Core24 Multi-professional Liaison Mental Health Training Programme

Development, implementation and evaluation

7/31/2019

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Team contributions:
The Collaborative was first formed and the application led by Dr Gary Lamph (formerly University of Salford) and Dr Claire Bullen Foster (North West Boroughs Partnership NHS Foundation Trust).
The project in its delivery has been expertly led by Lisa Bluff and strategically by Celeste Foster and the evaluation has been led independently by Professor Alison Brettle, all of the University of Salford.

Table of Contents

Acknowledgements 0

List of Tables and Figures 4

Introduction 5

Background to Core24 Multi-professional Liaison Mental Health Training Programme 5

Programme Development 5

- Objectives 6
- Programme Team 6
- Programme Design 7
- Delivery 8

Programme Evaluation 11

- Data collection and analysis methods 11
  - Demographic, attendance and engagement data 12
  - Pre and post course evaluation 12
  - Follow-up data 13
  - Data synthesis 14
- Ethics and governance 14

Programme Evaluation Results 15

- Demographics 15
- Student, engagement, attendance and attrition 16
  - Face to Face learning 16
  - Virtual Learning Environment 17
- Participant evaluation of the programme 17
  - Effect on perceived confidence and competence 18
  - Impact of learning on practice 21
  - Strengths and weaknesses of the course 22
  - The Setting for Learning 22
  - The opportunity to network with other liaison practitioners. 22

The experience of clinical simulation 23
The resources and teaching experience 23
Subject specific comments 24
The impact upon the Practitioner 24
Future training needs 25
Follow-up data 27
Table 8: Follow-up Data Sample 27
Strengths and areas for improvement 27
Networking 27
Simulation 28
Subject area and teaching method improvements 28
Impact of Learning 28
Barriers to learning 28
Facilitators of learning 29
Future learning needs 29
Lessons learned from the training implementation 29
Delegate management and recruitment 30
Partnership approach has been a cornerstone of the success of the project 30
Changes to the structure of the programme and the learning day 30
Discussion 31
Conclusions and Recommendations 34
References 36
Appendices 37

List of Tables and Figures

Table 1: Staff involved in Programme Development.. 7
Table 2: Education Programme 10
Table 3: Data collection and analysis 12
Table 4: Geographical Spread of Delegates Invited to Participate 15
Table 5: Occupation... 15
Table 6: Time Working in LMH 15
Table 7: Participants Perceived Competence Across the Course (Means and Ranges)...... 17
Table 8: Follow-up Data Sample.. 27

Figure 1: Improvement by Cohort 18
Figure 2: Matched Improvement 19
Figure 3: Matched Improvement by Module 19
Figure 4: Matched Improvement by Tenure.. 20
Figure 5: Matched improvement by Discipline 20
Figure 6: Impact on Knowledge and Practice 21

Introduction

Background to Core24 Multi-professional Liaison Mental Health Training Programme

The Five Year Forward View for Mental Health (FYFV MH) highlighted the need for Liaison Mental Health Services (LMH) and pledged a commitment to invest in order to achieve CORE-24 models of care:

> *"By 2020/21, NHS England should invest to ensure that no acute hospital is without all-age mental health liaison services in emergency departments and inpatient wards, and at least 50 per cent of acute hospitals are meeting the 'core 24' service standard as a minimum"* (NHS England, 2016 page 34).

Whilst the standardised model and fiscal investment would address the national variation in services, it was acknowledged that this would not meet the needs of this workforce. Through growth and investment, the LMH multidisciplinary team was poised to expand to include professional groups that were unlikely to have gained exposure to the specialism within core training (e.g. Psychology, Occupational Therapy), in addition to the substantial recruitment of nurse practitioners required in order to staff the 24-hour service model.

Prior to national investment, where LMH services did exist, they had largely been established in the absence of a specific model or framework and consequently variation was vast. A review of LMH services across Cheshire and Mersey conducted by the North West Coast Strategic Clinical Network (Verma et al, 2016) identified a lack of compliance with national guidance regarding the minimum service specification across multiple areas including LMH specific supervision and training. Through this intelligence regarding local provision and in anticipation of the growth in services and workforce, Bullen-Foster and Verma (2016) developed a concept training matrix, specific to the needs of the multidisciplinary CORE-24 workforce.

Programme Development

The LMH Education Programme was established as an innovative project and partnership between clinical and academic partners; North West Boroughs Healthcare NHS Foundation Trust (NWBH) and The University of Salford to address the specific needs of the LMH clinical workforce. The project built upon the work of Bullen-Foster and Verma (2016) and aimed to support the significant investment in LMH by ensuring the multidisciplinary

workforce were equipped with core competencies, skills and confidence to deliver safe and effective care and ensuring standardisation and sustainability.

Objectives

Key objectives for development and delivery included:

- Develop training modules that reflect the core competencies required for the LMH workforce, in conjunction with national policy and guidance;
- Develop training modules that are relevant and transferable to clinical practice;
- Refine training modules via engagement of multidisciplinary LMH clinical staff and people with lived experience;
- Develop and deliver a training programme to meet the needs of the existing and emerging workforce to achieve the vision of the FYFV MH in respect of LMH and ensure the sustainability of services beyond 2020;
- Development and deliver a training programme to ensure a safe, compassionate, confident, competent and sustainable multidisciplinary LMH workforce;
- To facilitate learning outcomes with a wide reach; outside of the North West and across the national LMH workforce.

Programme Team

The project was developed as a North West-wide initiative that would transcend all regional Mental Health Trusts that provide LMH services; Mersey Care, Cheshire and Wirral Partnership, North West Boroughs Healthcare, Lancashire Care, Cumbria Partnership, Manchester Mental Health and Social Care Trust, Greater Manchester Mental Health Trust and Pennine Care. Whilst the primary aim of the training programme was to target the LMH workforce, the ambition was for this to have a wider impact upon the multiple Acute Trusts that host these services via the dissemination of skills and knowledge.

The programme team was established to reflect the collaborative clinical and academic partnership and involve multiple stakeholders. It comprised of clinical and academic leaders, academic developers and clinical and expert oversight groups that included multidisciplinary LMH clinicians and people with lived experience. The table below outlines the range of staff involved in the programme development:

Table 1: Staff involved in Programme Development

Academic Lead (Senior Lecturer with expertise in subject and pedagogic expertise)	*1*
Clinical Lead (Consultant Clinical Psychologist)	1
Academic staff (Lecturers/Senior Lecturers/Professor with expertise in subject, curriculum design, pedagogy and evaluation)	20
Trust Stakeholders (Assistant Director and Business Development Officer)	2
Clinical Reference Group (professionals)	8
Expert Reference Group (lived experience)	3

Programme Design

The programme was co-produced with academic stakeholders, multidisciplinary clinicians and people with lived experience, representing the backgrounds of those involved in the delivery, commissioning and recipients of the training. The development phase incorporated multiple levels of scrutiny to ensure that the modules were relevant and transferable to both clinical practice and the users of MHL services.

This involved:

1. Developing a preliminary module/session matrix via discussion between the Clinical and Academic Leads. The core competencies for the LMH workforce within clinical and academic frameworks were examined to develop a preliminary session matrix. The preliminary matrix ensured that sessions and content were mapped against key policy directives relevant to LMH; Liaison Mental Health Nursing Competency Framework (Eales et Al., 2014), Liaison Mental Health Service Guidance (NICE, 2016), PLAN Standards 4th Edition (Palmer et al 2014) and Mental Health Core Skills Education and Training Framework (DH, 2016). Session learning outcomes and detailed specification mapped to competency frameworks, are outlined in Appendix 1.
2. Reviewing the module matrix by the academic team
3. Incorporating frontline practitioner views. Two half-day face-to-face listening events were held across the North West Region. These comprised presentation of the matrix, a presentation by the commissioner (HEE) and table top discussions amongst the delegates. The qualitative data captured as part of the discussions was used to refine the module content, structure and delivery.

4. Incorporating views of the wider LMH workforce, service users, carers and Acute Trust practitioners. An online Twitter event was conducted via @WeMHNurses, a regular online discussion forum of mental health nurses with a national reach of over 1.6 million users. The discussion was held in an evening, at a time known to be popular with the forum users. During the discussion 47 participants engaged, generating 345 tweets. Others posted in relation to the topic before and after the event. Prior to the chat, an explanation of the project was posted and the discussion asked questions (and generated feedback) on proposed content, audience, impact and name.
5. Forming a Clinical Reference Group (comprising Liaison Clinicians who expressed an interest in participation following listening events) and Expert Reference Group (of service users) to provide feedback on each module.
6. Module preparation by academic team.
7. Reviewing modules by CRG, ERG and clinical lead to ensure clinical and user relevance.
8. Academic team Incorporating feedback into modules.

The programme overview was shared with NHSE North Region Liaison Mental Health Special Interest Group, the Greater Manchester and North West Coast NHSE Strategic Clinical Networks, the Psychiatric Liaison Accreditation Network (PLAN) and at the 2018 PLAN annual forum. An initial paper that provided the outline and rationale for the training programme, including design and development was submitted to The Journal of Mental Health Education, Training and Practice is currently under review.

Delivery

The LMH Education Programme delivery was designed to facilitate a blended learning approach that included both face-to-face and distance learning sessions to maximise engagement and learning across a wide geographical spread of delegates. Five days distance learning sessions were hosted by The University of Salford’s Virtual Learning Environment (Blackboard) and the five days face-to-face sessions were delivered on-site at the University of Salford’s purpose-built counselling and psychotherapy training facilities and clinical simulation suite. Face to face sessions comprised master lectures, small group skills development and the use of clinical simulation suites to deliver the environmental experience relevant to the specialism. VLE content was written by a subject expert for each session. Content was structured into a series of pre-reading, self-assessment activities, followed by a narrated lecture (using office mix or screen cast-o-matic) and supplementary interactive learning activities to support consolidation and application of learning.

The programme was made available to the North West LMH multidisciplinary clinical workforce, with 150 training places available to the eight NHS Trusts that span three Sustainability and Transformation Partnerships/Integrated Care Systems across the geographical footprint; Cheshire and Mersey, Lancashire and South Cumbria and Greater Manchester. Three cohorts each comprising 50 delegates were offered. Delegates within each cohort were mixed across the geographical footprint in order to encourage opportunities for professional networking, in addition to ensuring efficiencies for clinical services to release their staffing resource to attend via three opportunities for entry over a six-month period; Cohort 1 September 2018-November 2018, Cohort 2 November 2018-January 2019, Cohort 3 January 2019-March 2019.

The table below outlines the structure, delivery and content of the education programme. Full details on each module is provided in Appendix 1.

Table 2: Education Programme Overview

Session	*Session Title*	*Delivery Method*	*Content*
Pre-session	Introduction	DL	Introduction
Session 1	Assessment	FF	Bio-psychosocial assessment and care planning, standards and outcome measures
Session 2			
Part 1	Common mental health presentations	DL	Identification, assessment and understanding
Part 2	Liaison specific interventions & formulation	DL	Introduction to liaison mental health specific interventions and formulation
Session 3	Dementia & Delirium	FF	Detection, assessment and management of dementia and delirium within a physically ill population
Session 4			
Part 1	Self-harm & suicide	DL	Introduction to self-harm and suicide
Part 2	Psychosis & Personality Disorder	D	Introduction to psychosis & Personality Disorder
Session 5			
Part 1	Self-harm & suicide	FF	Differences between self-harm and suicidal intent, impact of attitudes upon patient experience
Part 2	Psychosis/ Personality Disorder	FF	Detection, assessment and management of psychosis within a physically ill population. Personality disorder assessment/ interactions and challenging stigma and misunderstandings
Session 6	Legal Frameworks	DL	Legal frameworks relevant to liaison mental health including MHA, MCA and DoLs
Session 7	Complex physical and psychological presentations	FF	Interface between complex physical and psychological conditions, working across the physical and mental health interface and using liaison specific interventions and formulation
Session 8			
Part 1	Substance misuse	DL	Presentations within an acute setting, physical and psychological effects of substance misuse
Part 2	Learning disability	DL	Specific needs of learning-disabled patients, reasonable adjustments and challenging behaviour
Session 9	Leadership, supervision, training and education skills	DL	Clinical leadership skills for MDT and acute colleague support, skills to develop and facilitate training, presentation topic preparation
Session 10	Clinical Simulation Day – Presentation, Interventions & reflections	FF	Presentation delivery, reflections on collaboration and supporting acute colleagues, next steps

(DL: Distance Learning, FF: Face-to-face)

Programme Evaluation

The evaluation and its analysis were developed, overseen and drawn together by a senior academic (Professor) who was independent of the programme development and delivery team.

