FORENSIC
QUALITY NETWORK FOR FORENSIC MENTAL HEALTH SERVICES

MSU/LSU Issue 36, December 2017

This Issue

WELCOME

Welcome to the 36th edition of the Quality Network for Forensic Mental Health Services newsletter. A huge thank you to all that have contributed; we are delighted to have received so many articles on the important topic of managing obesity in secure settings.

With the start of the new cycle we introduced a revised approach to the review process. The idea was to return to the ethos of quality improvement and enable members to have more meaningful discussions about matters important to them. It also provides services with more time to plan improvements for the future and implement change. I am pleased to share that we have received really positive feedback from services that have hosted QI days so far and thank you to those that have shared your ideas of how they can be developed further.

This quarter we also hosted events on 'Engaging Family and Friends' in August and 'Revisiting See Think Act' in November. Both events were very engaging and packed with

interesting discussions and ideas for future work. We hope you found both days useful and interesting; for those that could not attend you can see all of the presentations on our website.

We looking forward to seeing you all in 2018 and wish you a very Merry Christmas and a Happy New Year!

Dr Quazi Haque and Megan Georgiou

Birmingham and Solihull Mental Health Foundation Trust

Obesity in secure units: Our research and its implications

Introduction
Public Health England was commissioned to carry out research into the levels of obesity and interventions in secure units. During this research, I had an opportunity to interact with many staff and patients. This reinforced my own clinical impression that obesity and the resulting complications can be a major problem. There is evidence that this can lead to significant suffering and reduces life expectancy. In my practice, I have watched patient's lives being devastated by increasing amounts of obesity as they kept putting on weight right in front of our eyes. This challenged me to try and do something to help.

Our research findings
We looked at more than 2000 research papers. All papers consistently reported what I see in my practice; an alarming level of obesity in our inpatients. The problem appeared to be worse in female inpatients. Many factors contributing to obesity were identified including effects of mental illness, restrictions on exercise and movement due to security of the units, using food as a comforting factor, lack of consistent food policy, and side effects of medication. We were disappointed to find very few examples of interventions used to control or prevent obesity. When these were used, they were effective. Staff commented about lack of exercise equipment, lack of knowledge and confidence in the area of nutrition and obesity management and tension between patient's autonomy and challenging their lifestyles. Many patients told us that they were unaware of the risk of becoming obese and by the time they realised they had put on a lot of weight, it was a huge struggle to do anything about it.

Our local audit
We found that in our Birmingham hospitals, the rates of obesity were twice that of general population and rates of diabetes were three times higher. We found that the weight gain happens rapidly in the first year of admission in most patients.

Barriers to change
So, everyone knows this is a big problem. How do we explain the lack of a coordinated response? Reasons (or excuses) are many. The meal times can be abnormal, with patients expected to have their breakfasts and meals between 8 am till 7 pm and starve for the next 13 hours. Worse if you miss breakfast. There are no consistent policies about takeaway meals. So on top of the meals provided by hospital, some patients eat takeaways late at night. Some hospitals serve hot puddings with every meal. Many hospitals have local shops for patients stocking and prominently displaying chocolates, crisps and fizzy drinks. Some of us feel patients should choose to eat what they want. The fact is that no patient chooses to be obese. We control patient choices with regards to smoking and drinking in our hospitals. In some, excessive food intake can be as or more dangerous than smoking and drinking put together. Some argue that controlling diet breaches patient's human rights. My question is 'Is it inhumane and degrading to stop patients getting obese? Is it demeaning to restrict food choices for those who are most vulnerable?'

In my view, the biggest obstacle is our own attitudes. We are resistant to change our old ways (meal times, items sold in shops, takeaway policies). We continue to believe that we should treat mental health and physical health as the patient's and GP's problem. Some may say 'This is how it's always been. What can we do if patients don't listen to us?'

It's time to act now!
A good start is to accept there is a problem and accept shared responsibility with patients to tackle it. Easy wins would be looking at food availability and policies. Providers should employ an adequate number of staff in nutrition, and physical

activity and equipment. All providers should start an obesity treatment and prevention program targeting those at risk. We should have specific care plans for the severely obese, especially if they have other medical problems. We should ensure our hospitals comply with NICE guidelines regarding obesity in hospital settings. Significant weight gain should act as an automatic trigger for a review of medication. Patients should be educated about the risk of obesity at the point of admission.

We need a coordinated response between the Royal Colleges, NHS England, Public Health England and the CQC to ensure we have a shared position on food, equipment and treatment programs for weight loss. Let's get together and act now. We simply cannot continue to watch patients suffering in silence.

Rajesh Moholkar, Consultant Forensic Psychiatrist and Physical Health Lead, Reaside Clinic, Senior Clinical Advisor, Public Health England, Specialist Advisor, CQC, Honorary Lecturer, Birmingham University

South West London & St George's Mental Health NHS Trust

The Changing Shape of Society—A risk to service users in secure settings

There is a recognised inequality in physical health standards in people suffering from mental health conditions compared to the general population. This includes an increased prevalence of obesity, diabetes, dyslipidaemia and smoking, which can lead to chronic diseases and increased mortality rates.

There is extensive evidence that people suffering with serious mental illness, such as schizophrenia, are at risk of dying on average 20 years prematurely.

Compared with the general population, they have:

- 2 times the risk of developing diabetes
- 2-3 times the risk of hypertension
- 3 times the risk of dying from coronary heart disease
- 10-fold increase in deaths from respiratory disease for people with schizophrenia
- 4.1 times the overall risk of dying prematurely (than the general population under 50)

With this increased risk to those suffering from mental health illness, we asked whether the increase in the risk factors associated with non-communicable diseases (NCD's) has an increased effect on mental health service users in secure settings? We carried out an audit looking at various modifiable and non-modifiable risk factors. One of these modifiable risk factors was the prevalence of obesity within the forensic service population versus the general population.

From the data we collected, Service Users in a medium secure unit at SWLSTG mental health Trust are at an increased risk of developing NCD's due to the increased prevalence of key risk factors such as obesity.

We also noted the increase in BMI, whilst under our care from admission to 6-months after admission, with shocking statistics. As a percentage at admission, our service user group are very close to national averages for having a BMI over 25, so overweight or obese and on average, females 5% greater and males 6% greater prevalence to the general population. However, 6 months after

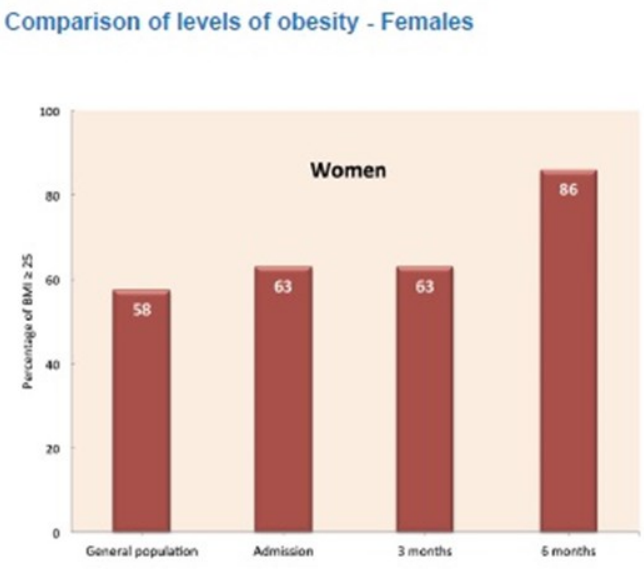


Fig. 2 Comparison of the percentage of adult (16+) females classified as overweight or obese; BMI ≥25 in the general population versus service users in medium secure setting at admission, 3moths post admission and 6 months post admission

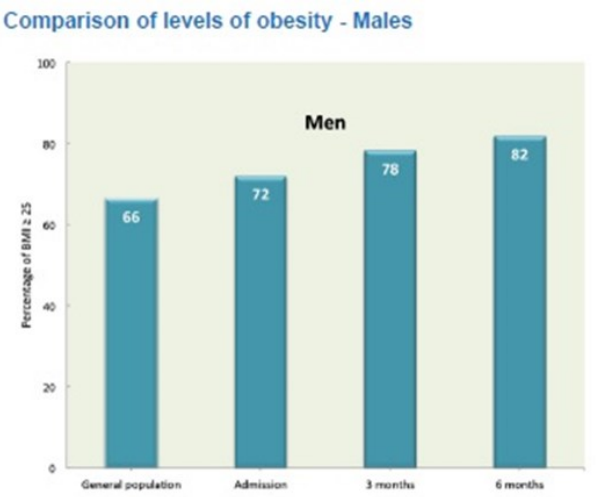


Fig. 3 Comparison of the percentage of adult (16+) males classified as overweight or obese; BMI ≥25 in the general population versus service users in medium secure setting at admission, 3moths post admission and 6 months post admission

admission, the percentage of those overweight or obese by BMI rose to 86% (females) and 82% (males), compared to the national averages of 58% and 66% respectively.

