist] fitted me in really quickly ... Making the appointments was fine, no problem with that and the time I was given was a good time for me.” (‘Helen’)

- **Therapeutic letters were valued:**

“It was good to look back at something and have it there, all documented... I can show that to my husband and he can understand me a bit better.” (‘Tasha’)

- **Therapists were understanding and respectful:**

“She [therapist] was a great listener... and she could see what I was going through and so forth. Yep, so, on the caring side really.” (‘Penelope’)

- **People who attended assessment only found these sessions to be a beneficial intervention:**

“It gave me a clearer idea of where I could get more specific help for my condition. So I did get lots of really good information and lots of signposting and things like

that, which was really good.” (‘Isabelle’)

- **Many had a poor understanding around their initial referral to the service and the service’s aims:**

“He [referrer] just said that it was a new team that had started at the hospital and I could get counselling from the team” (‘Kate’)

- **Ambivalence toward the service and perceived lack of impact on symptoms were key reasons for people not pursuing assessment or therapy:**

“I don’t know how talking can cure it. If you’ve got a mental condition, you know, where you get all anxious and upset and depressed, talking and counselling can help in that respect. But that’s not, that’s not my condition. If you’ve got a broken leg you see a surgeon, you don’t need a psychiatrist....you don’t go to the gas man if you’ve got an electric problem.” (‘Paula’)

Examples are available to demonstrate anecdotally the specific process and impact of therapy (see Appendix 1 I).

Qualitative data was also collected from 10 referrers to the service regarding their opinions and experiences. Feedback was largely positive, with referrers noting the quick response times and the dearth of extant services to meet this need currently. Referrals to the service were said to increase clinician’s satisfaction with their work. Referrals were also not perceived to introduce big risks to decision-making, although it may influence clinician’s relationship with their patients. See below for more information and supporting quotes. See Appendix 1 J for full report, compiled by an independent researcher working with Collaboration for Leadership in Applied Health Research and Care (CLAHRC) West Midlands.

- **The MUS service provides a sought-after alternative to specialties, which lack ad-hoc training or personnel in psychology-related interventions and struggle to access other psychological services:**

“We roll-out [psychological interventions with] untrained nurses. For consultant psychologists in the trust, there’s a six months waiting list... [So, having] more access to psychotherapy with this [MUS] service is great... If you haven’t got a psychologist [to help you], you might as well have a cobbler sitting in on the clinic with you, really” (Nurse)

- **The service is perceived to increase the appropriateness of care for patients who are not high-priority in other services, but have disabling distress. Delays in diagnosis and therapy because of waiting lists generate complications, which the promptness of the MUS service can prevent**

“I don’t find [other services] useful service because their waiting list is so long... I think that you should make a diagnosis quickly, within six months of onset of symptoms [so that the patients’] chances of getting improvement are probably a lot better” (Senior Medical Consultant)

- **The MUS service does not introduce ‘big risks’ to clinicians' decision-making. Clinicians perceived limited risk in referring patients as they do so only when reassured that no organic cause is present. The clinicians refer patients with ‘clear’ psychological distress and follow up their treatment.**

“I refer patients [after] we run all the necessary tests [and] rule out [other explanations]... I don’t feel it substitutes me. Rather they deal with [psychological] problems... [If they] need to involve me, I’m here; and I ask for updates [regularly]” (Senior Medical Consultant)

- **The MUS might influence the relationship between the clinician and their patients once a referral to the MUS service is suggested. Patients might perceive that their pain is “not taken seriously”. The clinicians have implemented precautions to limit this risk.**

“To patients, I would say that [based] on the history of examination and those investigations we can really safely exclude physical disease. But that’s not to say that you’re not unwell... so [there is] a number of strategies we can look at [such as] the MUS service” (Senior Medical Consultant)

- **The MUS service increased clinicians’ satisfaction with their work, as it addresses ‘heart-sink’ patients, for whom they cannot otherwise provide a prompt solution**

“We have patients with considerable distress and we didn’t know how to address their problem... So, when we heard about this service, we were generally thinking ‘finally!’ It is a very different conversation [when] we can say: ‘I know you are in constant pain, and while we might not know yet the cause, we have experts that can help you managing the psychological distress” (Nurse)

Results – Training

The training was positively received by SWBHT staff. Of the staff who filled in feedback questionnaires (n=22), 90% indicated that they agreed or strongly agreed the training was excellent and all agreed or strongly agreed that they would recommend it to others. Analysis on the result of a pre/post training questionnaire indicated that the training had a statistically significant impact on improvements in the knowledge and skills of staff who participated.