The evaluation incorporated multiple methods including:

- Routinely collected cohort demographic and metric data
- Bespoke questionnaires to assess impact on confidence, competence, student satisfaction and training impact – using repeated measures design (pre post)
- Qualitative follow-up data collection from end of programme stakeholder event and online feedback
- Collation of learning from attending practitioners re: repeated key issues in practice
- Reflective learning logs from programme implementation to inform future roll-out and recommendations

Data collection and analysis methods

Table 3 outlines the methods of data collection and analysis mapped to each key outcome measure

Table 3: Data collection and analysis

Outcome Measure	*Data Collection Method*	*Data Analysis Method*
Cohort information	Recruitment data and demographic data from questionnaires	Descriptive, with use of data for inferential statistical analysis of any identified differences between sub groups (e.g. length of experience)
Student, engagement, attendance and attrition	Attendance monitoring, VLE/Blackboard engagement data	Descriptive statistics
Changes in self-reported confidence and competence	Pre, post questionnaire (quantitative)	Descriptive and inferential statistical analysis
Impact on practice	Pre-post questionnaire Quantitative and qualitative statements Qualitative data collection from stake holder events	Descriptive statistical analysis Thematic analysis
Strengths and weaknesses of programme	Post questionnaires - Qualitative Qualitative data collection from stake holder events Reflective learning log from course managers	Thematic analysis Use action research cycle to structure reflective analysis
Barriers/facilitators to learning and future learning needs	Qualitative data collection from stake holder events Soft intelligence/learning from delegates during programme delivery	Thematic analysis
Practice issues and priorities	Soft intelligence/learning from delegates during programme delivery	Anonymised data organised into repeated key themes

Demographic, attendance and engagement data

Data was collected from recruitment spreadsheet provided prior to registration, demographic data provided on the pre and post evaluation questionnaires, attendance registers and metric engagement data from the Blackboard Virtual Learning Environment. Data was collated and is presented using descriptive statistics below.

Pre and post course evaluation

Questionnaires (Appendices 2 & 5) were distributed at the first session immediately prior to the course at the last session immediately following training. The questionnaires were developed for the purpose of the evaluation and are based on the competencies and learning outcomes of the course, standard elements of University of Salford teaching evaluations and questions to assess the impact of knowledge on practice adapted from a validated tool (Grad et al 2008).

The questionnaire comprised Likert scales (1-10) assessing perceptions of knowledge, confidence and competence in 12 domains, reflecting the course learning outcomes and curriculum.

1. Biopsychosocial assessment and care planning including risk assessment, crisis plans, formulation
2. Identification, assessment and understanding of common mental health disorders
3. Liaison specific brief interventions
4. Dementia and delirium
5. Self-harm and suicidal intent
6. Psychosis
7. Personality disorder assessment and skills in working effectively
8. Legal frameworks relevant to liaison mental health
9. Complex physical and psychological conditions
10. Substance misuse (identification and management)
11. Learning Disability
12. Clinical leadership skills for educating

To gain an understanding of the programme's impact, delegates were invited to select impact statements that reflected how the programme had changed (or not changed) their knowledge or elements of their practice. To provide feedback for future programme development, free text feedback was sought on areas of the programme that they felt worked well and areas for improvement.

Quantitative data was analysed using descriptive statistics in Excel. Pre and post data were compared by the whole group, individual cohorts and by matched pair analysis where possible.

Qualitative responses were, categorised, providing frequency counts and ranked. They were then analysed using thematic analysis (Braun and Clarke, 2006).

Follow-up data

Qualitative data was also collected at follow up (at least 6 weeks after each cohort) using a range of methods to maximise delegate and stakeholder engagement. This included a follow up survey, with the initial intention of matching to previous survey responses (Appendix 6) and face to face methods (stakeholder events). Unsolicited email feedback was also received which followed the same themes as the above methods, so this was also incorporated. As each of these methods only generated a small data set, the surveys could

not be matched, stakeholder event attendance was low and all responses covered the same themes, the data has been analysed and presented as one set of qualitative data.

Two face-to-face consultation events were held. All delegates, members of the clinical and expert reference group, managers and members of the academic delivery team were invited. Events were held in two different geographical locations within the Northwest region, lunch was provided and a drop drop-in attendance method was adopted to increase the likelihood of staff on shift in clinical services being able to attend.

The main focus of the event was a celebration of the project. A summary report of the project was presented to by project staff (members of the academic team). This included a summary of the questionnaire results (below), followed by a café style round table discussion with a member of the project team facilitating the discussion or circulating between tables. The discussion at each table centred around four topics: Impact of training, barriers regarding the training, facilitating factors and future learning needs. Notes were collated on flip chart paper on each table, then fed back to the wider group by the facilitator.

Data synthesis

The findings from all the methods are synthesised below to provide integrated findings, learning, implications and recommendations for practice. Consultation meetings were held with Northwest Clinical Lead for Liaison Mental Health and the Health Education England programme Manager to contextualise the findings.

Ethics and governance

The evaluation strategy was scrutinised and approved via Salford University Research Ethics Committee (Approval reference: **HSR1718-110**).

Programme Evaluation Results

Demographics

Available data regarding occupation for each employing organisation was requested for MHL staff put forward to register for the course (N=145), however a complete data set was not provided. Across three cohorts 123 participants attended the programme (Table 4).

Table 4: Geographical Spread of Delegates Invited to Participate

Cohort	GMMH	North West Boroughs	Lancashire Care	Cheshire & Wirral	Mersey Care	Pennine Care	Cumbria	Unknown
C1	7	9	12	7	7	6	1	
C2	7	5	11	5	4	7	1	
C3	9	10	14	3	6	4	3	
Total	**23**	**24**	**37**	**15**	**17**	**17**	**5**	**18**

In Appendix 3, data regarding length of experience, age gender and ethnicity is presented from delegates who consented to take part in the evaluation (N=99), however there is also missing data within this set of responses, as some participants did not respond to every question even within the pre-test). The majority of those who completed were white British females of a mixed age range. Participating staff had a range of professional backgrounds with the largest group being Registered Mental Health Nurses (N=39) and the smallest social workers (n=1) and Psychiatrists (n=3). The largest group of participants were those fairly new to Liaison having worked in this area for less than 3 years (n=31), however a significant number of participants had worked in Liaison for between 3-6 years (n=19). It is not clear how representative these demographics are, either of the participants as a whole or the MHL workforce.

Table 5: Occupation

RNM	*Social Worker*	*Psychiatrist*	*Psychologist*	*Mental Health Practitioner*	*Support worker*	*Missing*	*Total*
39	1	3	6	11	1	38	99

Table 6: Time Working in LMH

Under 3 years	*3-6 years*	*7-10 years*	*10+ years*	*Missing*	*Total*
31	19	7	8	34	99

Student, engagement, attendance and attrition

A total of 145 delegates applied and were offered places, across three cohorts, running from September 2018 until April 2019; this is 97% of the training capacity available. Over the three cohorts, 123 delegates registered and attended, representing an 85% occupancy of the available capacity. Anecdotal feedback suggests places were not taken up due to service need changes, including staff changing jobs or an inability to release staff due to changes.

Face to Face learning

The face to face sessions were well attended, with an average 77% attendance per session. Across all three cohorts:

- 88% of delegates attended 60% or more of the face-face learning
- 65% of delegates attended 80% or more of face to face learning

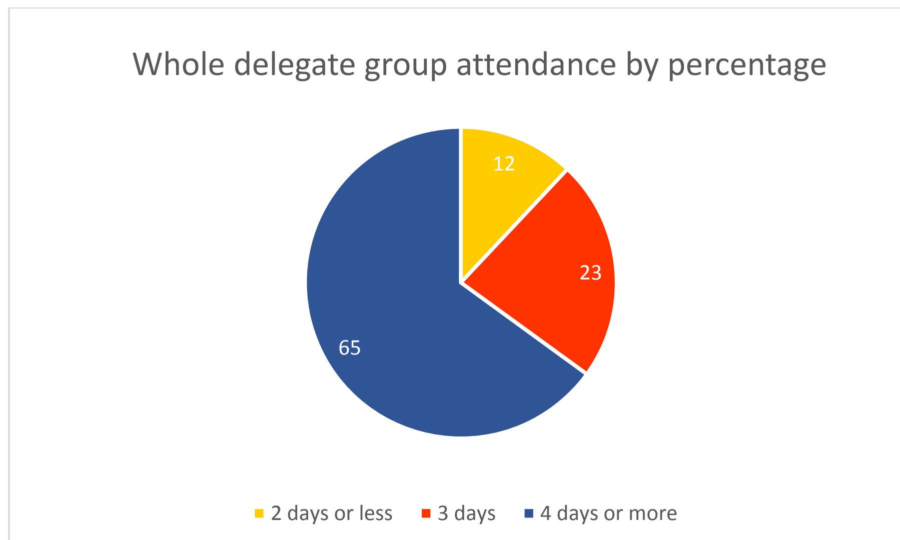

Figure 1: Delegate attendance

Breakdown by individual cohort mirrored the patterns seen across the whole group of delegates (+/- 5% variation).

Reasons for non-attendance were recorded as annual leave, maternity leave and clinical need meaning that a delegate could not be released on a particular day. The annual leave was particularly apparent within cohort one, where two days of teaching fell within school half term holidays (spread across different weeks throughout the region). This meant that for two dates in cohort one, there was below average attendance compared to the rest of the course.

High fidelity simulation days had the lowest rate of attendance across all three cohorts – range 56-62%. This reflects qualitative feedback from delegates: whilst many delegates found this element of the programme to be the most beneficial to them, other delegates identified clinical simulation as a training method in which they did not want to participate or that they did not enjoy.

Virtual Learning Environment

The majority of participants (n=107) engaged with the VLE materials and the distance learning training days. A small number of delegates (n=16) did not interact with virtual learning resources at all, whilst n=2 only interacted with the VLE resources around the first day of the course. Again, this reflects some of the qualitative feedback (see below).

Participant evaluation of the programme

Evaluation data (immediately prior to and immediately post) was completed by 99 participants (80% of all delegates), although not all completed the post test data. Matched pre-and post-data was available for 50 participants (40%). A full set of data tables are provided in Appendix 4. Participant's perceived confidence regarding their competence in the topic areas covered by the programme modules were assessed using a 10-point Likert scale (1= not confident, 10= extremely confident) immediately prior to the course and at the end of the last session. Overall confidence across each topic was relatively high prior to commencing the course; with means and range provided in Table 7 below. A small number of participants were extremely confident prior to the course, one self-assessed as 10 across all module content in the pre-test but failed to provide any matched follow up data. At the opposite end of the scale very few rated themselves as not confident across all modules.

Table 7: Participants Perceived Competence Across the Course (Means and Ranges)

	Mean Pre	*Mean Post*	*Range Pre*	*Range Post*
Assessment	8.2	8.2	3-10	4-10
Common MH Disorders	8.3	8.7	5-10	7-10
Liaison Interventions	7.4	8.5	3-10	5-10
Dementia/Delirium	6.5	8	2-10	5-10
SH/Suicide	8	8	4-10	7-10
Psychosis	7.7	8.5	4-10	7-10
Personality Disorder	7.2	8.2	1-10	4-10
Legal Framework	7.4	8.2	4-10	6-10
Physical & Mental	7.1	8.2	4-10	5-10
Sub misuse assess	7	8.1	3-10	4-10

Sub misuse treat	7.2	8.1	2-10	4-10
Learning Disability	5.5	6.9	1-10	1-10
Leadership & Education	7.3	8.2	3-10	1-10

Effect on perceived confidence and competence

On examining improvements by topic area, the results show a general improvement across all topic areas. However, the improvement per cohort was mixed, across modules and cohorts, with no cohort standing out as better or worse in terms of improvement; and no modules which saw similar or more improvements than others. When looking at tenure, those working in Liaison for less than three years or more than 10 years saw the most improvement; except for the modules on dementia and learning disabilities which saw similar improvements regardless of how long staff had been working in Liaison. The matched data also shows the largest improvement for the module on learning disabilities (over 38% improvement between the pre and post-tests).