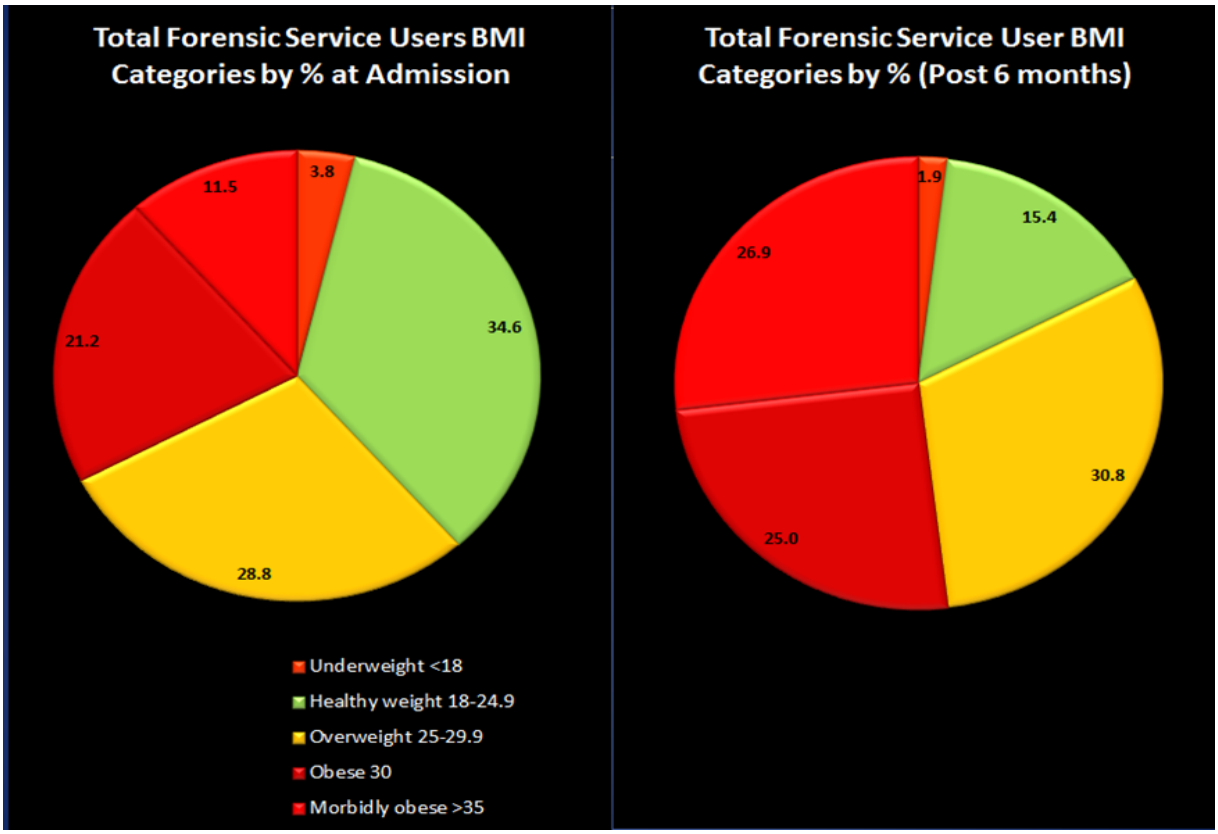
There are a number of modifiable risk factors that can be addressed within secure settings, as with the general population. A number of reports highlight the benefits associated with reducing physical inactivity. However, these reports do not emphasize the increased need to tackle these risk factors within secure service settings, which could improve both the physical and mental health of service users. To utilise the expert skills of all professionals more effectively, a number of risk factors need to be addressed. A multi-disciplinary approach is required to utilise the expert skills of all professionals more effectively.

Exercise Therapists, Dieticians, Nutritional therapists, OT's, Doctors and Nursing staff all have role in helping the service users in secure settings to improve to a healthier lifestyle. Each profession offer's different areas of expertise that must be drawn upon. Addressing service users physical health by improving and increasing opportunities to access physical activity, healthy food options and smoking cessation, reduces the number of associated NCD's, therefore improving the service users health and well-being whilst also reducing associated costs of care of NCDs.

We continue to try and implement this as part of the 'Forensic Health Strategy' here at the Shaftesbury Clinic. Led by Clinical Exercise Therapists, this strategy aims to improve several areas of physical health but with reducing the levels of obesity as one of the priorities. Part of this strategy is to increase physical activity opportunities ranging from 1:1 and group gym sessions, Crossfit, exercise groups delivered on the ward (to encourage access for all patients/ service users and in line with least restrictive practice), sports groups; to education sessions, physical health awareness events for both service users and staff, regular health assessments and goal setting that service users keep as a personal portfolio. Working collaboratively with the Trust dietician, we are also commencing a programme to target individuals being prescribed medication associated with weight gain in order to counter these side effects during commencement of these treatments.

How can we achieve this?

- Use staff expertise and qualifications to deliver appropriate interventions



- Work as a MDT to draw on different expertise and skill sets.
- Involve service user in design of their goals and care package to empower them to make change. (e.g My Shared Pathway)
- Work collaboratively to improve both service user and staff health.
- Promote staff to role model healthy lifestyles.

Steven Clark, Lead Clinical Exercise Therapist and Sofie Grabinski, Clinical Exercise Therapist, Shaftesbury Clinic

Cygnet Healthcare

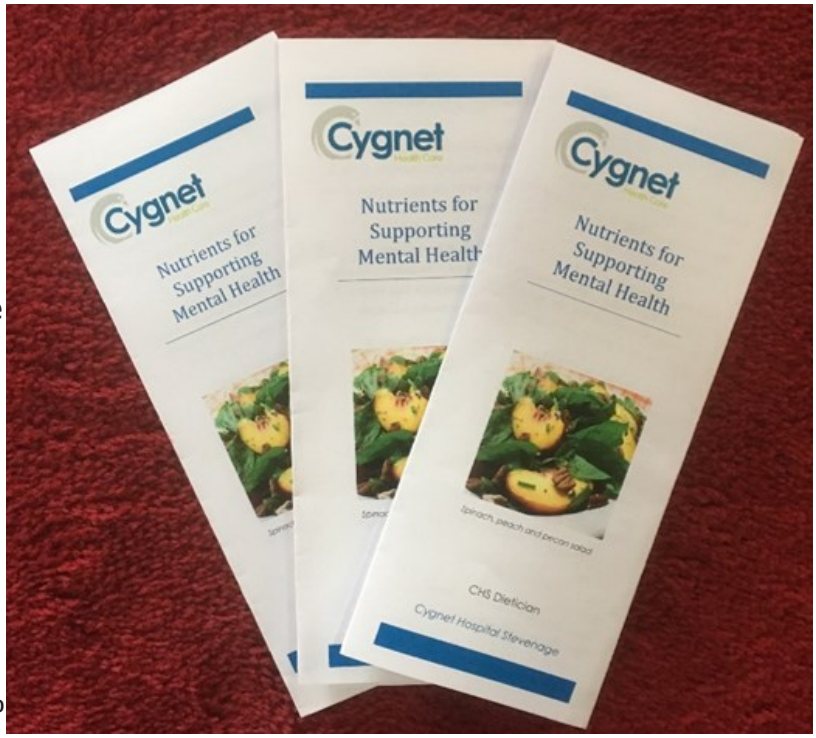
Managing Malnutrition in the Midst of Obesity

Malnutrition is …
The common perception of malnutrition is one of an individual who has a BMI several points below the lower cut-off of the healthy range. Individuals consuming less energy than required for maintaining body weight within a healthy range are better referred to as 'undernourished', whilst those whose diet and lifestyle provide inadequate amounts of micronutrients should be described as 'malnourished', regardless of BMI.

Obesity is a major issue in mental health care settings and we place great importance on the need to address a condition that further increases risk of preventable disease, such as type 2 diabetes. Consumption of excess energy (calories), in tandem with sedentary existence, is the damaging combination that can cause lasting harm to the physical health of those in our care.

We must continue to make resources available for supporting weight management of our service users but, at the same time, we should look beyond solely targeting excess body weight, and address diet quality

as well. Optimum nutrition supports overall health and wellbeing – energy balance (calories in and calories out) is just one part of the health equation to be considered. In the medium-secure setting, several nutrients are deserving of attention, because these are linked to mental health, and among those that we are at more risk of having sub-optimal body stores.



Nutrients linked to mental health …

Any individual who has inadequate exposure to UV light is at risk of vitamin D deficiency; and obesity or low intake of vitamin D further increases this risk. Routine checking of vitamin D status showed that 90% of service users on one of our wards had serum 25OHD concentration below the vitamin D deficiency cut-off (25nmol/L) – prevalence of vitamin D deficiency in the general population in the UK is around 15% in winter months (Hyppönen *et al.*).

Vitamin D deficiency has been linked to depression and first-episode psychosis; although these observed relationships could simply illustrate reverse causality, the possibility of vitamin D status affecting mental health should not be entirely ruled out – vitamin D receptors are present in many tissues in the body, including brain. Oily fish and eggs are the only food sources *naturally* rich in vitamin D.

Magnesium deficiency has been linked to treatment-resistant depression (Eby *et al.*). The intake of this nutrient is below the Lower Reference Nutrient Intake (LRNI) in around 14% of adults in the general population. Wholegrain cereal, and dark leafy greens provide magnesium, but nuts and seeds are by far the richest source of this mineral.

In an intervention study involving young people at high-risk of psychosis, 12-week supplementation with omega-3 fish oil reduced risk of transitioning to full psychosis, compared to those receiving placebo – benefit was maintained at seven-year follow-up (Amminger *et al.*). Plant sources of omega-3 oil, such as present in flaxseed, pumpkin seeds, nuts, etc are a vegan alternative to oily fish.

Eating Well workshops …

It is a daily challenge to devise strategies, and agree goals, that support service users to consume fewer calories and get more active. A 'least-restrictive' approach to behaviour change is to offer *engaging* education on diet and health, in the form of workshops that encourage open discussion, and where attendees (including staff) can learn, as well as share their personal views and experience around food and eating.

Weekly *w*orkshops at Cygnet Hospital Stevenage, focus on good nutrition and how to ensure adequate consumption of health-protective micronutrients and minimise intake of those harmful to health if consumed in excess. The hope is that those attending gain useful knowledge about food and health, enabling them to make informed

decisions about what they choose to include in their diet, as well as modifying frequency of consumption of specific foods and drinks.

The workshops are structured around monthly themes, as a basis for discussion and participation in related learning activities. A theme has relevance to service user experience, behaviour or health risk, for example, 'management of constipation', 'salt and health', 'reducing risk of diabetes'. As one would expect, there is overlap, but this just serves to help consolidate learning around previous themes and discussion in workshops.

A diet information leaflet for mental health …

Nutrients for Supporting Mental Health was created to inform about food sources of vitamin D, omega-3 fats and magnesium. This leaflet, and some simple recipes, is given to service users interested in doing healthier eating cooking sessions with the Occupational Therapy team.

Please contact the Network for the full reference list relating to this article.

Tony Hirving, Dietician, Cygnet Hospital Stevenage

Greater Manchester Mental Health NHS Foundation Trust

The Healthy Lifestyles and Media Groups of the Recovery Academy Take on Managing Obesity in Secure Care

Connection between obesity and secure care

The group discussed the links between obesity and secure care and came up with the following issues:

- Medication increasing appetite and weight gain
- Limited choice of meals and snacks
- Lack of information about healthier choices
- Over eating culture – meal times , takeaways , leave, shopping
- Boredom and stress
- Poor sleeping patterns
- Diabetes – the risks and awareness
- Limited physical activities on wards
- Symptoms of mental health condition
- Lack of information about obesity risks on wards

Several service users shared their personal experiences:

Male patient JW

This service user put on approximately 10 stones in 12 months. His clinical team were concerned and investigated it further with regular physical checks. These stopped after he managed to lose 2 stones. He continues to struggle with his current weight.