This conclusion is supported by narrative feedback from the discussions, where staff members noted that the course had positively impacted their personal efficacy in terms of dealing with MUS. Staff also noted that there were still some limitations in their skills and abilities when dealing with MUS patients, however, this was

recognised as to be expected given the difficulty of working in this area.

The training discussions also highlighted the importance of good communication between professionals and with patients. Previous difficulties and positive ways forward were identified with regards to this. The importance of considering the training content with respect to an individual's unique job role was another issue raised during the discussions. This was also mentioned on the training feedback forms – with more guidance on applying the information to specific individual's job roles or work environments (e.g. in the community) being requested as a potential improvement to the training.

Specific quotes from training feedback forms include:

- *“I don't feel powerless, I feel like I've got more strategies to build on what I already know and what I'm already doing and I understand why that works more.”* (Clinical Nurse Specialist)
- *“Great tips, presentation was extremely useful, Brilliant!”* (Junior Doctor)

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See Appendix 1 K for full training report.

Part 3: Cost impact

Service utilisation data are important for connecting the patients accessing the MUS service with the type and amount of acute hospital services that have been used. As there are no geographical bars to service access patients will be registered with GPs from across Birmingham and potentially the wider West Midlands area. It has been agreed that an analysis of primary care utilisation will not be undertaken. Rather service utilisation will focus on analysis that can be achieved through the analysis of Hospital Episode Statistics (HES) data by the local CSU. This should help us consider general service use attributable to patients across the whole health economy. In addition to service utilisation data outlined below, our key cost measures include MUS service provision costs and service implementation costs:

Table 3. Service utilisation data

Data	Data Source	Collection Frequency
Unique identifier (NHS No)	Patient records	12 months pre and post programme
Number of ED attendances	HES data	36 months pre and post programme
Number of ED attendances resulting in admission	HES data	36 months pre and post programme
Number of hospital admissions	HES data	36 months pre and post programme
Average length of stay per episode (Range: SD)	HES data	12 months pre and post programme**No data yet
Number of investigations	HES data	12 months pre and post programme**No data yet
Number of different specialist services	HES data	12 months pre and post programme**No data yet
Number of outpatient attendances	HES data	36 months pre and post programme

There is not currently a service for MUS patients and only Pain Management has dedicated psychological expertise currently embedded in the specialty. Pre-costs that we will be calculating are those of acute hospital service utilisation, as above for both the MUS referred people (Table 4) and those identified by the CCI process (Table 5). Table 6 presents costs associated with service delivery for 1 year. At the time of writing, the CSU were unable to provide costs for our proposed comparison group (e.g those identified as high service utilizing but without MUS) due to information governance issues, which we hope to address and overcome in the future.

Table 4. Table indicating healthcare utilization costs for referred individuals 3 years prior to MUS referral.

Acute NHS activity		Admitted In-patient		Out-Patient attendances		Totals		Average per person	
A&E	Count	Cost	Count	Cost	Count	Cost	Count	Cost	
Direct Intervention (n = 36)	248	£31,488.00	143	£122,984.84	807	£85,140.82	1234	£239,613.66	£6,655.93
Indirect Intervention (n = 7)	147	£17,627.00	83	£164,078.64	136	£17,196.11	366	£198,901.75	£28,414.53
Waiting list for intervention (n = 25)	196	£23,057.00	116	£125,909.47	386	£49,325.87	698	£198,292.34	£7,931.69
Referral not accepted (n = 11)	80	£7,964.00	36	£34,590.39	206	£26,060.45	322	£68,614.84	£6,237.71
Grand Total	707	£80,136.00	378	£447,563.34	1535	£177,723.25	2620	£705,422.59	£8,929.40

Table 5. Table indicating healthcare utilization costs for those identified by Complex Case Identification process 3 years prior to service set-up (Oct 2012 – Oct 2015).

Acute NHS activity		Admitted In-patient		Out-Patient attendances		Totals		Average per person
A&E	Cost	Count	Cost	Count	Cost	Count	Cost	
Identified as meeting MUS caseness (n = 45)	£37,662	343	£267,968	1671	£206,904	2296	£512,534	£11,389.64
Identified as possible MUS (n = 19)	£10,950	96	£153,506	1061	£102,539	1265	£266,995	£14,052.37
Grand Total (n=64)	£48,612	439	£421,474	2732	£309,444	3561	£779,529	12,108.14

We calculated the cost of the service delivery over 12 months by recording clinician input, venue and travel costs required for the service throughout the pilot.

Table 6. BMUS Service Delivery Costs

	Senior Clinicians	Therapists	Facilities	Admin/Research Assistant	Totals
Weekly	£219.18	£462.42	£117.69	£265.36	£1064.65
Annually	£11,398.00	£24,046.00	£6,120.00	£13,799.00	£55,361.80

Our project aims to reduce costs of MUS patients to the healthcare system and we aim and expect to demonstrate reduction in acute hospital service utilisation 9-12 months post MUS intervention.