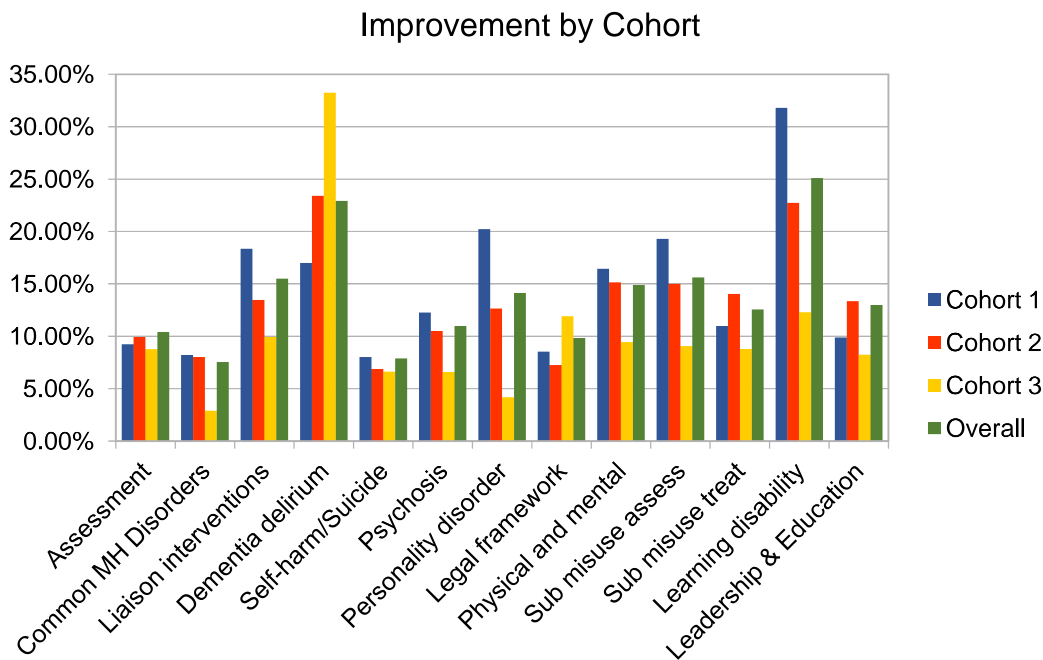

Figure 1: Improvement by Cohort

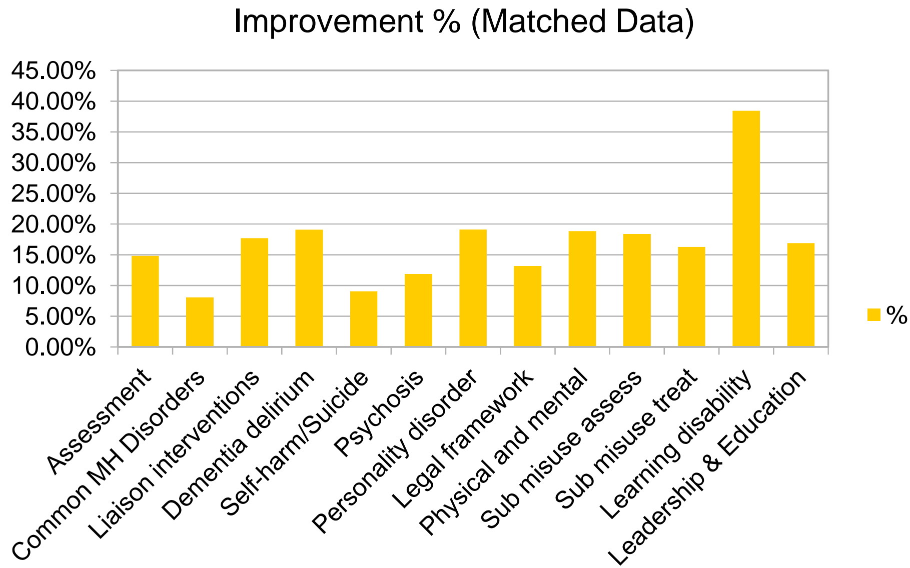

Figure 2: Matched Improvement

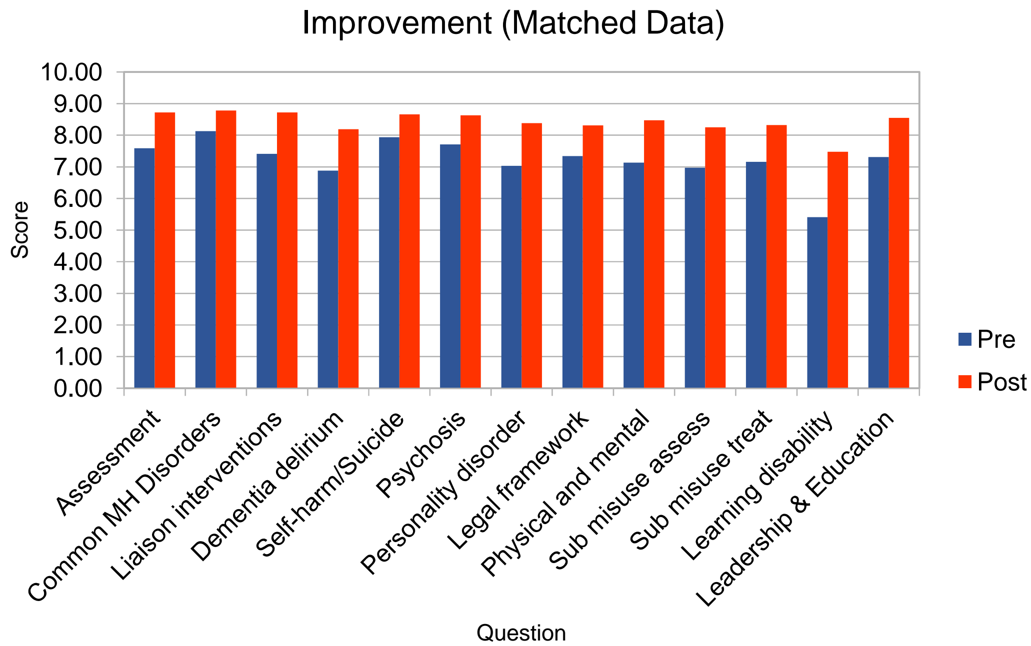

Figure 3: Matched Improvement by Module

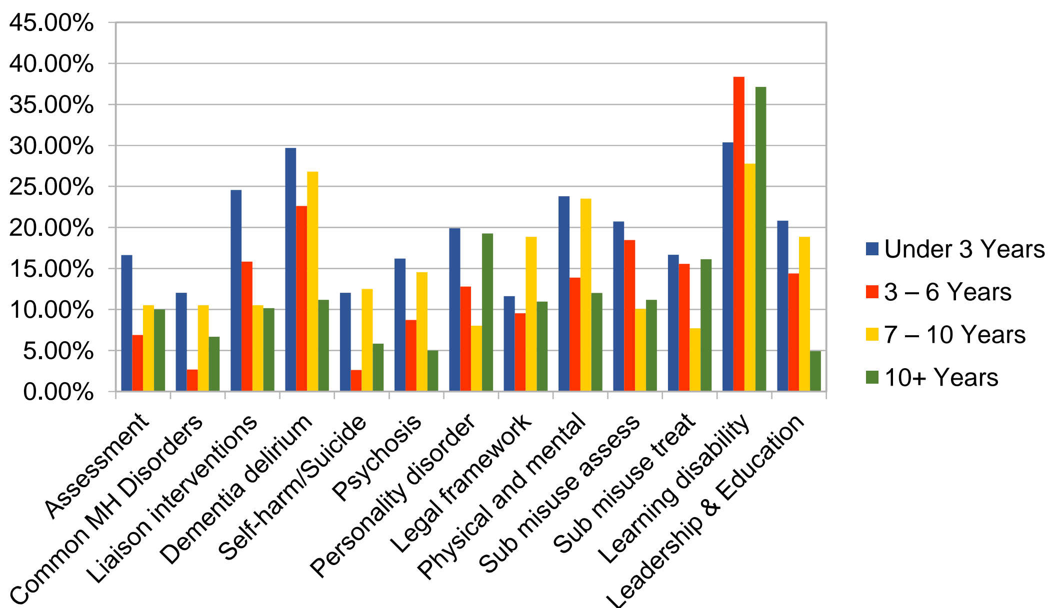

Figure 4: Matched Improvement by Tenure

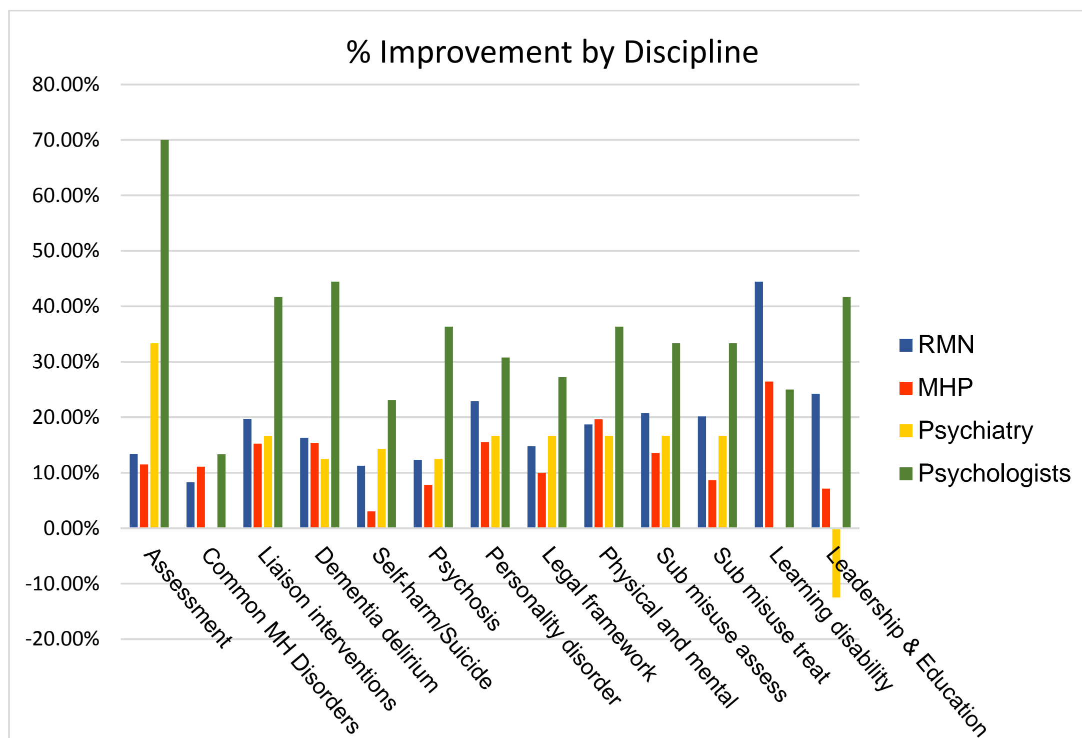

Figure 5: Matched improvement by Discipline

When the matched data was broken down by discipline some interesting variations appeared, although it must be noted that for some disciplines, such as psychiatry the numbers were extremely small (e.g. n=1, for matched data). Psychologists made the largest improvements across the board, whereas the spread across the other professions was more even, or only pronounced in line with what would be expected with the professional background. For example, it is not surprising that a registered mental health nurse or mental health professional would achieve small improvements in relation to common mental health disorders or self-harm as they would be more familiar with this topic due to their professional background and prior experience.

Impact of learning on practice

To gain an understanding of how the course had impacted (or made a difference) to the participants individual knowledge or practice, they were asked to complete a series of impact statements. Almost all participants learned something new; and for the vast majority of participants the course provided additional insights, reassurance and updated their knowledge or skills. A small number in each cohort changed their professional approach, approach to teaching, management or clinical approach as a result of attending the course. Only a small number (n=2) were dissatisfied by the course and none perceived that the course was “harmful”.