Ex-Female patient DS

This service user put on approximately 5 stones in 6-months. After coming into secure services from Prison, rapidly put on weight due to increased appetite and no restrictions to eating in hospital, everything revolved around food. "Weight gain should have been addressed as it eventually became soul destroying and distressing". This service user subsequently became diabetic. Some staff were unhelpful and made comments about her being 'greedy' or wanting to get her blood checked if she wanted breakfast.

The group concluded that services should be more responsive to service users struggling with their weight, or seeing dramatic changes in weight over a short period of time. They felt that support should be available from day one, be involved in issues linked to healthy lifestyles and be supportive.

As a result of this being a concern to service users the Recovery Academy (EC) developed and started running a weekly healthy lifestyles group.

Healthy lifestyle session topics include:
Mind:
Taking back control
Inspirational thinking
Role of the mind in healthy lifestyles
Positive states of mind

Mouth:
Healthier choices
Exploring topics around healthy choices
Reading food labels
Portion sizes
Differences between sugar and sweeteners

Muscle:
Physical self-care
Maintaining physical exercise, incorporating it as part of a routine (e.g., attending daily gym sessions)

The Edenfield Centre's Physical Health care team have made regular contributions to sessions on specific topics related to the above.

Conclusion
The Service User group feel that healthier lifestyle choices should be incorporated into the mainstream care environment (ward routines), and support from trained staff should be more readily available in offering better physical health care and health promotion. Both staff and service user role models should regularly promote healthy decision-making, routines and behaviours, making sure sources of information on wards are up to date and comprehensive. Access to weighing scales, having daily routines, good quality information and taking the topic more seriously would help service user ward based communities to keep it a high profile issue.

Service Users, Media and Healthy Lifestyle Groups, Recovery Academy, Edenfield Campus

Avon and Wilshire NHS Mental Health Partnership Trust

Breaking Away from the Obesogenic Culture in a Secure Service

Fromeside is an 80-bedded Medium Secure in-patient unit for males and females that is managed by Avon and Wiltshire NHS Mental Health Partnership NHS Trust. The current project developed from growing concern from service users and professionals alike about the impact of the secure environment on our patients' physical health and wellbeing.

We began by researching the literature and found that obesity and related factors in inpatient units is a widely documented issue. One UK study reported that 33% of males and 63% of females in a secure inpatient facility were considered obese. The reasons for this are likely to be complex and multifaceted involving interactions between restrictions, nutrition, exercise and mental health to name a few. It is possible that the restrictions of the environment may foster an obesogenic culture which normalises a sedentary lifestyle, and acts as a barrier to accessing regular exercise and maintaining a healthy diet.

In an attempt to break away from this ethos, we created a focus group of clinicians and service users who meet monthly to identify areas for improvement. We began by organising a health promotion drive in the form of a 'tread-a-thon'; in which staff and service users collaboratively walked the distance of the English Channel on a treadmill. We also adapted our menu system, to encourage service users to pre-

order their meals in advance, thus reducing the likelihood of them selecting unhealthy options impulsively. Housekeeping staff have also worked with us to reduce the amount of food on display at meal times, in an effort to minimise the temptation to have multiple servings. Instead, service users are encouraged to opt for a healthy second meal option, such as soup, salad or fruit.

Accessing the vending machine is an activity within the daily routines of many service users, and functions as a stepping stone to other opportunities to increase community access. Previously, these machines contained predominantly unhealthy options, and supplemented an obesogenic culture. Additional thought was given to the content of the vending machine, and as such more healthy options are now available. We have also organised a weekly 'slimmers' group to support service users who do not feel comfortable with their current weight, in addition to a 'healthy swaps' group, which endorses alternatives to unhealthy snacks. These changes, paired with the introduction of a nutritional team, have encouraged conversations concerning diet and exercise and emphasised the importance of maintaining physical health. We have also increased opportunities for regular exercise including training ward staff to facilitate exercise sessions, implementing a walking group and 1-2-1 fitness-related leaves (for example, swimming).

With future directions in mind, we are developing a localised strategy aimed at ensuring the hospital environment actively promotes and models a healthy culture. This will be achieved by maximising service users' capacity around lifestyle choices and adapting the environment to promote healthy living. We aim to achieve this with staff training, monitoring of service users' weight from first admission, individualised care plans and health promotion events. As such, we are organising an educational seminar for staff and service users to raise the profile of the issue of physical health in mental health services and generate ideas and conversation; including a guest speaker with experience of implementing healthy lifestyle approaches.

Notably, a psychoeducational talk around the challenges and barriers to implementing change revealed that strong emotions were generated when discussing the topic. Staff members were concerned about the protection of service users' basic human rights, and the personal nature of feeling that one is being challenged on lifestyle choices or indeed their weight. Therefore, facilitating a space for staff to reflect, and tackling key issues in our duties as staff in secure services, has become vital in implementing change.

The current interventions have been localised to our women's service and feedback from service users so far has been positive. One service user stated; "on arrival I would say I ate out of boredom and medication doesn't help *[with weight gain];* however after gaining weight I now enjoy long bike rides and walking group. It's a hard challenge, but with support from peers and staff I love healthy eating and being much more active."

The current intervention is still under development. We are hoping the construction of a standardised strategy will provide a framework that will allow us to; (i) set targets for improvement, (ii) measure the effectiveness of interventions, (ii) ensure the changes are sustainable and adaptable for the needs of our male and female service users.

Georgia Steed, Assistant Psychologist; Josie Alexander, Occupational Therapist; Sophie Claessens, Dietician; Jade Fullick, Student Psychologist and Sarah Elliot, Clinical Psychologist, Fromeside

South London and Maudsley NHS Foundation Trust

The Experiences of Nurses when Implementing Strategies to Reduce Obesity

Background:
Currently, around 6,000 people are detained in the UK in three high, sixty five medium and one hundred and fifty low secure mental health units due to their assessed risk to others or custodial sentences (Public Health England, 2015).

River House medium secure unit is comprised of six wards, with 15-16 patients each, totalling 89 patients. The average length of stay is 18 months. It has been noted that the majority of patients gain weight after their admission to unhealthy levels, leading to other physical health conditions, which in turn can affect them psychologically.

Aims
The overall aim is to improve the weight management programme in this unit. This study reviewed how approaches to tackling obesity were implemented and identified challenges nurses are faced with when trying to reduce obesity.

Objectives

1. Investigate mental health nurses' attitudes towards obesity. Critically evaluate the support currently offered to patients.

2. Explore mental health nurses' experiences and difficulties encountered in implementing weight management strategies Utilise findings for the basis of a quality improvement programme for nurses' contribution in successful implementation of weight reduction programmes.

Design/ Methodology/Approach
A qualitative descriptive framework was employed. This method is suited to research which aims to identify the views of the sample group, without the restraints of the underpinning theories of other qualitative research such as grounded theory or phenomenological approaches (Manuel and Crowe, 2014).

As part of the service evaluation, data collection was obtained using semi-structured interviews with eight nurses from a range of nursing roles, who contribute towards patient weight management. The recorded interviews were transcribed for the frame-work analysis.

Findings
The findings were categorized in themes which highlighted the main areas of concern in regards to patients' obesity and general physical health.

Conclusion
This study emphasized the importance of involving nurses in delivering, supporting and adopting lifestyle change interventions. This could be a way to change the culture on wards and highlight the benefits of healthy eating and physical activity. Nurses were aware that there is not enough emphasis on physical health in the unit. When considering the outcomes of the study the following recommendations have been proposed:

1. The secure unit environment is conducive to implementing successful healthy living programmes. There are appropriate facilities for sports activities and trained instructors.

2. In depth training of nurses and other staff in nutrition and physical health with the aim to increase their awareness, knowledge and confidence around physical health issues. This will enable nurses to deliver the required support and advice to patients. Nurses can play an important role as they are patients' care co-ordinators, with opportunities throughout the care pathway. Increase the number of dieticians in the Trust; thus making specialist interventions

available.

3. Involve patients in decision making and tailoring individually their healthy living programmes in order to empower them using the least restrictive interventions Provide health promotion interventions as early as possible in treatment. There should be a prevention strategy in place for the medium secure unit with the aim to reduce exposure to modifiable physical health risk factors and promote physical health care.

Ongoing investment (time, personnel and resources) in this area will produce positive results and reduce costs in the long term. This should reduce the costs of treating chronic diseases by aiming to prevent them. Physical health should remain a major priority for the unit. The guidelines for obesity interventions is presented within NICE guidance (2014). Mental health secure units need to identify how this guidance will be implemented in these care settings.

Please contact the Network for the full reference list relating to this article.

Aurelia Hossu, Ward Manager, River House

Royal College of Psychiatrists

Managing Obesity in Secure Services: An Outsider's Perspective

I am not sure whether it is my place to comment on "managing obesity in secure services" as I am someone whose mass hasn't changed since I was first detained over 10 years ago and whose BMI is less than 21. However, I am aware, from both the media, clinical meetings and academic research reports, that it is a concern for certain sectors of the mental health population; both detained and otherwise. Within secure services, it can seem as though, there are so many barriers, both perceived and actual, to managing one's physical health and fitness: The staff shortages that reduce opportunities to use onsite or external gyms, the possible poor quality of "cook-chill" meals which may seem to have had most of the goodness cooked out of them, together with the institutional tradition of celebrating birthdays/Christmas/ Easter and other events with an excess of often beige-coloured buffet food which is high in both sugar and fat.

Of course, there is also at times a stressful and demotivating nature of the ward ambience and environment. It can be incredibly hard to summon up the personal "oomph" to exercise when you feel semi-permanently drained due to whatever episodes of personal distress or anti-social behaviour may be playing out on the ward. You can retreat to your room or use garden breaks to move your body, but my personal experience of running around and around a somewhat small, enclosed space, is that it doesn't do much for your mood or mental well-being.