The figures presented by the CSU offset against the relatively 'cheap' cost of delivering the MUS service appears to support the case for need and service continuation. Certainly the team will only become more adept at delivering training, consultation and interventions with this complex group of costly patients and therefore the service warrants further continuation funding which we will actively seek.

We aim to continue to work with commissioners and acute hospitals to ensure any cost savings are reinvested to provide an MUS service. The service could ultimately be commissioned and paid for by our local commissioners and/or through our local Acute Hospitals. Indeed rather than the old model of commissioning of psychological services by individual medical specialties, this current model promotes economies of scale and the potential for an 'accessible to all' specialist service which could prove both effective clinically and financially palatable.

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Part 4: Learning from your project

- Complex Case Identification

While we have established a methodology for this it took much longer to achieve than anticipated and we were thus unable to intervene more assertively with this cohort. What is clear is that the MUS and 'possible' MUS people are responsible for more activity and associated costs than clinician identified people. The learning re the complexity of securing information sharing, working across IT systems and refining the methodology is valuable. In this, the outstanding contribution of Dr Lavalée (ST6) in leading on CCI is noted, especially as he had such limited special interest time to devote to the project. Optimising on relationship building e.g with Medical Directors/Caldicott Guardian by project team members, and Dr Paul Turner in particular, helped secure set up. We have established modest inter-rater reliability on case detection and moved closer to identifying a procedure which could be potentially valuable in case identification. We were not successful in intervening more assertively with the cohort identified however we will advise their treating clinicians of our findings and provide good practice guidance on MUS consultation management. While opportunistic, this cohort may provide a useful comparison group in terms of exploration of costings of MUS cases, provide a 'case for need' for service continuation/development and serve to promote engagement with medical specialties who have not engaged with us so far e.g. Urology but new information governance challenges from CSU have limited our ability to report on this at this time.

- Embed specialist expertise in an acute hospital, working across medical specialties to create a new care pathway based on patient need. Including:
 - d) Access to evidence-based psychological therapies (Complex Symptoms Clinic).
 - e) Consultation and liaison to the acute hospital.
 - f) Education and training for secondary care staff in managing MUS.

We have been most successful in these areas above as demonstrated. Referrals increased as awareness and confidence in the service built. While direct intervention dominated in service provision we would have liked to have had both more time and senior clinician resource dedicated to more consultation work, particularly in light of the enormous costs associated with this group. Additionally we were unable to fully 'sit alongside' our medical colleagues as was our aim. While we did achieve several joint consultations we wanted to be both physically and psychologically more joined up with our acute colleagues however consulting space was a challenge to secure.

In summary our key learning has been that despite robust planning services will take longer to set up than anticipated and referrals will be slower than expected when a new service launches. Our impact to date has been the provision of a new service which has been well received by patient and clinicians as evidence by referral numbers and low level of patient DNA's i.e. we have offered 179 appointments and had only 52 DNA's total – for assessment and therapy (22%). 7 of these DNAs were people who did not attend their first appointment or any subsequent appointments.

- Evaluate the quality, cost and effectiveness of the service.

Quality

While the numbers are small, the evidence of qualitative feedback supports the assertion that we have delivered a very high quality and needed service which is well regarded by both referrers and service users. We are now in a position to start to engage service users which until now we have been unable to do. A further driver to support continuation funds application.

Cost

Costly cohort – it is too early to say whether case identification or CCS has had an impact on current and future healthcare utilisation. Additionally the impact of training on clinicians behaviour would be difficult to quantify however, there are no extant specialist services or pathways and few specialty specific services within SWBH currently. Cost of commissioning specialist psychological practitioners could potentially be mitigated across specialties – minimising per specialty financial commitment, while simultaneously reducing costs for expensive patients and improving quality for an often stigmatised population. It is too early to say whether we have been able to offset cost of service delivery with TAU/doing nothing however continuation funds would allow an enhancement of cost quantification and retain the momentum in service delivery.

Effectiveness

Similarly it is too early to draw substantive conclusions as to our clinical effectiveness however we have succeeded showing a reduction in associated psychological and physical distress across measures the degree to which this generalises and influences healthcare utilisation remains to be seen. We have been successful in providing an accessible, acceptable, valued and potentially cost effective clinical pathway in acute care. We have potentially developed a useful way to identify complex and costly people and delivered valued training to frontline clinicians.