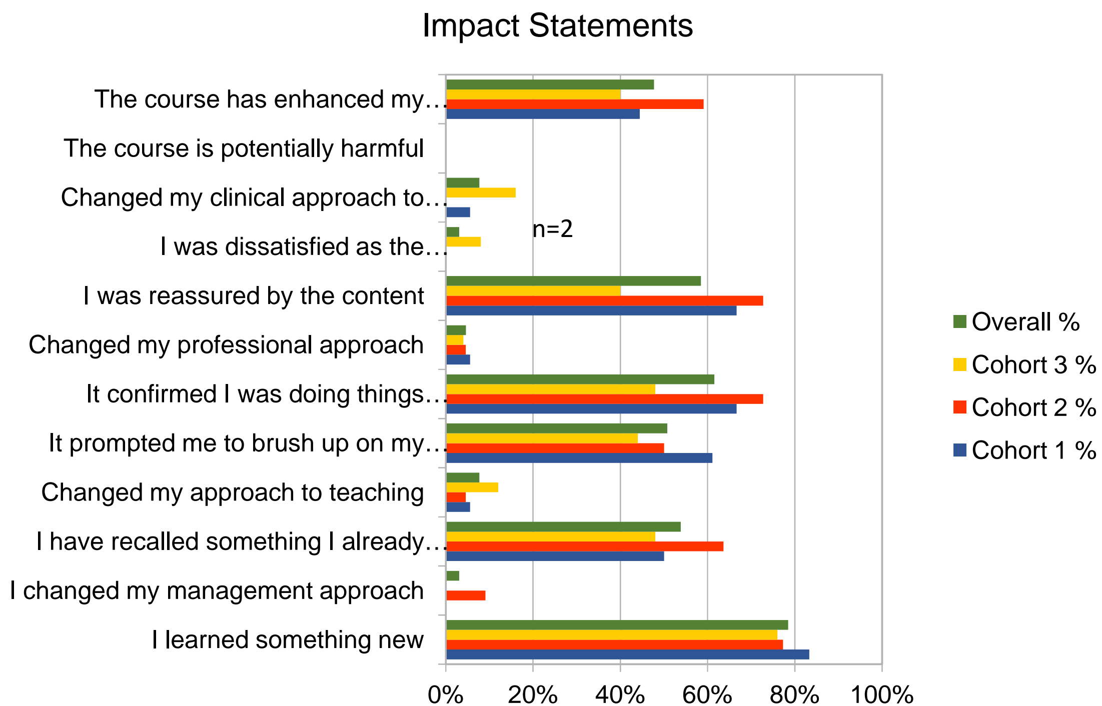

Figure 6: Impact on Knowledge and Practice

Strengths and weaknesses of the course

As part of the survey, delegates were asked to indicate 'three things they enjoyed' and 'three things that could be improved'. This generated six themes, which are highlighted in the figure below.

1. The Setting for learning
2. The opportunity to network with other liaison practitioners
3. The experience of clinical simulation
4. The resources and teaching experience
5. Subject Specific comments
6. The impact upon the practitioner.

Figure 8: Strengths and weaknesses of the course

The setting for learning

A small number of participants reported how having time to step away from the clinical environment to learn was of benefit, with a couple making reference to stepping away from the stress of the job and time to learn '*Time away from stress of job'* (Participant 65866).

Within the areas for improvement data, the venue and location of the face to face training days was highlighted as difficult, later start times were suggested as an area for improvement, delegates walking into sessions late was highlighted as disruptive and the cost of face to face attendance for some participants was felt to be excessive due to the location. Other areas highlighted were heating issues and free sandwiches.

The opportunity to network with other liaison practitioners.

This was one of the strongest themes to emerge and was driven by comments relating to the benefit of networking with other practitioners from other areas and trusts. Some of the comments were related to confirmation of good practice with statements such as a strength of the programme being that it allowed for *'Confirmation of areas of good practice within my area'* (Participant 67389) and also learning of shared difficulties in practice '*lovely group of people in class and it appears all have similar problems'* (Participant 67010). Whilst others identified how this opportunity to network, provided space to also learn from each other *'Meeting new friends, sharing experience and knowledge'* (Participant.67008). The opportunity to meet up with other liaison practitioners from across a wider geographical footprint and outside of their own Trusts appeared both via this data and from the experiences of lecturers to be something that was commonly reported as a real benefit of this training programme.

Within the areas for improvement data one participant suggested the need for the group work time not to become a moan fest and another highlighted the need for more boundaries to set the scene for group work. Others however highlighted the need for more time to discuss and network with colleagues. One participant felt that the networking should continue with the following suggestion *'Opportunity for all to return together to give collective feedback and to keep in touch via NW MHLT forum'*(Participant 67380), this was considered with this evaluation proposal however the follow up events were poorly attended.

The experience of clinical simulation

Of all the different learning approaches the clinical simulation sessions and particularly the final day was most frequently highlighted as a strength, with words describing it as 'excellent', 'realistic to real life practice' 'interesting' and 'fun' described *'Simulation good fun and scenarios realistic (well done guys :)'* Participant 67010). The anxiety that proceed simulation was described by a couple of participants '*I wasn't looking forward to the simulation day but I enjoyed this and it has made me look at things differently'* (Participant 67394).

However, in contrast several participants also highlighted simulation within the could be improved section of the evaluation, some of the participants did not enjoy this teaching method, describing it as unrealistic, *'Role Play is not helpful, false environment'* (Participant Unknown).

It seems that whilst a majority were in favour of simulation-based learning and there were several requests for more of it, that for a small minority of others this was found to be difficult and unhelpful to engage with.

The resources and teaching experience

The wide variety of teaching resources, teaching methods and lecturer approach and knowledge were all described within the data relating to the parts of training participant enjoyed. Many referred to the blended learning style and the blackboard distance learning. The delivery team were also mentioned as having a positive impact with personal mentions of lecturers and their content knowledge and mentions of lecturers being engaging and informative, *'Teaching style was relaxed but informative'* (Participant 65874).

Within the areas for improvement data, suggestions were made for lectures with the inclusion of people with lived experience, inclusion of acute trust colleagues alongside as delegates with one participant suggesting a session delivered by them and their work. Lecturers with Liaison experience was also a suggestion for improvement. The level of the content for some specific sessions (for example, the dementia and delirium session) was

critiqued by several as being too low level. However, there was significant variation in participant views about this, with other participants rating the same sessions as very good. This may reflect the composition of the group, with a large number of experienced practitioners, including some who had specific expertise with the later life age-group, as well as those relatively new to liaison. Some of the sessions were also criticised for having too much group time and others for not being sufficiently interactive which may be due to individual learning preferences and styles rather than the actual session content.

Subject specific comments

A variety of subject specific comments were made, with different participants enjoying different areas of training and conversely others not enjoying the same session. Although the comments are limited in the depth they provide it is possible that the areas identified as strengths were highlighted either dependant on the lecturer and delivery of the session or the participant's existing knowledge. More general comments about the content focussed on the benefits of this being pitched across the lifespan and particular benefit of also discussing younger persons approaches with many liaison services now covering a much broader age group, *'The first session there appeared to be a focus on CAMHS within discussions generated. This was helpful in a new all age liaison team'* (Participant 00075). All sessions taught face to face were mentioned by at least one participant as being enjoyable and those delivered via distance learning which received an enjoyable mention were the perinatal and drug and alcohol sessions.

Within the areas for improvements, there was a strong consensus that more attention, time and detail could be given to the following areas, dementia and delirium, personality disorder, psychosis and young people, learning disability, medications, and suicide prevention.

The impact upon the Practitioner

The main areas of impact were reported as refreshing knowledge and experience, with a particular focus on the theoretical knowledge, '*Learning new literature that's out there on liaison'* (Participant 67349). Reassuring best practice and skills development was also noted as was service improvement ideas, '*Ideas for enhancing practice'* (Participant 67389).

Areas for improvement included the need to make this a more accessible course for new liaison practitioners with one participant also valuing its worth for acute colleagues. Several however felt nothing should be changed and that they enjoyed this programme.

Future training needs

During the delivery of the course, discussions amongst the participants provided suggestions for to future training needs of the MHL workforce which fall outside the agreed specification of the programme. This includes:

The need for training on physiological investigations and laboratory results that can impact upon decision making regarding mental health assessment

This was highlighted by the Clinical Reference Group, prior to the course, and some directed learning materials were provided in response. However, feedback from practitioners attending cohorts one and two confirmed that this is a particular deficit for staff without a mental health nursing background.

The need for good practice principles and service level understanding of the mental health act and robust systems for implementation within medical wards (5:2 in particular)
Discussions suggested that this was being used increasingly to manage the tension between ward-based referrals and A&E based referrals, initiated by the acute trust medical staff, without full access to required documentation or understanding of the legal process. There is evidence of hospital-by-hospital variations but currently the problems are being mitigated by mental health liaison staff on a case by case basis.

The need to provide opportunities for shared learning between mental health liaison staff and acute care colleagues
Significant elements of delivery regarding best practice were well received by the delegates, but raised issues about implementation due to a lack of knowledge around medical admission processes, or when a mental health liaison practitioner has limited powers of escalation as overall responsibility for the episode of care belongs to the acute care trust (particularly in relation to complex physical and psychological presentations). Particular issues which also arose relate to the use of language and different attributions that are held by the acute care and mental health liaison staff to particular terms (e.g. medically-fit; meaning no further medical intervention required for medical staff versus physically recovered enough to be able to consent and participate in a full biopsychosocial assessment, for MHL staff). Shared learning opportunities amongst MHL and acute care colleagues was viewed as a means of overcoming these issues.

The need for ongoing supervision/action learning set- type activities across the region
Reflecting the qualitative survey results, anecdotally delegates overwhelmingly reported during classes regarding the opportunity and supportive nature of sharing frustrations, ideas

and experience of the role with other practitioners. MHLs are often making complex decisions in isolation or in pairs and valued the experience of sharing and learning with likeminded colleagues. At times, this presented opportunities for shared problem solving rather than simply sharing experiences, which was a particularly positive feature of the learning.

Follow-up data

Following the course, a number of methods of gathering data were used to solicit feedback, and initially to ascertain the impact of the course over the longer term. Due to the small numbers received (see table 8 below), the data has been analysed as one data set. Feedback from the small number of follow up surveys from participants, was broadly in line with the comments received from the previous survey completed immediately following the course. This included a varied range of modules which were enjoyed by participants. Feedback from managers whose staff attended the course was broadly positive, with suggestions for future ways forward, whereas academic staff delivering the course reflected on some of the practical aspects that related to delivery and provide a response to some of the comments where participants have suggested improvements could be made.

Table 8: Follow-up Data Sample

Stakeholder	***Number***	***Source***
Course Delegate	12	Survey, email
Liaison mental health service manager	2	Email, face-to-face
Practice-based project manager	1	Face-to-face
Academics delivering the programme	3	Face-to-face
Clinical and expert reference group members	0	Invited to face to face events
Total	**18**	

Strengths and areas for improvement

Feedback from both delegates and their managers was largely positive, with positive student comments echoing feedback from the earlier survey and managers wanting to send additional staff on future iterations of the course and use coursework in internal teaching events. Particular areas mentioned several times were networking and simulation. Networking was only seen as a strength, but simulation was seen as both a strength and an area which could be improved.

Networking

The most commonly cited strength of the course was the opportunity to network with colleagues from different services and professions. One participant summed the experiences when they said "*I particularly enjoyed the networking aspect of the course, it's easy to think you work in isolation and no-one faces the same issues as you do!"* This view was echoed by others with respondents stating "*I found the course to be enjoyable, particularly meeting other liaison practitioners"*. Similarly, a service manager whose staff had attended the course asked "*could a MHLT forum be set up for all attendees to participate in*?"

Simulation

As in the post-test survey, the views on simulation were mixed. Some delegates enjoyed the Clinical simulation on the final day but some found the skills sessions on taught study days difficult to engage with and would have preferred less role play.

Subject area and teaching method improvements

Subject areas where more information was requested echoed the feedback from the earlier survey and highlighted autism, dementia and learning disabilities as topics that needed further development. In terms of methods of teaching feedback was also mixed, probably based on participants preferred styles of learning. One participant wanted more practical and more knowledge-based information, others wanted more structure and sessions whilst others wanted more opportunities to talk and do group work.

Impact of Learning

As in the post test, most of the participants who completed the follow up survey indicated that they had learned new things, recalled something they knew already or were reassured by the content. This was further reinforced by one participant who suggested the course had "*highlighted the importance of the academic and evidence base underpinning of the work we are doing*" and another who suggested "*I think the course is currently more relevant for newly appointed Liaison practitioners who… would come away feeling more equipped and therefore confident to deal with some of the challenges that come our way on a daily basis*!"

One of the aims of repeating the survey after 6 weeks was to gain an understanding of whether changes had been maintained or had happened over the longer term. Small numbers (similar to the post test) confirmed that they had changed their management approach, teaching, professional approach or clinical approach. However, it is not known whether these are the same participants who completed the post-test.

Barriers to learning

The barriers to learning included technology, in particular the VLE. It was noted that this was difficult for those not used to online learning, and time needed to be built in by the programme team to help some learners use this resource. Another participant suggested that the VLE was good for a refresher but not a good substitute for face to face learning.