As for the orexigenic (appetite-increasing) effects of certain atypical anti-psychotic medications…let's not go there.
What can secure wards do? Recruit 'green goddesses' and 'mr/ms motivators' to whip patients into a frenzy of physical exertion? Perhaps not, but therapeutic referrals to community gyms can be made and used as a motivator for patients to work for and maintain unescorted leave. It might be helpful, if instead of biscuits, yogurts or more novel kinds of fruit or even nuts, could be available for patients between meals. More courageous and determined units might monitor/restrict/eliminate the sale of unhealthy highly calorific snacks from their onsite tuck shops or cafes. Services might also run regular walking or exercise groups in their grounds or local community. That's the thing with healthy (and unhealthy)

behaviour, every little bit counts; provide more opportunities on the ward for patients to make healthy choices and reduce opportunities for unhealthy choices and the positive effects should start to become apparent.

Patients deserve to be cared for both physically and mentally, what are in both the long and short term healthier, but harder choices. For both male and female patients, weight can affect self-esteem and if you bear the label 'mentally disordered offender' and, in at least the short-term, have less than complete ownership over your own destiny, it doesn't aid recovery having even more reasons to feel bad about yourself. I believe there is scope for secure services to do a lot more to protect their patients from the harmful effects of inactivity and certain types of medication. What is needed is a strong incentive for them to do so, and enhanced reliance on relational rather than procedural and physical security. Perhaps it's now the time for the commissioners of secure hospitals together with the DoH and MoJ, to put some more incentives in to play.

Sarah Markham, Patient Reviewer, QNFMHS

Northumberland, Tyne and Wear NHS Foundation Trust

Development of a Weight Management Programme to Tackle an Increasing Weight Problem on Forensic Leaning Disability Wards

Introduction

Rates of overweight and obesity are increasing in the general population, 63% in 2015 (Moody, 2016). Rates are considered to be higher in people with severe mental illness (SMI) due to the effects of medication, poor diet, alcohol misuse and less active lifestyles (Scott and others, 2017) and higher again (up to 80%) in populations detained within mental health secure units (Public Health England PHE, 2017). Rates are also higher in people with learning disabilities (Robertson and others, 2014). The Royal College of Psychiatrists (2016) have identified tackling prevention and treatment of obesity as one of the essential actions to help reduce the increased rates of poor physical health and premature death in people with a S.M.I.

Northgate hospital has low and medium secure units caring for male patients with learning disabilities. Within these wards patients being over-weight/obese is a problem mirroring the concerns reported above.

A recent review of 43 patients on 2 forensic units at the Northgate site; Kenneth Day Unit (medium secure) and Tweed (low secure), revealed 74% were either overweight or obese (32% overweight and 42% obese).

To tackle the problem, multiple component changes (educational and practical) are needed to tackle cultural, dietary and physical activity behaviour change among both staff and patients (PHE, 2017), see diagram 1. A survey conducted at the Northgate site revealed staff and patients wanted a dietetic service led, ward based education and monitoring programme (NTW Dietetics Service, 2016). In response, a 10 week programme was developed. The programme reflects current evidence around management of obesity. Research is highlighting the importance of targeting food habits as means of tackling obesity in SMI (Scott and others, 2017 & PHE, 2017). Dietitian led nutrition interventions have been shown to be the most successful in preventing and treating weight gain (Scott and others, 2017). The dietetics service ensures dietary messages are evidence based and consistent but adapts to a more individualised approach as required, they are experts in nutritional policy/standards and have close links with catering services. Ward based sessions, where nursing staff and other multidisciplinary team members are encouraged to participate also helps to develop staff role models, consistent messages and a healthier culture.

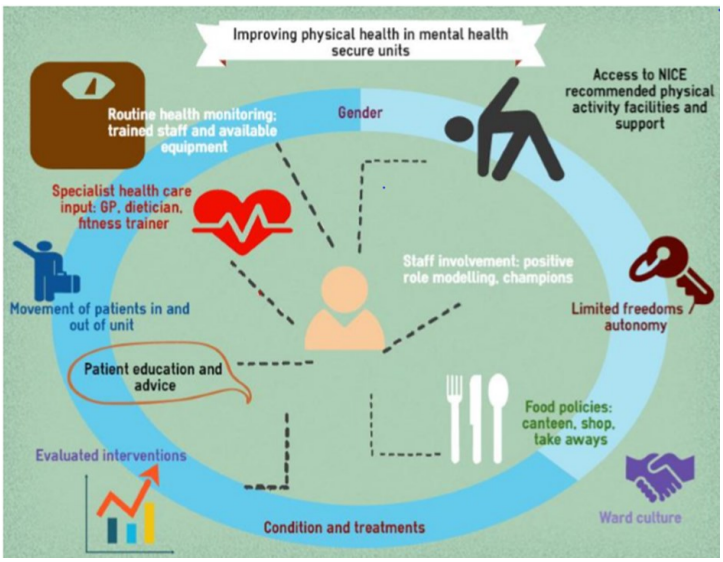


Diagram 1: Contributing factors to consider when tackling weight management in secure mental health wards (PHE, 2017)

Programme Outline:

The sessions last up to 60 minutes, involving interactive education, weight monitoring and

goal setting. Topics include 'The cycle of change' (Ewles and Simmett,1999) fat, sugar, protein, carbohydrates, portion sizes, salt, fruit & vegetables and a recap session. Content is based on government 'Eat well Guide' messages (PHE, 2016) but touches on known problem areas e.g. takeaways, high calorie snacks, catering issues and ward culture. Outcome measure data is collected relating to changes in weight, blood pressure and Diabetes control.

As an incentive patients receive a star for either maintaining their weight and for each 0.25kg lost per week. On completion of the programme they receive a certificate.

The weight management programme has now been completed on Tweed and the KDU with some promising results:

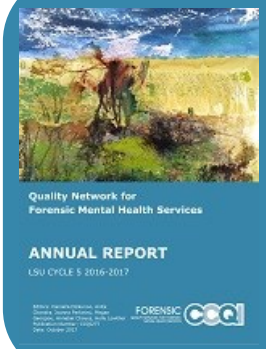
Patient Results:
8 patients lost weight, 1.74kg on average (range 0.5-3.3Kg).
5 patients stabilised/ gained weight (only 1 had a clear increase of 2kg).
All patients, were able to answer questions demonstrating improved knowledge around healthy eating.
Blood Pressure (BP) improved for 54% of the patients: 1 patient reduced their overall BP and 6 reduced their systolic BP. (BP increased for 3 patients, remained stable for 2 and was unavailable for 1 patient).
One patient, has diabetes and has experienced a large decrease in Insulin (45 units) alongside his 3.3kg weight loss.

Staff Results (5 staff):
Average weight loss was 3.9kg.
Staff engagement was excellent. Staff supported between sessions by reminding and encouraging patients regarding need to attend, key messages and goals.
Staff reported that the sessions enhanced their knowledge around healthy eating.

Conclusion
The weight management groups have proved to be a valuable tool within the dietetics service to tackle the issue of weight management on learning disability forensic wards, where the majority of patients are overweight or obese. We will continue to emphasise the importance of supporting staff participating in the programme; we felt the commitment and involvement of staff really enhanced patient compliance and outcomes. Ideally we would hope to repeat the programme annually on such units and also transfer to other hospital sites throughout the trust. We plan to devise a data base to continually collate outcomes from the programme.

Please contact the Network for the full reference list relating to this article.

Fiona Gillies, Specialist Dietician & Rachel Skinner, Advanced Dietitian, Northumberland Tyne and Wear NHS Trust



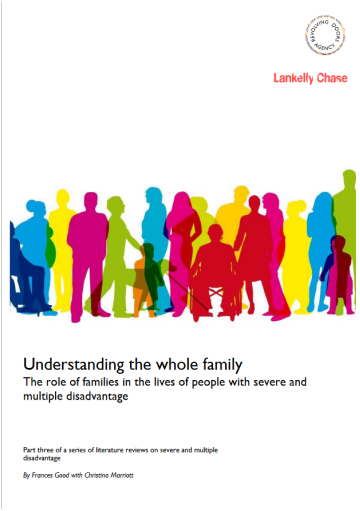
ANNUAL REPORTS

Our LSU and MSU annual reports have now been published and our available on qnfmhs.co.uk

News

Understanding the Whole Family

The review shows that families have multiple and often conflicting roles in relation to people facing severe and multiple disadvantage; and therefore examines the strengths and protective factors as well as the barriers or problems within families.
https://gallery.mailchimp.com/5667fc9423077c60df49d7056/files/6ba01498-f129-480b-b29a-a5f88e873fec/Families_Lit_Review_FINAL.pdf



The future of the mental health workforce

In this report written by the Centre (on behalf of the NHS Confederation Mental Health Network, commissioned by NHS Employers and supported by Health Education England), we explore what the mental health workforce of the future should look like. Through extensive consultation, we examined the challenges facing the existing workforce, enabling us to construct a vision for its future .
https://www.centreformentalhealth.org.uk/the-future-of-the-mental-health-workforce?utm_source=Centre+for+Mental+Health+Core+List&utm_campaign=faf6cbefb1-EMAIL_CAMPAIGN_2017_11_08&utm_medium=email&utm_term=0_c0ac5acb39-faf6cbefb1-212001057

Improving access to competitive employment for service users

The model recommends a focus upon rapid job search to achieve competitive employment for those who want to work; opportunities sourced should be consistent with individual preference and benefits counselling offered. Support should be time unlimited and integrated with mental health treatment. A person-centred and strengths-based approach is also adopted to support people to build on their strengths, establish goals, and encourage motivation.
https://qi.elft.nhs.uk/wp-content/uploads/2015/08/charlotte-beck-connie-wernham.pdf

Northumberland Tyne and Wear NHS Trust

Obesity in Patients Living within Secure Services

Obesity rates are increasing in the general population; in 2014, the prevalence of overweight and obesity exceeded 60%. Rates of obesity are even higher in people with severe mental health problems compared to the general population due to the effects of medication, poor diet, alcohol misuse and less active lifestyles (PHE, 2017). Obesity and being overweight are again more prevalent in the population detained within mental health secure units (with rates of up to 80% reported) (PHE, 2017). Also in the UK, people diagnosed with schizophrenia are reported to have a 2–3 times greater premature mortality rate than the general population. This is mainly due to cardiovascular disease associated with long-term lifestyle factors such as smoking and obesity. Recent government policy has highlighted the need to tackle mental and physical health issues equally as a current priority (PHE, 2017).