Words: 707

Part 5: Sustainability and spread

We would welcome conversations with the Health Foundation in relation to additional funds to support the following with regard to sustainability and impact analysis. Our key challenges relate to service continuation and follow up data. The CSC will continue until the end of December 2016 and we are actively engaging with commissioners and acute colleagues now regarding sustainability. The therapy work planned or in progress will continue until then, allowing continuity of service provision (albeit scaled down) and fuller and more robust numbers on which to base a more robust clinical and economic evaluation. This will also ensure that we avoid incurring duplicate implementation costs by stopping and restarting the clinical service. Our research assistant will continue in post and will support the preparation for publication on the complex case identification work and further evaluation, write up and dissemination of our work, learning and outcomes.

Our sustainability plans time with commissioning cycles and consist of the following:

- **Raise at local commissioning meetings throughout the project.** This is already being achieved through two of our project board members, our CCG representative who is also a lead for mental health commissioning and through our Project Director, both of who attend the relevant meetings as part of their core roles.
- Present evaluation evidence from September 2016 onwards beginning with a launch event, followed by relevant commissioning meetings to begin conversations with the aim of ensuring commissioned services are in place from April 2017 at the latest.
- **Highlight at regional and national finance or commissioning related network meetings.** This has already been achieved via presentations and updates at the West Midlands Commissioning Network via the WM AHSN and at the Healthcare Finance Managers Association- Mental Health section via our project board members. This will need updating as we obtain hard evidence of outcomes, service utilisation and cost impact.

In order to spread this innovation beyond the Innovating for Improvement award sites we will utilise the support of the West Midlands AHSN networks. AHSN's were specifically commissioned via NHS England to support the adoption of innovations at scale and pace. A plan will be produced in relation to this in the coming months. Links with the WMAHSN include funding provision for other parts of our Birmingham MUS project, e.g. training and a project board member with a dual role as the WMAHSN Mental Health Programme Lead.

In addition to the activities noted below we are fortunate to have several highly influential people at both local and national level who are expert and committed to improving MUS, within the project team. This has ensured our project is known about and discussed in both a planned and opportunistic way. We are well networked and have been, and will remain, active in presenting posters and presentations at both mental health and physical health conferences and special interest groups. For

example we are currently preparing an abstract for submission on MUS with Gastroenterology for conference thus ensuring integrated working and maximum audience reach. In addition two of our project team, Dr Simon Heyland and Dr Mahnaz Hashmi, have contributed the development of Commissioning Guidelines for MUS due to be published imminently thus ensuring our commissioning conversations are highly informed and guided by best practice. We have strong links (via our RAID services) in every other general hospital in Birmingham therefore the potential for spread. Furthermore, we are networked with local IAPT and clinical health psychology services through Dr Amanda Gatherer.

The greatest challenges to embedding our innovation are:

- Current lack of economic evidence to support establishment of a service however this is only in the short term as people are followed up and more numbers complete therapy.
- Parity of esteem?
- Austerity

Milestones and key activities beyond funding include:

WMAHSN Reporting deadlines

Economic Analysis – a fuller economic appraisal is required but cursory analysis suggests we can provide a cost efficient service for high cost patients which is well received and valued by both referred and referrer.

Presentation to SWBH board planned for October 2016.

Submission of proposal to SCCG in Autumn 2016.

As detailed above, we have key personnel from medicine, psychiatry and psychology involved in the project team and they are well networked and have presented at the following:

RCPsych conference presentation (2015)

WMAHSN annual conference presentation (2016)

RCPsych Liaison Annual Conference poster (2016)

BSMHFT R&I Conference poster (2016)

Health Finance Managers Association Mental Health Forum conference presentation (2016)

SWBH 'Best Innovation' for MUS clinical team lead, Dr Eliza Johnson (Oct 2016)

Appendix 1 A: Service Promotional Poster



Promotional
Poster.pdf

Appendix 1 B: Information Leaflet for Clinicians



Clinician Leaflet.pdf

Appendix 1 C: Information Leaflet for Patients



Patient Leaflet (print
layout).pdf

Appendix 1 D: Intranet Site Plan



Intranet Site
Plan.pdf

Appendix 1 E: Service Specification



Service
Specification.docx

Appendix 1 F: Complex Case Identification Draft Functional Analysis Report



Complex Case
Identification Functioni

Appendix 1 G: Therapeutic Letter Example



Example Therapeutic
Letter.docx

Appendix 1 H: Patient Feedback Thematic Analysis Summary



Patient Feedback
Thematic Analysis Sur

Appendix 1 I: Patient Vignettes



Patient
Vignettes.docx

Appendix 1 J: CLAHRC West Midlands Report (including summary of referrer feedback)



CLAHRC
Report.docx

Appendix 1 K: Training Report



Training Report.docx