Time was another barrier, it was hard to ring fence time in an urgent care setting to undertake online learning days, and for those attending face to face sessions, the time taken to travel and then attend a long session was also problematic.

Finally meeting the needs of all delegates all of the time was a challenge, as previous experience, discipline and learning style mean that everyone needs something slightly different

Facilitators of learning

Participants highlighted a number of facilitators to learning. This included the knowledge, interest and friendliness of the staff and content of the course which was noted in comments such as "*very enjoyable and useful from a non-nurse perspective*" and *"I felt that given I was part of the first cohort for this course it covered the basics of liaison psychiatry well*" and "*Sequence of subjects and build-up of content was coherent and facilitative of learning (both face-to face and VLE)*". Simulation was also highlighted as a facilitator - especially the simulation day at the end for consolidating learning and in relation to time and content it was felt that "*shorter days, days when there was greater discussion, problem-based learning or skills practice were the most effective*"

Future learning needs

The future learning needs highlighted as part of the follow up data collection, echoed comments collected from feedback earlier in the course. In particular this related to the need for acute Trusts or nurses and other disciplines in acute medical settings and A&E to attend the course as well as the course providing opportunities for MHL and acute colleagues to work together on shared problems and challenges. In terms of modules or topics that also need to be addressed, eating disorder management in acute/urgent care was highlighted as well as more in depth and longer training for children and adolescent topics and dementia.

Lessons learned from the training implementation

Three key areas of learning from the process of delivering and managing the programme were identified by the academic and practice leads for delivery:

The need to design strategies to maximise attendance for a workforce who are located in urgent care services that must be covered no matter what and working shift patterns.
Strategies that were effective within this programme included:

- Using reserve lists when cohort capacity was technically reached (expecting that a proportion would not be able to attend due to changes)
- Flexibility, enabling delegates to join later cohorts to catch up on sessions that they had missed due work demands.

Delegate management and recruitment

- Need to leave sufficient time prior to the programme to to meet university GDPR and UK BA requirements for programme registration and communicate this to managers and staff who will be attending.
- Build in time to support delegates to register and familiarise themselves with using the VLE host services
- Awareness of the impact and speed of staff turnover within the urgent/acute care footprint on recruitment to training and communication with delegates

Partnership approach has been a cornerstone of the success of the project

- Partnership development between NWBH NHS Trust and the University has been a real benefit and enjoyable to be part of. HEE support and enthusiasm for the project is really appreciated

Changes to the structure of the programme and the learning day

- Streamline content to allow greater room for peer discussion, supervision and networking
- Shorter learning days
- Modular approach so people can sign up to parts they need based on analysis of individual training needs

Discussion

The Core24Multi-professional Liaison Mental Health training programme was established with the aim of ensuring all-age mental health liaison services in emergency wards are meeting the core 24 service standard as a minimum (in line with the FYFCMH). Its objectives were to develop training modules that reflected core competencies in line with national guidance, that were relevant and transferable to clinical practice, engaged a wide range of stakeholders and met the needs of the existing and emerging LMH workforce.

This was achieved by a strong partnership between academics and clinical practice who co-created an evidence based, comprehensive training programme in a rigorous and iterative manner which involved a wide range of stakeholders to ensure that it met the needs of LMH staff, commissioners, service managers and those with the lived experience of using the service.

The programme was successfully delivered across the LMH workforce in the North West using blended learning methods (face to face and online delivery) to meet the needs of staff who are working in a difficult environment, who are time pressed for attending training, are dispersed throughout a wide geographical region, are from a range of professional backgrounds with different levels of experience and skills.

Evidence that these objectives have been realised was taken from an evaluation which incorporated a range of methods taken at various intervals throughout the delivery of the course and incorporated feedback from all stakeholders (programme designers, deliverers, participants and managers). Although the evaluation is limited, in that it relies on perceptions, and some of the data provided is based on small sample sizes, it was conducted independently to the programme development and delivery and uses multiple sources of data to provide a more balanced viewpoint.

The programme was offered across the region, across three cohorts, and it can be seen that there was a good uptake across the whole region and across professional groupings. The programme reached an 85% occupancy of the available capacity with an average 77% attendance per session. As well as good attendance at face to face sessions, engagement with the distance learning materials, via the VLE was also high suggesting that this blended approach to learning, was on the whole successful.

Multiple sources and methods of data collection were used to ascertain whether the programme met participant needs, when examining the data across the sources many of the themes were consistent suggesting that the methods themselves offered a degree of

triangulation. Across all methods of data collection, feedback was on the whole positive, although some suggestions for further improvements were also made.

Participants were asked to rate their perceived confidence and competence with the modules covered on the programme. The responses reflect the varied backgrounds of the cohorts and the differing length of tenure. When looking at the data as a whole, there was a general improvement across all domains, suggesting that the programme is fit for purpose, however there were no large increases in scores between pre and post-tests. This could be seen as a positive, in that prior to the introduction of the training programme, MHL staff perceived they were already pretty confident about the areas covered by the modules. This creates a ceiling effect, where any changes as a result of programme attendance are therefore likely to be of small magnitude (Svensson and Hansson, 2014). The qualitative data showed a wide variation in modules that participants liked or valued, reflecting the varied nature and experience of the sample as a whole.

However, there were differences when the sample was broken down and examined by tenure and professional background. Those who appeared to benefit the most from the programme content were those who had been in post less than three years, comments echoed in the qualitative feedback from participants and service managers. For the modules on dementia and learning disabilities, the improvement was much more similar regardless of tenure. This was also reflected in the qualitative comments where larger numbers of participants expressed an interest in receiving more training in these areas. When breaking the data down by discipline, differences were also seen, with psychologists improving more than other professions. Psychiatrists appeared to become less confident in the area of clinical leadership, on further analysis this result was on the basis of one newly qualified psychiatrist and therefore too small a sample to draw any conclusions. It is also worth noting that this data is based on perceived competency rather than an objective measure of competency, so some differences may be due to confidence or expectations rather than actual differences between the professions.

Participants were also asked to rate how the programme had made a difference (or impact) on both their knowledge and practice, by responding to a series of statements. The majority of participants learned something new and also the programme provided additional insights, reassurance and an update of knowledge or skills, reflecting the overall small changes in scores provided in the confidence and competence questions. As a result of attending the programme a small number of individuals changed their professional approach, approach to teaching, management or clinical practice, but details of how they did this were not supplied. Only two participants were dissatisfied with the course and none perceived the course was

harmful. Unfortunately, the number of participants who responded to the same questions at longer term follow up was too small to understand whether this was simply sustained over time or changed the practice of an additional number of participants. When using the tool in future it may be useful to ask for details on how any changes to practice have been made, or to follow up with a brief interview.

Attending face to face training was particularly valued by participants. This was not simply for course content, but more for the opportunity to step away from the job to learn. Participants valued the staff and the teaching style but above all valued the opportunity to learn from others by discussion and shared experience; so learning together across organisations rather than in-house training was particularly beneficial. There was room for improvement with the face to face delivery, but this was mainly of a practical nature such as start times (to allow for travel across the region) or building in time to learn how to use the VLE technology to access the distance element of the course. Some of the practical issues encountered by staff were mitigated during the programme by discussion and a flexible approach, such as using reserve lists to facilitate attendance. The use of clinical simulation provoked the most reactions in terms of methods of teaching. This was really enjoyed by most but hated by others, with several also saying they didn't like the idea of simulation but enjoyed it in the end.

A number of suggestions for future developments were put forward by a range of stakeholders; this included ideas for additional course content, expansion of the programme to include acute staff and a need for the creation of a network or opportunities to network and share experiences within the future. These suggestions have been considered in the recommendations section.

Conclusions and Recommendations

The Core24 Multi-professional Liaison Mental Health Training Programme developed and delivered by North West Boroughs Healthcare NHS Foundation Trust and the University of Salford, offers a potential training model that will meet the needs of the LMH workforce as outlined in NHS England's FYFV MH (2016). Developed in a rigorous manner using evidence-based content, refined by multiple stakeholders, and delivered across the region, the programme provided content that met the CORE-24 standards that was relevant and beneficial to those in clinical practice. The programme as it stands appeared to particularly benefit those new to Liaison and those with a psychology background, but this may be due to perceptions at the beginning of the programme.

The programme could be extended to include:

- Modules to allow shared learning with acute Trust staff or an extension of the remit of the course to include acute course staff and provide
    - Shared understanding of the spirit and principles of a holistic needs-led biopsychosocial assessment and formulation process, outlined in the Core-24 Standard policy framework
    - Content on physiological investigations and laboratory results that can impact upon decision making regarding mental health assessment
    - Content on good practice principles and service level understanding of the mental health act and robust systems for implementation within medical wards (5:2 in particular), for acute care medical colleagues.
- One strategy to address the two previous points would be to develop forums for Acute Trust medical staff and mental health liaison staff to teach each other – as a trade of expertise.
- A supervision and community of practice forum where practitioners can share experiences and work together to solve mutual problems. This could also be extended to acute practitioners.

Future models of delivery which should be considered include:

- The use of pre-course assessment and modular organisation to allow bespoke training packages for experienced staff or individuals. This method of assessment would need to be carefully considered to ensure it truly captured learning needs. One strategy would be to develop the course curriculum document (Appendix 1) which specifies learning outcomes mapped to national policy documents and competency frameworks, as a framework for pre-course assessment. This could be linked to the

personal development reviews. Development of appropriate training resources to support managers with understanding Core-24 workforce expectations would help to underpin and ensure the quality of any process of this kind.

- A Train the Trainer model, where experienced staff are trained to deliver the programme at a more local level as this would optimise the scale and pace of dissemination of training.
- A community of practice that, with the support of employers, could provide a network for MHL local trainers and support peer to peer training and skills sharing – enabled by using webinar and technologically supported communication.
- The development of a blended learning approach – supported by digital teaching resources. This would improve access and flexibility of teaching and learning and provide a quality assured resource to support the Train the Trainer model described above.

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Appendices

Appendix 1: Course curriculum and intended learning outcomes, mapped to national policy and competency frameworks

<table>
<tr><td colspan="6">Bio-psychosocial Assessment & Care Planning</td></tr>
<tr><td colspan="6">Learning outcome - Understanding of the format and delivery of a bio-psychosocial assessment and the specific time frames within which this must be delivered as per the CORE-24 evidence-based treatment pathways for emergency and urgent referrals. Ensuring the inclusion of an individual risk assessment, general child and adult safeguarding and those specific to an acute environment (e.g. DV). Ensuring the inclusion of appropriate risk assessment and management of risk within the context of a hospital setting (e.g. appropriate places for service users to await assessment, alerting acute staff to potential risk, ensuring acute staff know how to assess and action any change in risk during observations). Ensuring that assessment, specific crisis and care planning skills and ensuring the collaboration with the service user/family/carers for both</td></tr>
<tr><td rowspan="2">Competency Mapping</td><td>CORE-24 Staff</td><td>CORE-24 Service</td><td>PLAN Standards</td><td>NCF</td><td>MHCSTF Subjects</td></tr>
<tr><td>Yes</td><td>N/A</td><td>5, 6, 7, 8, 18</td><td>Yes</td><td>2, 4, 6, 7, 8, 11, 12, 15, 16</td></tr>
<tr><td colspan="6">Liaison Outcome Assessment</td></tr>
<tr><td colspan="6">Learning Outcome - Understanding FROM-LP measures, how to complete the measures and the importance of these. Establish appropriate links with the Quality Assessment and Improvement Programme via CQCI/PLAN (estimated September/October 2017) to consider national reporting and performance data standards for services.</td></tr>
<tr><td rowspan="2">Competency Mapping</td><td>CORE-24 Staff</td><td>CORE-24 Service</td><td>PLAN Standards</td><td>NCF</td><td>MHCSTF Subjects</td></tr>
<tr><td>N/A</td><td>Yes</td><td>19</td><td>Yes</td><td>N/A</td></tr>
<tr><td colspan="6">Legal Frameworks</td></tr>
<tr><td colspan="6">Learning Outcome - Overview and understanding of the Mental Health Act, including specific sections related to liaison (e.g. section 136 and section 5), Mental Capacity Act and relevance of capacity assessments (e.g. who is best placed to complete) and Deprivation of Liberty for own practice and to ensure appropriate medico-legal advice to acute colleagues.</td></tr>
<tr><td rowspan="2">Competency Mapping</td><td>CORE-24 Staff</td><td>CORE-24 Service</td><td>PLAN Standards</td><td>NCF</td><td>MHCSTF Subjects</td></tr>
<tr><td>Yes</td><td>N/A</td><td>18</td><td>Yes</td><td>16</td></tr>
<tr><td colspan="6">Older Adults (including Dementia & Delirium)</td></tr>
</table>