In 2016 Northumberland, Tyne and Wear NHS Foundation Trusts Dietetics service developed a 10 week ward based weight management programme. The aim of this was to improve the overall health and wellbeing of patients and staff through dietary education, weight management awareness and monitoring. Several patients on Tweed unit were identified as potential participants due to having a BMI of over 30, all the patients identified showed a willingness to engage in such a programme. The objectives of the programme were to train supporting nursing staff including Occupational therapists, Speech and language therapists and Exercise therapists to advise consistently on healthy eating, become positive role models to patients needing to tackle increasing weight and give patients ownership of their care. The sessions lasted no longer than 60 minutes and included interactive education, weight monitoring with individual goal setting and evaluation, topics included 'the cycle of change' (Ewles and Simmett,1999) fat,

Pa-tient	Start-ing weight (kg's)	Final weigh t (kg's)	Total chan ge (kg's)	BP Start	BP End
1	134	134.7	+0.7	Not Availa-ble	119/58
2	126.6	126.8	+0.2	135/72	123/79
3	88.4	86.8	+0.2	138/63	131/65
4	101.1	99.4	-1.7	129/65	136/88
5	114.1	113.2	-0.9	127/69	123/73
6	96.5	94	-2.5	119/65	134/86
7	108.3	110.3	+2	132/67	128/75
8	140.1	141.2	+1.1	133/87	129/72

sugar, protein, dairy, carbohydrates, salt, fruit & vegetables as well as portion sizes. This was followed by a recap session at the end of the 10 weeks, as an incentive patients receive a star for either maintaining their weight and/or for each ½ pound lost per week, on completion of the programme all participants received a certificate and a healthy prize of a fruit basket was organised for the group.

Tweed Results:

Patients Results

- All eight patients who enrolled completed the programme.
- 3 patients lost weight, 1.7kg on average (range 0.7-2.5Kg).
- 5 patients stabilised/ gained weight (only 1 had a clear increase of 2kg).
- All patients, were able to answer questions demonstrating improved knowledge around healthy eating.
- 2 of the participants reduced their overall blood pressure.
- 5 participants reduced their systolic blood pressure.
- Blood pressure increased in 2

participants.

A follow up session took place in June where only three patients attended with two loosing further weight and one patient had a small weight gain (0.5kgs).

Staff Results:

Staff	Starting Weight (kg's)	Final Weight (kg's)	Total Change
1	78.9	77.8	-1.1
2	126.2	124.4	-1.8
3	112	105.4	-6.6
4	92.4	Not Available	0
5	96.7	90.6	-6.1

- Average weight loss was 3.9kg for staff (for those with a final weight recorded).
- Staff engagement was excellent on Tweed and there was good staff support between sessions, with staff reminding and encouraging patients regarding need to attend, key messages and goals.
- Staff reported that they had also enjoyed the sessions gaining valuable knowledge around healthy eating.

Plan going forward

- Staff to engage further with the programme as the commitment and involvement of Tweed staff really enhanced programme compliance and outcomes.
- Ensure ground rules are agreed at the beginning of the programme.
- Dietetics Service to adapt and run the programme at other units and hospital sites.
- The dietetics service to set up a data base to collate outcomes from the programme.

Please contact the Network for the full reference list relating to this article.

Martin Browell, Assistant Practitioner, Tweed Unit, Northgate Hospital

Royal College of Psychiatrists

My Weight Loss Story

So this newsletter theme is Managing Obesity in Secure Services so I'm going to tell you a little about my own story.

At the age of 11 years old I was put on my first mental health medication. Before I was on this medication I was an extremely active child. I used to do regular dance classes, attend swimming classes and I was also very talented at gymnastics and was competing with my local team.

Unfortunately, the medication caused me to gain weight rapidly, in fact I gained four stone in four months! As my mental health wasn't getting any better they continued to up my dosage and I continued to put on more weight. Combined with being admitted to child mental health units and the medication I began to become over weight.

By the time I was 20 years old, I was extremely obese and my weight matched my age and I seemed to be putting on an average of a stone a year. By this time I was in a medium secure hospital and I had no motivation to even stay awake during the day let alone exercise and eat well.

My days were spent on close observation, sitting in a chair, watching the TV and munching on the food I had bought on my shop run that morning. There was no limit on what you were allowed to buy on the shop run and I would easily consume five or more packets of crisps and a few chocolate bars after my breakfast (which was usually five bits of toast with spread on them) and this was before lunch. Also the food that was provided at the hospital didn't taste very good so I would fill myself up with rubbish and then subsequently feel rubbish. Something that I think my service could have done better was limiting the amount of food that each patient could buy, this would have really helped me.

So at 21 years of age I was 21 stone. I now had a bit of leave to go to the shop myself and I was able to attend different groups like music or craft but there wasn't any groups that addressed healthy eating which is something that also would have been really helpful.

I also had leave to go to the gym but I found it really difficult. There was a gym at my service and it was actually a really well equipped gym with running machines, cross trainers, weights, rowing machines and also included a sports hall with basketball hoops and other bits. Unfortunately, they only had male gym instructors and as a woman in a secure service, you had to have a female member of staff and the gym instructor to go with you, which wasn't easily made available. One thing that my hospital could have done better, would be to either have at least one female gym instructor or have more female members of staff to take you to the gym.

So at 22 years of age, I was now 22 stone and really struggling with my weight and the effect it was having on my health. I now had community leave but whilst I was out on my leave I would have to sit down every few minutes, as I was struggling with back pain and feeling out of breath. This not only was an effect on my physical health but it had a major effect on my mental health, as I was so conscious of being so big and it stopped me doing things that I enjoyed.

I had tried different diets and my hospital was helpful in some things that they did. One really good thing was they had begun a weight loss program called 'health idol'. They had trained instructors come in and discuss healthy living and do exercises with us but I found it really hard to stick to. Something that I think would have been really good, would have been to have incentives like extra leave or treat days out for patients who stuck to it because like me, other patients found it hard to stick to and

they ended up not continuing with the program.

My weight continued to increase and by the time I left hospital at the ripe age of nearly 25, I was 24 and a half stone and I moved like a 90 year old. Considering I was 5”3 that's a hell of a lot of weight to be carting round and I had a BMI of over 60! I could barely walk a few meters without being in severe back pain.

I decided something needed to change as I couldn't live like this and nothing else I tried had worked and it was effecting my mood so I decided on weight loss surgery. So within 4 weeks of being out of hospital I had the gastric sleeve. This is where they staple your stomach so it is smaller (like a sleeve) and take the rest of the stomach out.

Unfortunately, the surgery went wrong and I spent the next three months fighting for my life in general hospital.

I was diagnosed with a leak in the stomach down to where they hadn't sewed me up properly. I also had pneumonia, an abscess and a collapsed lung. The leak just wouldn't mend so eventually they decided to put in a metal stent into the stomach to help it heal. When they went to take it out eight weeks later, they realised they had put in a faulty stent so then that was another invasive surgery. They did more surgeries trying to fix the problems they had caused which unfortunately left me with a pretty much normal size stomach, so there was no point to the surgery in the first place

After three long months I was out of hospital. I had lost weight (around four stone) but that was because I was nil by mouth for 11 weeks 4 days (fed by a tube) but I was back to square one again struggling to lose weight!

I had tried weight loss groups but I hadn't been able to stick to them. I decided to try weight watchers again and I will never look back. It's helped me so much and I wish I had been more motivated sooner. I've now lost over nine stone and have gone from a size 36/38 to a size 18/20.

Getting motivation when you are in a mental health hospital is so hard. Patients need staff to help motivate them, as when you’re stuck in a rut it's hard to get out. I think that doing weight watcher groups in hospital would be a really good idea. It gives you a simple points system to stick to and seeing the weight go down each week gives you a real buzz which lifts your mood. I believe if I had lost weight earlier on it would have aided my mental health to recover quicker. There's nothing that gets you mood down more than struggling to walk, breath or doing other simple activities. You find you can't enjoy things as much as you are constantly conscious of your weight and what people think of you.

It's taken me many years to eventually get the motivation to lose weight but I can't tell you how much better I feel for it. I can do so many things that I couldn't do before because of my weight including going abroad, (I wouldn't have been able to fit in a seat on the plan before). It's opened my life up to so much more and encourage anyone who is struggling with their weight to keep trying as you will get there in the end.

Hannah Moore, Patient Reviewer, QNFMHS

Join the **Email Discussion Groups** to network with colleagues on topics relating to secure mental health.

Email ‘join’ to:
lsu@rcpsych.ac.uk
msu@rcpsych.ac.uk

Hertfordshire Partnership NHS University Foundation Trust

Reducing the Level of Obesity in Secure Learning Disability Units

Over the past two years there has been a focus at Warren Court (medium secure) and 4 Bowlers (low secure) looking at ways to support healthy eating and weight management. This has resulted in a gradual change in the culture and practice within the units, enabling the SU's (service users) to adopt more healthy eating practices; to have increased continuity in the support that they receive and enable them to take on the responsibility to manage their weight.

Why is obesity such a common problem in these types of units?
An initial assessment identified the risk factors are associated with weight gain, barriers to healthy eating, existing good practice, key staff members and potential areas of change.

Picture showing the amount of fat and sugar that could be eaten in one week.

Many of the risk factors are potentially modifiable; however it is important to consider that introducing change can have a negative impact SU's behaviour.

What have we done?