<table>
<tr><td colspan="6">Learning Outcome - Understanding the detection, assessment and management of dementia, delirium and depression in an older adult population and specific to delirium – an understanding and detection of this within a physically ill population. Understanding of mental health issues associated with the ageing process and the impact of ageing on risk and safeguarding. Understanding the specialist assessment of cognitively impaired service users, appropriate assessment tools (e.g. MMSE) in addition to the importance of integrating family, carers and support network within this assessment, how to contain and manage challenging behaviours that may be associated with a cognitively impaired presentation. Understanding of the health and social care professionals who are likely to be involved in providing care for older adults.</td></tr>
<tr><td rowspan="2">Competency Mapping</td><td>CORE-24 Staff</td><td>CORE-24 Service</td><td>PLAN Standards</td><td>NCF</td><td>MHCSTF Subjects</td></tr>
<tr><td>Yes</td><td>Yes</td><td>18, 26</td><td>Yes</td><td>8</td></tr>
<tr><th colspan="6">Alcohol & Substance Misuse</th></tr>
<tr><td colspan="6">Learning Outcome - Understanding the detection of the misuse of alcohol and drugs and how this clinical picture may present within an acute setting, the physical and psychological effects of substance misuse and the interaction with mental health. Understanding best practice regarding assessment of intoxicated service users and attention to risk assessments of intoxicated service users. Understanding appropriate signposting both within and outside of the hospital setting. Note: this is a basic understanding and competencies for generic liaison mental health staff and would not replace the specialised training and skills of substance misuse practitioners/dual diagnosis practitioners.</td></tr>
<tr><td rowspan="2">Competency Mapping</td><td>CORE-24 Staff</td><td>CORE-24 Service</td><td>PLAN Standards</td><td>NCF</td><td>MHCSTF Subjects</td></tr>
<tr><td>Yes</td><td>N/A</td><td>18</td><td>Yes</td><td>N/A</td></tr>
<tr><th colspan="6">Learning Disabilities</th></tr>
<tr><td colspan="6">Learning Outcome - Understanding the needs of service users with a learning disability, specifically recognising special needs and knowing how to provide or access support for people with visual, hearing, literacy or learning disabilities. Understanding the importance of reasonable adjustments within all services to support a learning disabled population. Understanding within assessment the increased morbidity and mortality due to physical and/or mental health issues in people with learning disabilities, the impact of a learning disability upon risk and safeguarding and the need to work with a wider network (e.g. staff, carers and family) to assess and support a service user. Understanding and managing challenging behaviours for own clinical practice and to support acute trust colleagues.</td></tr>
<tr><td rowspan="2">Competency Mapping</td><td>CORE-24 Staff</td><td>CORE-24 Service</td><td>PLAN Standards</td><td>NCF</td><td>MHCSTF Subjects</td></tr>
<tr><td>Yes</td><td>N/A</td><td>17, 18</td><td>Yes</td><td>8, 10</td></tr>
</table>

Psychosis					
Learning Outcome - Understanding and competencies in the specific detection, assessment & management of psychosis including the specific detection in a physically ill population.					
Competency Mapping	CORE-24 Staff	CORE-24 Service	PLAN Standards	NCF	MHCSTF Subjects
	N/A	N/A	18	N/A	N/A
Self-harm & Acts of Suicidal Intent					
Learning Outcome - Awareness and understanding of the impact of attitudes and approaches to self-harm/suicidality, specifically the experiences of service users presenting with such within an acute setting, for own practice and to support acute trust colleagues. Providing support to the national CQUIN relating to improving the experience of the mental health service user within A&E, particularly by understanding the difference between self-harm and acts of suicidal intent. Proactive understanding and engagement in suicide awareness and prevention techniques relevant for own practice and to support the acute trust staff.					
Competency Mapping	CORE-24 Staff	CORE-24 Service	PLAN Standards	NCF	MHCSTF Subjects
	N/A	N/A	18	Yes	5
Common Presentations					
Learning Outcome - Competencies to identify, assess and understand common mental health problems, particularly those that are relevant to a liaison population (e.g. understanding and assessing an emotional response to trauma, identification of health anxiety, panic, eating disorders and personality disorder). Understanding the value of MDT to support conditions once identified and/or appropriate referral pathways beyond liaison mental health.					
Competency Mapping	CORE-24 Staff	CORE-24 Service	PLAN Standards	NCF	MHCSTF Subjects
	N/A	N/A	17, 18	N/A	1
Complex Physical and Psychological Presentations					
Learning Outcome - Understanding the interface between complex physical and psychological conditions, specifically somatisation, MUS, frequent attendance within acute settings, psychological reaction and adjustment to physical illness, LTC, factitious disorders. Competencies to identify, assess and understand and/or utilisation of the MDT to provide this assessment and support. Understanding of the need to work collaboratively with acute colleagues and systems.					
Competency Mapping	CORE-24 Staff	CORE-24 Service	PLAN Standards	NCF	MHCSTF Subjects

<table>
<tr><td></td><td>N/A</td><td>N/A</td><td>18</td><td>Yes</td><td>1</td></tr>
<tr><td colspan="6">Liaison Interventions</td></tr>
<tr><td colspan="6">Learning Outcome - An understanding and overview of the importance of brief intervention provision within liaison, appropriate clinical pathways and interventions relevant to liaison mental health, specifically NICE interventions for self-harm, brief psychological interventions, follow-up/review to reduce attendance at acute site and relevant signposting beyond liaison services. Note: this is a basic understanding and competencies for generic liaison mental health staff and would not replace the specialised training and skills of psychologists/psychological therapists or others with specific competencies to deliver these interventions.</td></tr>
<tr><td rowspan="2">Competency Mapping</td><td>CORE-24 Staff</td><td>CORE-24 Service</td><td>PLAN Standards</td><td>NCF</td><td>MHCSTF Subjects</td></tr>
<tr><td>Yes</td><td>Yes</td><td>27</td><td>Yes</td><td>2, 3, 4, 5, 6, 7, 8</td></tr>
<tr><td colspan="6">Working Within the Acute Setting</td></tr>
<tr><td colspan="6">Learning Outcome - An understanding of the interface at which liaison mental health services sit. Development of specific understanding and competencies in medical terminology, pharmacology, knowledge of hospital systems, shared governance and responsibilities related to documentation, information sharing and confidentiality within this setting.</td></tr>
<tr><td rowspan="2">Competency Mapping</td><td>CORE-24 Staff</td><td>CORE-24 Service</td><td>PLAN Standards</td><td>NCF</td><td>MHCSTF Subjects</td></tr>
<tr><td>Yes</td><td>N/A</td><td>17</td><td>Yes</td><td>3</td></tr>
<tr><td colspan="6">Collaboration, Training, Supervision & Support to Acute Colleagues</td></tr>
<tr><td colspan="6">Learning Outcome - Ensuring that delegates are equipped with the knowledge of content to provide training/education/support to acute colleagues in:
• Supporting mental health patients awaiting assessment, responding to mental health crisis, legal frameworks and a compassionate response
• Supporting an OA population with mental health needs, detection and management of dementia, delirium and depression
• Detecting common mental health problems in acute patients and making initial mental health assessment
• Identifying risk to self and others
• Understanding Mental Health legislation
• Detecting and responding to acute disturbance in the physically ill e.g. delirium and psychosis and managing challenging behaviour</td></tr>
</table>

<table>
<tr><td colspan="6">

- Understanding why people self-harm, the difference between self-harm and acts of suicidal intent, suicide awareness
- Detecting the misuse of alcohol and drugs
- Understanding the emotional response to trauma, MUS, psychological adjustment to illness

Equipping delegates with knowledge and ability to facilitate different methods for education/training/supervision, develop resources, engage relevant stakeholders in the process and evaluate the effectiveness of education/training/supervision
</td></tr>
<tr><td rowspan="2">Competency Mapping</td><td>CORE-24 Staff</td><td>CORE-24 Service</td><td>PLAN Standards</td><td>NCF</td><td>MHCSTF Subjects</td></tr>
<tr><td>Yes</td><td>Yes</td><td>10, 28, 29, 30</td><td>Yes</td><td>1, 2, 3, 4, 5, 7, 16</td></tr>
<tr><td colspan="6">Leadership, Supervision & Training</td></tr>
<tr><td colspan="6">Learning Outcome - Ensuring delegates are equipped through the delivery of the programme in competencies for autonomous working, clinical leadership within specific professional role to the liaison mental health team. Ensuring that delegates are equipped to support the MDT and acute staff as appropriate to their role in addition to an understanding and self-awareness of their on-going needs (e.g. additional/specific training areas required as relevant to role). Ensuring that delegates understand their own responsibility to engage in clinical supervision and reflective practice as appropriate.</td></tr>
<tr><td rowspan="2">Competency Mapping</td><td>CORE-24 Staff</td><td>CORE-24 Service</td><td>PLAN Standards</td><td>NCF</td><td>MHCSTF Subjects</td></tr>
<tr><td>Yes</td><td>N/A</td><td>14</td><td>Yes</td><td>18</td></tr>
</table>

Appendix 2: Pre training questionnaire

Participant Name:

Cohort (1,2 or 3):

University Computer User Number:

Basic Demographic Information:

Gender

Ethnicity

(circle choice)

White

White – British   White - European   White - other

Mixed / Multiple ethnic group

White and Black Caribbean   White and Asian

White and Black African   Other Mixed

Asian/ Asian British

Indian   Pakistani   Bangladeshi   Chinese

Other Asian

Black / African / Caribbean / Black British

African   Caribbean   Other Black

Other ethnic group

Arab   Other Ethnic Group

Age (Circle Choice)

18-25   26-30

31-35   36-40

41-45   46-50

51-55   55-60

61+

Occupation / Profession

Time working in Liaison   Under 3 years

3-6 years

7-10years

10 years+

Email address for follow up questionnaire

NB: This sheet is for administration purposes only – it will be separated from the questionnaire data.

Within this section you will be asked to mark where you feel your confidence and competence is for each of the key topic areas. This will be complete at different time points over the course of the training. A basic Likert scale will be used to record this. (Please circle a choice for each question)

How confident and competent (Having the right skills and knowledge to work effectively) with people with the following difficulties:

1. Carrying out a Biopsychosocial assessment and care planning including risk assessment, crisis plans, formulation and liaison mental health outcome measures?

Not Confident **Extremely Confident**

1 2 3 4 5 6 7 8 9 10

2. In the Identification, assessment and understanding of common mental health disorders (Depression Anxiety etc) within a liaison mental health context and acute setting?

Not Confident **Extremely Confident**

1 2 3 4 5 6 7 8 9 10

3. In applying and using liaison specific interventions (brief short-term interventions) and formulation in liaison services?

Not Confident **Extremely Confident**

1 2 3 4 5 6 7 8 9 10

4. In the detection, assessment and management of dementia and delirium within a physically ill population?

Not Confident **Extremely Confident**

1 2 3 4 5 6 7 8 9 10

5. In the identification of differences between self-harm and suicidal intent, impact of attitudes upon patient experience?

Not Confident **Extremely Confident**

1 2 3 4 5 6 7 8 9 10

6. In the detection, assessment and management of psychosis within a physically ill population?

Not Confident **Extremely Confident**

1 2 3 4 5 6 7 8 9 10

7. In the identification of personality disorder assessment and skill in working effectively with this patient group and the challenging of stigma and misunderstandings amongst colleagues?

Not Confident **Extremely Confident**

1 2 3 4 5 6 7 8 9 10

8. In your knowledge of legal frameworks relevant to liaison mental health including MHA, MCA and DoLs?

Not Confident **Extremely Confident**

1 2 3 4 5 6 7 8 9 10

9. Working with interface between complex physical and psychological conditions, working across the physical and mental health interface and using liaison specific interventions and formulation?

Not Confident **Extremely Confident**

1 2 3 4 5 6 7 8 9 10

10. Working with presentations within an acute setting, physical and psychological effects of substance misuse?

Not Confident **Extremely Confident**

1 2 3 4 5 6 7 8 9 10

11. In identifying presentations within an acute setting, physical and psychological effects of substance misuse?

Not Confident **Extremely Confident**

1 2 3 4 5 6 7 8 9 10

12. working with specific needs of learning disabled patients, making reasonable adjustments and working with challenging behaviour?

Not Confident **Extremely Confident**

1 2 3 4 5 6 7 8 9 10

13. in your own clinical leadership skills for educating MDT and acute colleague support?