- Nutrition is now being linked in to the Recovery College, where SU's help plan and deliver the sessions. One such session (around general healthy eating principles) has already occurred and been received well by those attending – all acknowledging that learning from a peer feels more attainable than just listening to professionals. Further sessions are planned, looking at heart health and diabetes.
- SU's have their own healthy eating booklets, individualised to their specific aims and goals. Goals are personal, e.g. losing weight to fit into a favourite onesie. Goals are shared with the nursing and Recovery Team staff so they can be reinforced on a regular basis.
- A range of resources and techniques are used to reinforce information given: A particular hit being "You are not a dustbin" picture. Joint working with the Speech and Language Therapists is another approach where "Talking Mats are used to establish levels of understanding. A healthy eating group is run at the low secure unit, with practical sessions including tasting new fruits and looking at energy balance.
- The trust Innovation fund enabled a joint project with the recovery college to be held. **"How much do you really eat?"** A weeks typical intake of food was displayed; with the amounts of fats and sugars in the food being represented by sugar and chunks of lard. As well as stimulating conversation at the time of the event photos and video were taken and a teaching pack is being developed. The event also highlighted the need for staff training around menu choices and portion sizes.
- Another outcome from the innovation day is the need to relook at the way that the menus are laid out. At present the pictorial menus have vegetables and starchy carbohydrate choices all

Risk Factors and barriers	Modifiable
Obeseogenic medication	Unlikely
Obeseogenic menu	Partially
Availability and purchasing of high calorie snacks. Within the unit and when on leave.	Yes
SU not engaged in dietetic intervention	Yes
Family/friends bring in in unhealthy snacks	Yes
Limited opportunity for exercise	Partially
High levels of boredom and snacking	Partially
Culture of a high calorie supper eaten in the evening	Yes
Dietetic hours used to run a monthly clinic at Warren court that was seen to be in isolation of the day to day life of the SU's.	Yes
Lack of education and support to enable the SU's under-stand the benefits of healthy eating.	Yes
Inconsistencies in the portion sizes of meals served	Yes

shown on the same line. By splitting these over two lines it will be easier to direct SU's to keep to one carbohydrate choice at each meal. Work is also needed to ensure that descriptions and photos of the meals are accurate. At present SU's with autistic traits don't always have confidence that the choices they make are what they think they are. Meals are then rejected and the SU's fill up on excess junk food.

- As well as looking at what the SU's eat, there is a push on promoting physical activity. The Recovery Team staffs are key in the way they continue to encourage the SU's to use the gym on a regular basis (both inside and outside the units). Many of the SU's at the low secure unit now have bicycles. In addition the introduction of a peer Gym mentor and individualised programmes enables alternative types of physical activity outside the normal remit of using the gym equipment is explored Using pedometers and exercise videos has engaged more service users in the healthy lifestyle and wellbeing agenda.

Making change is difficult, but having an integrated approach and a can do attitude enables change to happen. The plan going forwards is to continue to work on all the areas discussed until they are firmly embedded in all aspects of life at the units.

Claire Fenlon, Highly Specialist Dietitian, Warren Court and 4 Bowlers

Health Service Executive

The WANE Programme

Background to the initiative:

People with mental illness and/or an intellectual disability face the harsh reality that they may die decades earlier than the rest of the population. The lifespan of people with severe mental disorders is shorter compared to the general population mainly due to physical illness. Patients in secure psychiatric units, like the Central Mental Hospital, are at a high risk of developing obesity for a number of complex reasons. The effects of psychotropic medications, an unhealthy lifestyle, inadequate knowledge and life skills contribute to weight problems within the inpatient group. Research suggests that persons with psychiatric disorders are less likely to know that they have a weight problem. Lack of awareness and motivation are key factors that require assessment and implementation of stage-appropriate interventions.

The Central Mental Hospital espouses a recovery model of care in partnership with the patient. The end goal for patients in the hospital is to return to the community. Therefore the service aims to provide its patients with the necessary skills to lead as independent as possible life following discharge. Traditionally this meant educating patients about their primary illness or disability. Increasingly, the importance of equipping patients with other life skills – in this case making healthy lifestyle choices –is essential when ensuring a smooth transition into society.

The *Weight and Nutrition Education Programme* (WANE) was developed by the Central Mental Hospital in response to the challenge of obesity in their patients. It was developed as a joint initiative between the Primary Healthcare and Recreation department.

Aims/Objectives:
To help patients safely lose excess weight and maintain healthy weight through educating participants regarding, sensible food choices and daily exercise. It was hoped to empower patients to choose a healthier lifestyle. The WANE programme is tailor made to meet the needs of the patient population.

How we went about the initiative:
The WANE programme was rolled out on a trial basis in 2015 starting with the rehabilitation units. Patients participated on

a voluntary basis and the programme was delivered to groups of 8 patients weekly for a period of six weeks. Sessions lasted an hour and topics were delivered in related to healthy eating and exercise. Patients were given a weekly food diary and a pedometer. During each session food diaries were checked and suggestions for improvements were made. Weekly weights were taken, and each patient was given a graph that showed weight lost.

Physical Activity:
Lack of physical activity can be a determinant of obesity. Evidence exists that physical activity reduces mortality and morbidity in coronary heart disease, hypertension, osteoporosis and mental health disorders. The WANE programme places emphasis on physical activity, and to this end the Recreation department provides jogging sessions, personal training, and gym sessions for participants. In addition to this, all patients in the CMH are offered daily walking groups, access to a fully equipped gym and weekly yoga sessions. The CMH also boasts a tennis court and playing fields where staff and patients enjoy playing football together every lunch time. The Recreation department also worked closely with the Occupational Therapy department in providing a sports day for all patients in the hospital.

Patients with an Intellectual Disability:
It is well documented that the ID population experience health disparities. Yet adults with ID are often excluded from health promotion initiatives. Research was carried out with patients from the Mental Health Intellectual Disability unit (MHID). Views of patients in relation to the factors that influence their decisions on healthy eating and their participation in exercise were explored by using two focus groups. The objectives of this study were to ascertain the patients understanding of healthy eating and exercise to examine the perceived factors that influence making healthy food choices and participation in exercise programmes. Results from this study were used to develop the WANE programme for the ID population. WANE offers health promotion groups and exercise programmes, including appropriate materials, to the interests of the patients in order for them to enjoy participating in them.

Outcome/Results:
The WANE programme continues to operate in six week cycles in the CMH. One area for improvement was that some patients felt it would be of more benefit to run the group over a longer time period. Every patient that participated in the WANE programme has either maintained, or lost weight. This weight loss varied between 1kg and 11kgs. Feedback from participants was positive. Most enjoyed the programme and felt more confident in their positive lifestyle decisions. Future plans include rolling out the group to all units, including a modified programme in the male admission unit.

Julia Butler, CNM1 and Tracey Hoare, CNM2, Central Mental Hospital

University Health Board

Investigating Psychological Factors in the Relationship between Antipsychotic Drugs and Obesity in a Secure Service In-Patient Population

Preventable physical illness is a leading cause of death in people with schizophrenia (Hennekens, Hennekens, Hollar & Casey, 2005). People with this diagnosis are three times more likely to die from coronary heart disease than the general population (Hennekens et al. 2005) and are also at increased risk for developing type two diabetes and life-shortening respiratory diseases (Subashini, Deepa, Padmavati, Thera & Mohan, 2011; Tay, Nurjono & Lee, 2013). Obesity is a key contributing factor in all of these health conditions.

Atypical antipsychotic medications stimulate hormones and neurotransmitters related to appetite control (Bak, Fransen, Janssen, van Os & Drukker, 2014) and weight gain is a recognised effect of their use. Attention for emotionally salient cues is commonly disrupted in schizophrenia (Anticevic, Repovs & Barch, 2012) and is driven by disruption within brain areas involved in attentional processing. Antipsychotic drugs partially restore regulation of attentional processes and reduce attentional deficits (Keedy, Reilly, Bishop, Weiden & Sweeney, 2014). Amongst the therapeutic benefits conferred it is also plausible that antipsychotics may restore ability to direct focused attention to food cues or for especially palatable foods to 'capture' attention.

An important behavioural factor in obesity is individual responsiveness to seeing food and food related cues. Attentional processes normally underpin an individual's motivation to consume highly palatable foods that are typically high in fat and sugars. The degree to which an individual allocates attention to food cues in their environment, and is therefore influenced by the 'pull' of food cues is a useful predictor of their propensity to overeat (Seage & Lee, 2017; Doolan, Breslin, Hanna & Galagher, 2015). Thus, psychological factors are likely to mediate the weight gain potential of antipsychotics.

One behavioural measure of neural sensitivity to food cues is attentional bias. Attentional bias is revealed in the differential processing of personally relevant information compared to neutral information (Macleod, Matthews & Tata, 1986). Obese individuals may allocate greater attentional resources to food cues compared to their lean counterparts (Nijs, Franken & Muris, 2010, Yokum, Ng & Stice, 2011; Kemps, Tiggemann & Hollitt, 2014; Werthmann, Jansen & Roefs, 2011). Both lean and obese participants direct attention to food images when they are hungry, but critically, obese participants continued to show enhanced attention to food cues when satiated (Castellanos, Charboneau, Dietrich, Park, Bradley, Mogg & Cowen, 2009). Attentional bias to food cues has been shown to predict weight gain over a 12-month period (Caltri, Pothos, Tapper, Brunstrom & Rogers, 2010). In addition to obese populations, individuals high in dietary restraint (i.e. those attempting to limit calorie intake), those prone to external eating (disinhibited eating) and those with abnormalities in trait reward drives also preferentially allocate attention towards food cues (Seage & Lee, 2017; Tapper, Pothos, Fadardi & Ziori, 2008).

Food cues acquire higher motivational value through the process of dopaminergic conditioning (Berridge, 2004). This process may be exacerbated by the consumption of caffeine (Garber & Hustig, 2011) which is often higher amongst people with schizophrenia (Strassnig, Brar & Ganguli, 2003). Dopamine is an important modulator of attentional resources and underpins motivation, cue salience and reward based

learning (Berridge 2004). Weight gain in people with schizophrenia may therefore be partially driven by dysfunction within this reward system (Grimm, Kaiser, Plichta & Tobler, 2017). A consequence of this dysfunction may be that food cues gain increased salience and command more attentional processes, particularly when attentional capacity is improved by antipsychotic medication. The interaction of these phenomena may partly explain higher rates of obesity seen in medicated individuals with schizophrenia compared to the general population.

Environmental factors may also influence hypersensitivity to food cues (Cohn, Grant & Faulkner, 2010). Potential obesogenic factors within inpatient settings include buffet type food services and access to high calorie foods and beverages (Gorcynski, Faulkner & Cohn, 2013) along with restricted access to other sources of autonomy, reward, stimulation and self soothing.

We have recently been awarded funding for a PhD studentship through Wales' Knowledge Economy Skills Scholarships (KESS2) to explore the inter-relationship between diet, nutritional status, attentional bias, and measures of perceived autonomy and the functions of eating and obesity in a secure mental health inpatient population. We intend to answer the following questions:

1. To what extent do individuals with schizophrenia pay heightened attention to food stimuli in their environment?
2. Is attentional bias for food cues on admission a useful predictor of weight gain during inpatient treatment?