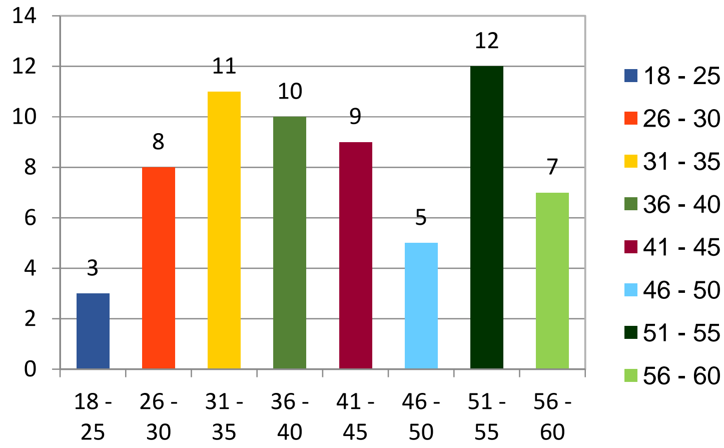
Not Confident **Extremely Confident**

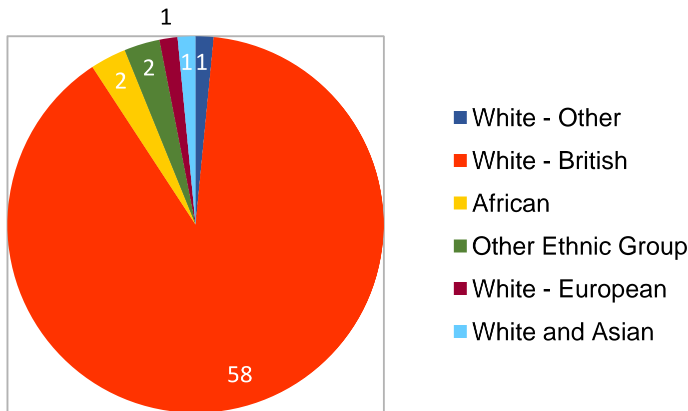
1 2 3 4 5 6 7 8 9 10

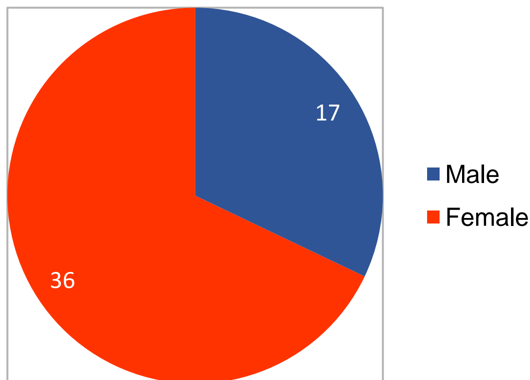
Thank you for taking the time to complete this form

Lamph, Brettle and Bullen-Foster, 2018

Appendix 3: Demographics (of those completing the pre-test)



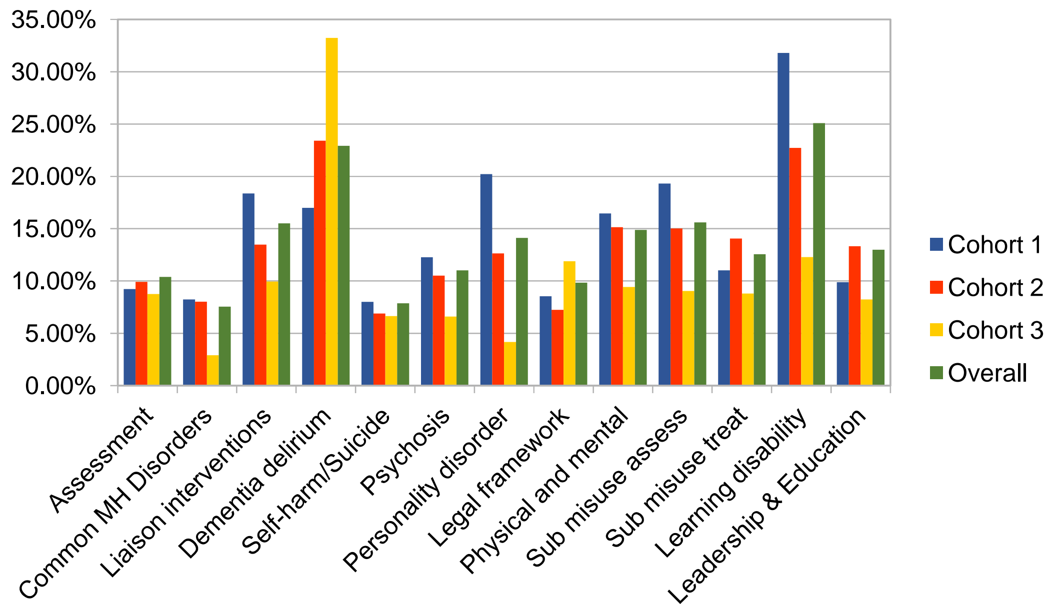




Appendix 4: Full Graphs

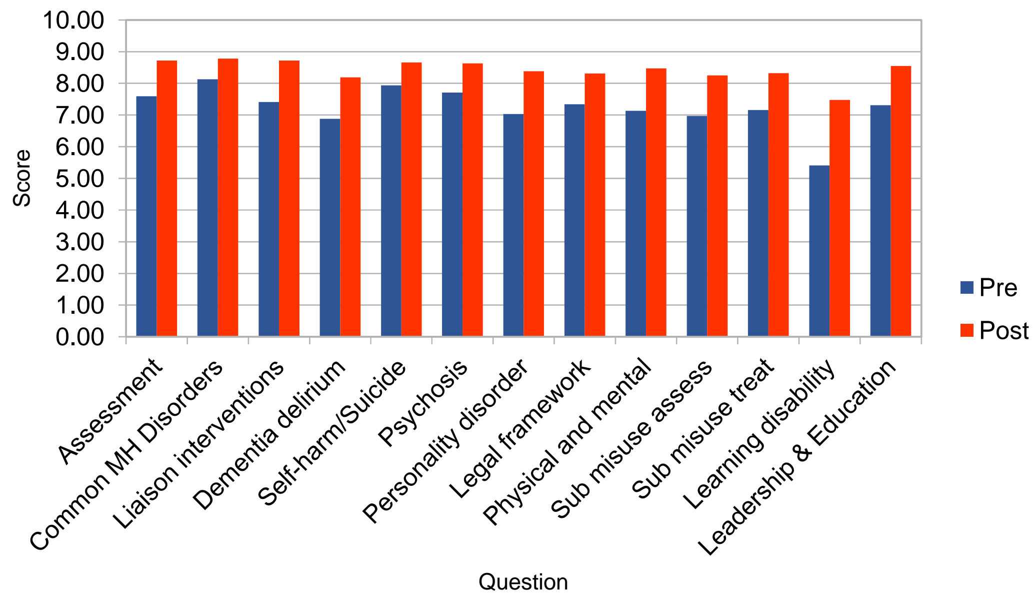
% Improvement by Cohort

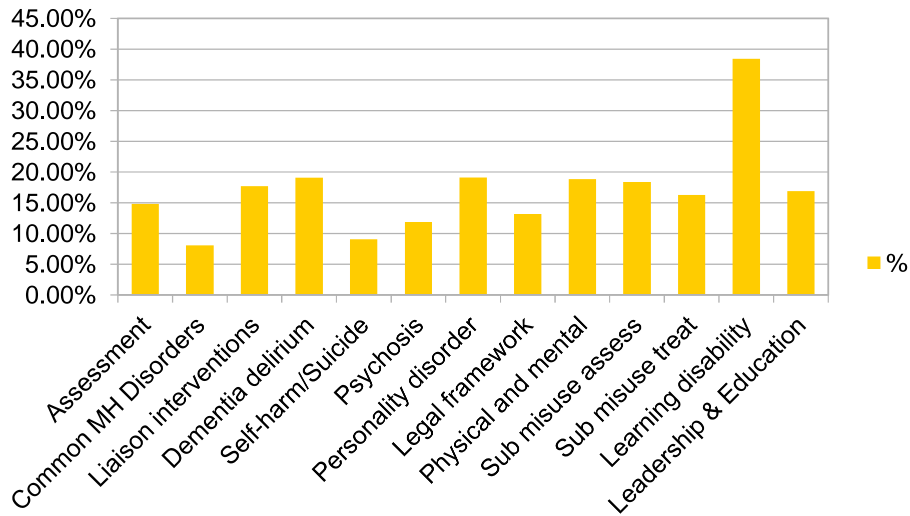
	Cohort 1	Cohort 2	Cohort 3	Overall
Assessment	9.22%	9.91%	8.75%	10.39%
Common MH Disorders	8.23%	8.02%	2.90%	7.54%
Liaison interventions	18.37%	13.48%	9.94%	15.51%
Dementia delirium	16.99%	23.41%	33.24%	22.93%
Self-harm/Suicide	8.01%	6.89%	6.64%	7.88%
Psychosis	12.27%	10.50%	6.60%	11.01%
Personality disorder	20.21%	12.64%	4.16%	14.12%
Legal framework	8.53%	7.24%	11.89%	9.84%
Physical and mental	16.46%	15.14%	9.43%	14.88%
Sub misuse assess	19.32%	15.02%	9.04%	15.60%
Sub misuse treat	11.01%	14.05%	8.79%	12.56%
Learning disability	31.80%	22.73%	12.29%	25.10%
Leadership & Education	9.88%	13.33%	8.24%	12.99%



Improvement (Matched Data)

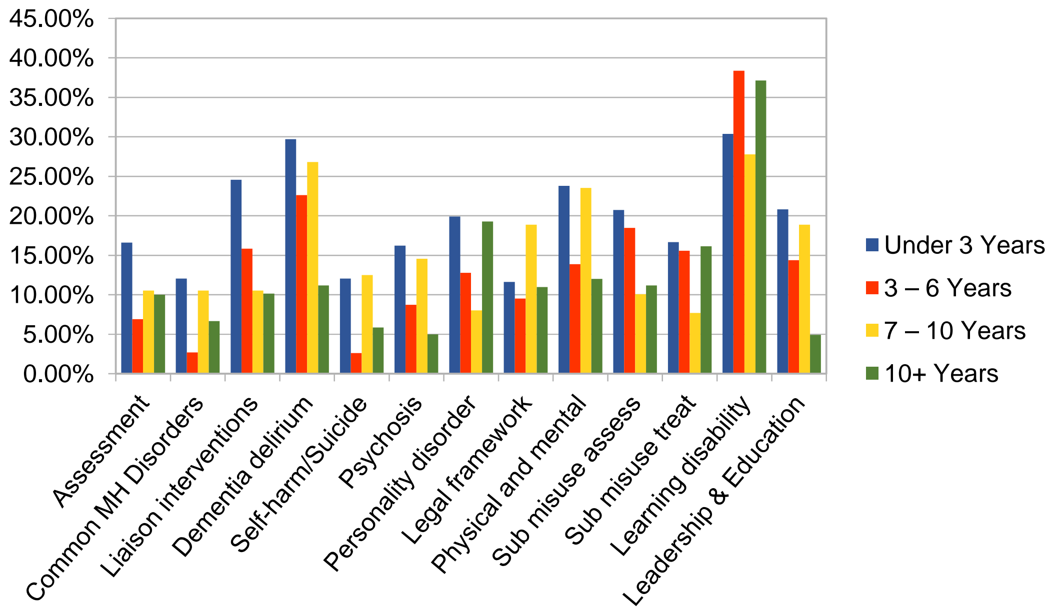
	Pre	Post	%
Assessment	7.59	8.72	14.81%
Common MH Disorders	8.13	8.78	8.08%
Liaison interventions	7.41	8.72	17.72%
Dementia delirium	6.88	8.19	19.09%
Self-harm/Suicide	7.94	8.66	9.06%
Psychosis	7.71	8.63	11.87%
Personality disorder	7.03	8.38	19.11%
Legal framework	7.34	8.31	13.19%
Physical and mental	7.13	8.47	18.86%
Sub misuse assess	6.97	8.25	18.39%
Sub misuse treat	7.16	8.32	16.30%
Learning disability	5.41	7.48	38.42%
Leadership & Education	7.31	8.55	16.90%