Following a nutritional analysis of food intake during the first months of admission, we aim to determine whether there is a nutritional status difference between individuals with high and low attentional bias to food cues?

The authors would welcome contact from other medium and low secure services who might be interested in collaborating on this study.

Please contact the Network for the full reference list relating to this article.

Joseph Davies*, Heidi Seage*, Andy Watt*, Paul Hewlett* and Ruth Bagshaw**
***Cardiff Metropolitan University**
****ABMU Health Board**

Working together to address obesity in adult mental health secure units

Earlier in 2017, Public Health England published a systematic review of the evidence and a summary of the implications for practice around obesity in secure units.

The Recovery and Outcomes group, organised by Rethink Mental Illness, recently met to discuss the recommendations of the report and they will report back to NHS England early next year.

St Andrew's Healthcare

Better Lives, Better Living: Service-user led innovations for healthy living

Rose ward is a 17-bedded medium secure neuro-rehabilitation unit for adult men with a brain injury.

Patients have a range of neurological and psychiatric diagnoses including; ABI, TBI, dementia, stroke, epilepsy, Huntington's disease and psychosis. They are admitted if assessment indicates they may benefit from rehabilitation in a forensic environment. The unit treatment philosophy combines two approaches – 'the Good Lives Model' and 'Neurobehavioural rehabilitation'. Thus individualised approach goals (Ward & Stewart, 2003) are identified and worked towards within a structured environment supportive of positive behaviours (Woods, 1987).

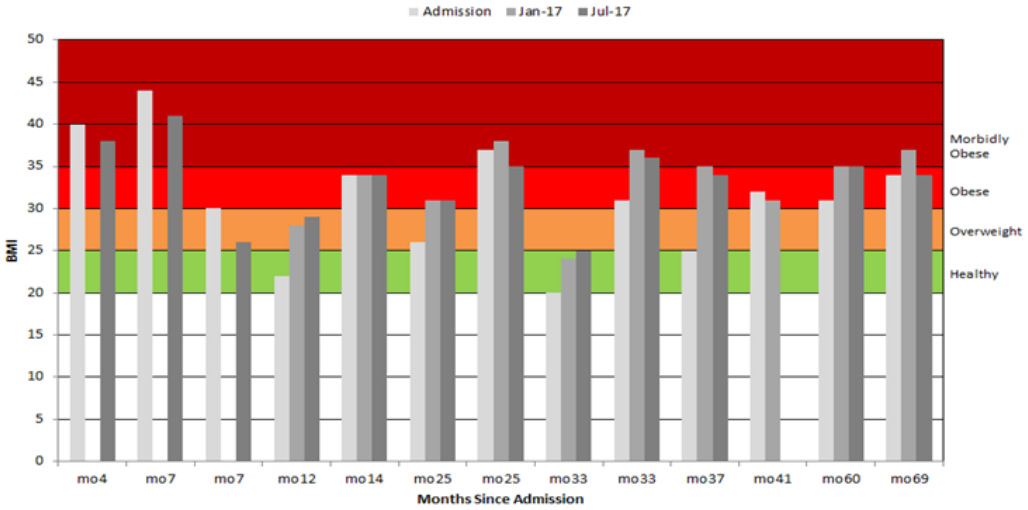
Whilst these approaches are generally utilised for the formulation and treatment of aggression, this ward has taken the opportunity of also using them to aid healthier living. Underlying this is the assumption that we have some self-responsibility – thus people can choose to make poor health choices just as they can choose to behave in an aggressive manner. The personal and societal consequences of such choices are clear and irrefutable. Aspects of the ward programme aim to provide educational and therapeutic opportunities for the individual to understand what has led to their current situations and identify what might be in their control or desire to change. From here personal goals can be identified and opportunities created to work towards these.

This brief article aims to highlight how we have carried out practical aspects of offering these health-related opportunities and some of the difficulties and progress we have had in measuring change.

Practical Aspects of the Programme

A review of BMI and waist-hip ratios of patients on the ward in late 2015 suggested that 11 of 17 and 14 of 17 of patients fell into high-risk categories respectively. The need for action was highlighted to patients through the weekly community meeting meetings and a new 'Better Lives' group, which aimed to provide a discussion forum for types and modalities of therapies offered, to improve tailored and relevant delivery.

Factors in Weight Gain	Suggested Actions
High calorie intake	Education sessions about food/ calories Identify emotional component of over-eating Limit snacks Meal portion control Adapt menu so majority of choices are 'healthy options'
Lack of exercise	Offer daily walks on timetable Increase on-ward exercise sessions Purchase of commercial style cross-trainer and other equipment for ward exercise.
Medication side-effects Illness/ injury Genetics	Education via care-co-ordinators and other MDT members to understand and moderate the impact of these factors.
Knowledge / attitudes /beliefs	Individual assessment/ goal setting Men's Health Promotion Group
Not knowing my weight/ health status	Regular weight and other checks Recording in personally accessible 'Healthy Action Folder'



Educational sessions were held about obesity and type II diabetes. Patients and staff drew up a list of factors that were possibly contributing to apparent weight gain and a list of actions that might help to combat this.

Over the next 18 months these actions were implemented by the MDT. Salience was maintained by patient-designed initiatives such as the '£ for lb' award, whereby the hospital would donate £1 to a charity of the patients' choice; and 'Sports Incentive Cards', which awarded a 'stamp' for every session of effortful exercise, which were then were totalled up and exchanged for sports-shop vouchers.

Results

The graph above shows the BMI scores for all patients present on the ward in July 2017, who had been admitted more than two months ago and who were able to be weighed (i.e. without physical or risk related complications). The horizontal axis represents individual patients and their months since admission. This graph shows that of the three people who have been admitted from January 2017 all have reduced their BMI scores in the following six months. Eight of the ten admitted before this time however have an increased BMI from admission to January 2017, but for seven of these, their BMI reduces by July 2017. This graph therefore suggests that there is a changing trend towards improving the BMI scores of patients on Rose Ward.

Discussion

As evidenced by the limited data in the results, the main difficulties have been in measuring and recording change. There have been inconsistencies in data collection and recording, making aggregate data hard to present, i.e. HbA1c, cholesterol and lipid levels; waist-hip ratios. This could be countered by allocating a nurse to regularly review/collect health data. The psychologists could analyse and guide interventions.

Whilst no one individual intervention can be attributed with this early success, a time-line of change does show that portion control and a health promotion group were the interventions introduced in the Jan-July time period. There is no doubt though, that the consistent reminders and inclusion of health-related considerations have adapted the ward culture over a period of 18 months, especially the attitudes of patients towards addressing their health needs. There is still a long way to go, but staff and patients have been involved in these changes and are encouraged by the 12 month turnaround towards success. The ways of working are being refined and shared more widely across the hospital. We hope to maintain the ward enthusiasm for these and new initiatives designed to help our patients in choosing lead healthier lives.

Please contact the Network for the full reference list relating to this article.

Lorraine Child, Consultant Clinical Psychologist and Victoria Joy, Assistant Psychologist, St Andrew's Northampton

Nottinghamshire Healthcare NHS Foundation Trust

The Malnutrition Screen Tool: A service evaluation project in Leicester

During recent years clinical guidance has highlighted the health inequalities that patients with mental health problems suffer, in particular the shorter life span and mortality rates relating to cardiovascular health for which obesity and life style are some of the modifiable factors.

In 2014, the NICE 'Psychosis and schizophrenia prevention and management guidance' and in 2016 the NICE 'Clinical Guidance for Obesity' highlighted the importance of early identification of patients with obesity and other co-morbidities. The NICE guidance recommended routinely monitoring and identifying rapid or excessive weight gain and offering patients a combination of healthy eating and activity program.

Standards for Forensic Mental Health Services (CCQI Forensic Quality Network for Forensic Mental Health Services, 2016) recommend the use of screening programs which consider the higher health risks for patients in secure mental health (to include diabetes and dyslipidaemia among other conditions) to ensure the early diagnosis and prevention of obesity. The NICE Clinical Guide 189 'Obesity: identification, assessment and management' (2014) also highlights screening as the first step in the development of a care pathway for overweight and obesity followed by identification and assessment.

At Arnold Lodge MSU in Leicester, the prevalence of obesity across the patient population (n~100) is approximately 60%. Like many other forensic mental health units, Arnold Lodge uses the Malnutrition Screening Tool ('MUST') as the means of assessing the nutritional status and needs of its population. The 'MUST' focusses on capturing the risk of undernutrition using a score system to identify those at higher risk. However, it does not do the same for obesity, co-morbidities or weight gain; it only uses a BMI >30 as reference for obesity.

Given the barriers present in early identification and assessment of health risks relating to rapid weight gain and obesity, Arnold Lodge has developed a nutritional tool called the Malnutrition Screening Tool ('MST') for Adults with Mental Health and Learning Disabilities.

'MST' incorporates 'MUST' for the identification and assessment of undernutrition (which remains relevant to a small portion of our patient population) whilst extending the nutritional risks scores to capture rapid weight gain and related co-morbidities. The 'MST' also stratifies the difference between overweight and obesity in order to provide healthcare professionals with specific management guidelines according to the person's individual level of risk.

In addition, 'MST' aims to capture the strategies already in place, the willingness of the patient to engage with a Healthy Living care plan, dietetic input and Sports and Leisure activities in order to focus the resources available. It also links in the 'Positive Cardiometabolic Health Resource for Psychosis and Schizophrenia from Lester Adaptation (2014).

At present, the reliability of the 'MST' is subject to a service evaluation using a trial population of 39 patients from three pilot wards (Female; Male Personality Disorder; and Male Mental Illness rehabilitation wards) and 44 control patients from three matched wards which mirror population of the pilot wards. This project is led by the unit dietitian and co-writer of this article.

Key staff from the pilot wards were trained to use the 'MST' tool and data relating to the accuracy and frequency of completion of the 'MST' was collected for 3 months. The effectiveness of the 'MST' to prompt nursing staff to initiate obesity-related management strategies was also examined (e.g. number of weight management/healthy eating care plans, referrals to Sports and Leisure and Dietitian). Feedback from staff is due to be collected imminently and will be use to improve the current model.
Preliminary results show that the frequency of completion of the tool has been adhered to in the pilot wards and that the accuracy of the tool increases when staff members have undertaken 'MST' training. The pilot has also indicated that when an obesity-risk has been identified by the 'MST', this is not always leading to the implementation of suggested management strategies. The reasons for this and the ways this situation can be improved will be explored in focus groups with staff in the near future.