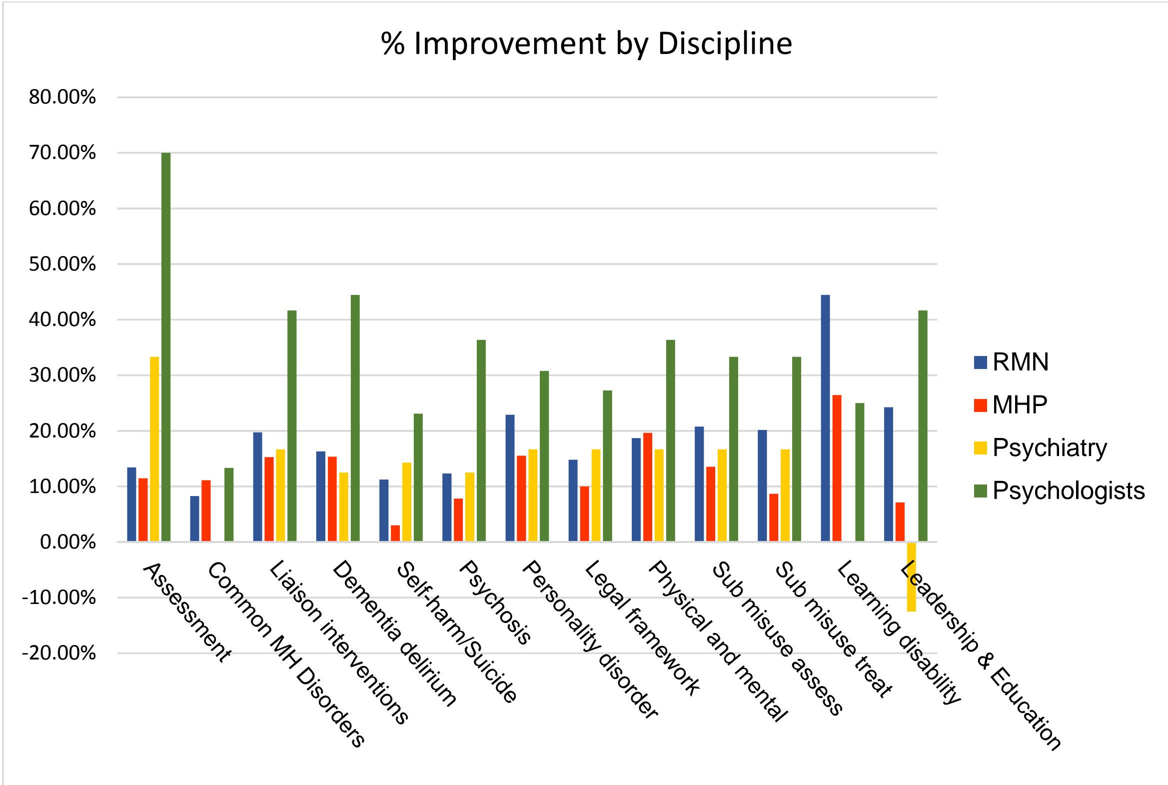
% Improvement by Tenure

	Under 3 Years	3 – 6 Years	7 – 10 Years	10+ Years
Assessment	16.62%	6.90%	10.53%	10.00%
Common MH Disorders	12.04%	2.68%	10.53%	6.67%
Liaison interventions	24.56%	15.83%	10.53%	10.16%
Dementia delirium	29.70%	22.62%	26.81%	11.19%
Self-harm/Suicide	12.04%	2.62%	12.50%	5.85%
Psychosis	16.21%	8.72%	14.55%	5.00%
Personality disorder	19.91%	12.79%	8.02%	19.27%
Legal framework	11.63%	9.53%	18.87%	10.97%
Physical and mental	23.80%	13.87%	23.53%	12.00%
Sub misuse assess	20.74%	18.46%	10.06%	11.19%
Sub misuse treat	16.67%	15.57%	7.69%	16.13%
Learning disability	30.37%	38.36%	27.78%	37.14%
Leadership & Education	20.83%	14.39%	18.87%	4.92%



% Improvement by Discipline

	RMN	MHP	Psychiatry	Psychologists
Assessment	13.42%	11.48%	33.33%	70.00%
Common MH Disorders	8.28%	11.11%	**0.00%**	13.33%
Liaison interventions	19.72%	15.25%	16.67%	41.67%
Dementia delirium	16.31%	15.38%	12.50%	44.44%
Self-harm/Suicide	11.26%	3.03%	14.29%	23.08%
Psychosis	12.33%	7.81%	12.50%	36.36%
Personality disorder	22.90%	15.52%	16.67%	30.77%
Legal framework	14.79%	10.00%	16.67%	27.27%
Physical and mental	18.71%	19.64%	16.67%	36.36%
Sub misuse assess	20.77%	13.56%	16.67%	33.33%
Sub misuse treat	20.15%	8.67%	16.67%	33.33%
Learning disability	44.44%	26.44%	**0.00%**	25.00%
Leadership & Education	24.24%	7.14%	**-12.50%**	41.67%


% Improvement by Discipline
80.00%
70.00%
60.00%
50.00%
40.00%
30.00%
20.00%
10.00%
0.00%
-10.00%
-20.00%
Assessment
Common MH Disorders
Liaison interventions
Dementia delirium
Self-harm/Suicide
Psychosis
Personality disorder
Legal framework
Physical and mental
Sub misuse assess
Sub misuse treat
Learning disability
Leadership & Education
RMN
MHP
Psychiatry
Psychologists

Appendix 5: Post Training Questionnaire

Cohort Number:

Sessions not attended:

University Computer User Number:

Within this section you will be asked to mark where you feel your confidence and competence is for each of the key topic areas. This will be complete at different time points over the course of the training. A basic Likert scale will be used to record this. (Please circle a choice for each question)

How confident and competent (Having the right skills and knowledge to work effectively) with people with the following difficulties:

1. Carrying out a Biopsychosocial assessment and care planning including risk assessment, crisis plans, formulation and liaison mental health outcome measures?

Not Confident **Extremely Confident**

1 2 3 4 5 6 7 8 9 10

2. In the Identification, assessment and understanding of common mental health disorders (Depression Anxiety etc) within a liaison mental health context and acute setting?

Not Confident **Extremely Confident**

1 2 3 4 5 6 7 8 9 10

3. In applying and using liaison specific interventions (brief short-term interventions) and formulation in liaison services?

Not Confident **Extremely Confident**

1 2 3 4 5 6 7 8 9 10

4. In the detection, assessment and management of dementia and delirium within a physically ill population?

Not Confident **Extremely Confident**

1 2 3 4 5 6 7 8 9 10

5. In the identification of differences between self-harm and suicidal intent, impact of attitudes upon patient experience?

Not Confident **Extremely Confident**

1 2 3 4 5 6 7 8 9 10

6. In the detection, assessment and management of psychosis within a physically ill population?

Not Confident **Extremely Confident**

1 2 3 4 5 6 7 8 9 10

7. In the identification of personality disorder assessment and skill in working effectively with this patient group and the challenging of stigma and misunderstandings amongst colleagues?

Not Confident **Extremely Confident**

1 2 3 4 5 6 7 8 9 10

8. In your knowledge of legal frameworks relevant to liaison mental health including MHA, MCA and DoLs?

Not Confident **Extremely Confident**

1 2 3 4 5 6 7 8 9 10

9. Working with interface between complex physical and psychological conditions, working across the physical and mental health interface and using liaison specific interventions and formulation?

Not Confident **Extremely Confident**

1 2 3 4 5 6 7 8 9 10

10. Working with presentations within an acute setting, physical and psychological effects of substance misuse?

Not Confident **Extremely Confident**

1 2 3 4 5 6 7 8 9 10

11. In identifying presentations within an acute setting, physical and psychological effects of substance misuse?

Not Confident **Extremely Confident**

1 2 3 4 5 6 7 8 9 10

12. working with specific needs of learning disabled patients, making reasonable adjustments and working with challenging behaviour?

Not Confident **Extremely Confident**

1 2 3 4 5 6 7 8 9 10

13. in your own clinical leadership skills for educating MDT and acute colleague support?

Not Confident **Extremely Confident**

1 2 3 4 5 6 7 8 9 10

14. Please identify 3 things that you enjoyed during this training

1.

2.

3.

15. Please identify 3 things you think could be improved to enhance this training

1.

2.

3.

16. If you are able to relate to any of the following statements that explore impact the course has had on your practice please circle them below: (there is no limit on how many you circle)

The Programme and any impact it has had on practice:

Changed my management approach

I learnt something new

I have recalled something I already knew

Changed my approach to teaching

It prompted me to brush up on my skills and knowledge more

It confirmed I was doing things correctly

Changed my professional approach

I was reassured by the content

I was dissatisfied as the programme had no impact on my practice

Changed my clinical approach to liaison

The course is potentially harmful

The course has enhanced my insight and practice

Thank you for taking time to complete this your feedback is very valuable

Developed by Lamph, Brettle & Bullen-Foster (2018)

Appendix 6: Longer term follow up

Follow Up - Training Evaluation

Cohort Number:

University Computer User Number:

Sessions not attended:

Within this section you will be asked to mark where you feel your confidence and competence is for each of the key topic areas. This will be complete at different time points over the course of the training. A basic Likert scale will be used to record this. (Please circle a choice for each question)

How confident and competent (Having the right skills and knowledge to work effectively) with people with the following difficulties:

1. Carrying out a Biopsychosocial assessment and care planning including risk assessment, crisis plans, formulation and liaison mental health outcome measures?

Not Confident **Extremely Confident**

1 2 3 4 5 6 7 8 9 10

2. In the Identification, assessment and understanding of common mental health disorders (Depression Anxiety etc) within a liaison mental health context and acute setting?

Not Confident **Extremely Confident**

1 2 3 4 5 6 7 8 9 10

3. In applying and using liaison specific interventions (brief short-term interventions) and formulation in liaison services?

Not Confident **Extremely Confident**

1 2 3 4 5 6 7 8 9 10

4. In the detection, assessment and management of dementia and delirium within a physically ill population?

Not Confident **Extremely Confident**

1 2 3 4 5 6 7 8 9 10

5. In the identification of differences between self-harm and suicidal intent, impact of attitudes upon patient experience?

Not Confident **Extremely Confident**

1 2 3 4 5 6 7 8 9 10

6. In the detection, assessment and management of psychosis within a physically ill population?

Not Confident **Extremely Confident**

1 2 3 4 5 6 7 8 9 10

7. In the identification of personality disorder assessment and skill in working effectively with this patient group and the challenging of stigma and misunderstandings amongst colleagues?

Not Confident **Extremely Confident**

1 2 3 4 5 6 7 8 9 10

8. In your knowledge of legal frameworks relevant to liaison mental health including MHA, MCA and DoLs?

Not Confident **Extremely Confident**

1 2 3 4 5 6 7 8 9 10

9. Working with interface between complex physical and psychological conditions, working across the physical and mental health interface and using liaison specific interventions and formulation?

Not Confident **Extremely Confident**

1 2 3 4 5 6 7 8 9 10

10. Working with presentations within an acute setting, physical and psychological effects of substance misuse?

Not Confident **Extremely Confident**

1 2 3 4 5 6 7 8 9 10

11. In identifying presentations within an acute setting, physical and psychological effects of substance misuse?

Not Confident **Extremely Confident**

1 2 3 4 5 6 7 8 9 10

12. working with specific needs of learning disabled patients, making reasonable adjustments and working with challenging behaviour?

Not Confident **Extremely Confident**

1 2 3 4 5 6 7 8 9 10

13. in your own clinical leadership skills for educating MDT and acute colleague support?

Not Confident **Extremely Confident**

1 2 3 4 5 6 7 8 9 10

14. Please identify 3 things that you enjoyed during this training

1.

2.

3.

15. Please identify 3 things you think could be improved to enhance this training

1.

2.

3.

16. If you are able to relate to any of the following statements that explore impact the course has had on your practice please circle them below: (there is no limit on how many you circle)

The Programme and any impact it has had on practice:

Changed my management approach

I learnt something new

I have recalled something I already knew

Changed my approach to teaching

It prompted me to brush up on my skills and knowledge more

It confirmed I was doing things correctly

Changed my professional approach

I was reassured by the content

I was dissatisfied as the programme had no impact on my practice

Changed my clinical approach to liaison

The course is potentially harmful

The course has enhanced my insight and practice

17. **Can you describe one situation when the course changed how you dealt with a situation in practice.**
18. **This course could be improved by…**
19. **This course is important because….**
20. **Any further comments**

Thank you for taking time to complete this your feedback is very valuable

Developed by Lamph, Brettle & Bullen-Foster (2018)