It is hoped that the service evaluation will confirm that the 'MST' tool is able to assess the level of obesity risk in a reproducible, consistent and user-friendly way. If this is the case Arnold Lodge will implement the 'MST' tool throughout the unit to maximise the impact of the current resources and as an updated referral system and treatment pathway for both obesity and undernutrition. In future, 'MST' could be validated for use more widely in adult mental health and learning disabilities settings.

Gloria Rodriguez, Senior Mental Health Dietitian and Lucy McCarthy, Research Fellow, Arnold Lodge

Oxford Health NHS Foundation Trust

How we manage obesity

Oxford Health NHS Foundation Trust have a number of low and medium secure units for both male and females across Oxfordshire and Buckinghamshire. We have Health and Fitness instructors based at all our units and they have shared some of their approaches in 'Managing Obesity in Secure Care'.

Healthy Eating Sessions – Marlborough House, Medium Secure Unit
At Marlborough House in Milton Keynes we run healthy eating sessions twice a week. These activities give the opportunity for patients and members of staff to learn more about healthier nutritional options in a dynamic and positive way. Antonio Garcia, the Health and Fitness Instructor, works one to one with a patient to prepare the recipe and the session is tailored to the skills of the patient, from simple activities such as chopping tropical fruits to oven baked recipes like cinnamon Gala apples. During the session the focus is on explaining the advantages and benefits of a balanced diet and healthier food substitutions. The dish is then shared with the group. We have found that some ingredients have never been tried or considered by the patients, but there has been an enthusiasm to taste new foods. Feedback so far has been fantastic and we are starting to see that some patients are now including healthier options in their personal shopping, such as cholesterol lowering drinks and rice cakes.
At the end of each session, feedback is collected in order to understand patient's views and to further improve sessions. At the moment, one of our star recipes is Avocado-Mix with rice cakes.

Community Football, Oxford Clinic – Medium Secure Unit
At Littlemore mental health Centre we have a Seven-a-side football team made up of patients and members of staff that regularly attend tournaments in the local community. We also play in a local league known as the Bobi (Berkshire, Oxfordshire,

Buckinghamshire Inclusive) league where teams meet six times a season at Oxford City football ground. The team provides a great opportunity for patients to become involved in a social and competitive environment which, throughout the football season proves to have many benefits for wellbeing; including cardio vascular fitness and weight loss. Throughout the season as we see their commitment and confidence grow so does their physical fitness.

After the 2016-2017 season 'Oxford clinic FC' finished second in the Premier B Bobi League and are currently second position this season after the first meeting. Anyone wanting to follow the team's progress can check us out at the following link: http://full-time.thefa.com/ProcessPublicSelect.do;jsessionid=D4DFFB14CDFB186F11FDCBDCDE40681A?psSelectedSeason=247508835&psSelectedDivision=69747387&psSelectedLeague=2181637&Submit.x=7&Submit.y=11

Well-being clinic, Wenric House, low secure Service.

At Wenric House low secure unit Sarah Strawson, Health and Fitness Instructor and Ward Doctor Hameed Latifi run a weekly Well Being Clinic. The patients are seen once a month the Wednesday before their ward round on Monday. The aims of the clinic are to:-

- Monitor and record the physical health of all patients at Wenric House
- To feedback all information to each patient's ward round or CPA
- To encourage patient wellbeing and provide 1:1 support around healthy lifestyle,
- To provide support around smoking cessation and NRT.

While in the clinic the patients have their Weight, Height, BMI and Measurement of waist, Blood Pressure, Pulse, Body Temperature, Oxygen Saturation, and Blood sugar level recorded. The patients are asked about any acute physical health problems and also asked when they were last seen by a dentist and an optician.

If any abnormality is found, necessary action is taken such as further examination by the ward doctor at a later time or referral to the relevant professionals if need be.

Although there is a formal recording of patients' weight and other observations the sessions are used to slowly encourage lifestyle changes using the 'every contact counts' approach. The consistency of the team offering the service enables patients to build trust and open up about health problems and concerns about weight gain. Goals can be monitored and well supported.

Thames House, Women's Service

At Thames House, the subject of patients high BMI is being approached through a collective effort of the MDT team and the health and well being groups run by the Health and fitness instructor. The Health and Fitness instructor facilitates 1-2-1 Motivational Interviewing conversations that usually last 20 minutes where patients are encouraged to explore what influenced their weight or blood sugar level. They are guided to take responsibility for their own choices through exploration of their own values and inclinations.

Topics of the conversation mostly revolve around better food choices where patients are motivated to transfer their desire to change through cooking groups, breakfast clubs or weekly shopping.

In addition, there are weekly meet ups in a communal area where everyone is encouraged to bring their own experiences, worries or ideas regarding their own well-being to better understand the unique reality the patients live in.

Tom Mangan, Sarah Strawson, Rafael Harazinski and Antonio Garcia, Health and Fitness Instructors, Wenric House

Southern Health NHS Foundation Trust

The Use of Activity Trackers to Promote Patients Engagement in Healthier Lifestyle Behaviour

Multiple factors in secure mental health hospitals such as: restricted movement, limited dietary choices, medication and limited activity resources, combine to create an environment which challenges patients to stay physically active and maintain a healthy weight. Whilst Ravenswood House MSU has a range of cardio-vascular exercise equipment, a sports hall equipped with a range of equipment, and is staffed by a qualified personal trainer, motivating patients to regularly access the facilities is a challenge that changes on a daily basis. Gym staff proposed an innovative approach of using fitness trackers to address this issue. A brief review of current literature suggested fitness tracker benefits people engaged in a weight loss programme, acting as a motivational tool (Stukenberg and Freiss, 2015, Pourzanjani et al, 2016). A further review of the available products suggested one of the most reliable and cost effective options was the Fitbit Flex. At the time of writing there was no evidence of fitness trackers being used in forensic hospitals.

With the original idea developing, feedback and interest from patients was sought at the initial planning stages. This enabled discussion about practical arrangements to be clarified, such as the charging and syncing of devices. Several security issues were highlighted, such as WiFi and device syncing, using the Fitbit Flex enabled these to be overcome. For the initial group five participants were recruited, with the intention of running an eight week pilot. This group currently meets on a weekly basis to enable Fitbit charging and syncing, and discuss health related topics or issues they encountered with the equipment. Over the course of the first few weeks further aspects were developed, including: individualised exercise times, short group exercise sessions to supplement open gym access, and support to use ground leave as means for motivation. Device syncing allows data to be collected on a weekly basis. This is reviewed with each participant to assess their activity levels during the previous week and make short term goals to improve this accordingly. Initial feedback highlights the stark difference for those with community access between days with and without community leave, and all participants appeared to have increased their activity levels as a consequence of having data to review. The participants report improved self -awareness about their daily activity monitoring and nutritional intake, helping them work towards individual weight loss goals.

Examples of specific feedback includes: "Using the Fitbit gave me the motivation to do more activity and exercise, and to track and see my progress printed out on paper was very useful. The difficult part is not accessing ground leave as much and restricted movement – not having escorted community leave"

"I reached 10,000 steps on a daily basis [and] I am walking around a lot more. My active minutes have improved, and I have started to eat healthier"

The pilot appears to have been a success, and the next group of participants is being planned.

Jack Bolton, OT Technical Instructor and Chris Genter, Occupational Therapist, Ravenswood House

Follow us on Twitter @ccqi_ @rcpsych
And use #qnfmhs for up-to-date information

Priory Healthcare

Managing Obesity in Secure Care

Multi-disciplinary teams at Kemple View continue to work collaboratively with our service users to tackle the problem of obesity. A combination of medication and reduced motivation mean a lot of services users fail to meet the recommended 150 minutes of exercise per week. Given that one of our nursing objectives for 2017 is to reduce obesity, we have created a series of opportunities for patients to become as active as possible and to provide them with the education they need to make healthy lifestyle choices.

Service Users at Kemple View still engage very positively with our Mission Fit programme, a 12 week weight loss and healthy lifestyle initiative. The programme has now been running for a couple of years and we continue to see success amongst those involved. Mission Fit is currently seeking to get involved with our recovery college where a service user can be employed to facilitate sessions to peers. We have also implemented the Mission Fit Passport which is a booklet designed to support patients on the programme and allow them to record food intake and completed exercise. We have also started a seasonal exercise programme called Christmas Fit, a similar programme that is offered to service users at weekends, which hopes to support service users in losing weight before the Christmas period.

At Kemple View, we also recognise national support days and events to raise awareness amongst service users. These have included the British Heart foundations Healthy Heart day and a diabetes awareness morning. Service users are offered support, advice and guidance at these events to encourage lifestyle changes and promote healthy living.

External community links have flourished over the past year at Kemple View with the creation of the Recovery hub. Service Users attend sports sessions through Lancashire Sports Challenge through Sport Initiative, which provides free sporting opportunities to those in recovery. We now attend weekly boxing fitness sessions in Coppull and football sessions in Preston where we are joined by members of the public also in recovery. Kemple View also have strong links with Burnley FC and Blackburn Rovers FC where we attend weekly and monthly football sessions. We attend Burnley FC's claret in mind programme, which has allowed us to represent Burnley when they play other football teams mental health teams. We have also been long standing members in the Social Inclusion Football league that takes place at Blackburn Rovers FC where we now have a service user who volunteers there as well. The links we have with external agencies have provided excellent opportunities for our service users to get active and engage in sports in an offsite environment.

At Kemple View we have a monthly physical health and wellbeing group that meets to discuss activity opportunities, nutrition, topical physical and mental health issues and other wellbeing topics. Through this group we have moved away from a culture of weekly take-aways, to staff working with service users to cook their own 'fake-aways'. Firstly, we moved take-away day from a

Sunday to a Friday. This was because there were a lot more opportunities to be active on Fridays whereas Sundays were traditionally a day where a lot of service users remained very sedentary. Our belief was that if service users had been more active in the day then having a take-away would not be as detrimental. Secondly, wards now have a 'fake-away' every three weeks where staff and service users plan their meal in community meetings, do a shopping trip to get ingredients and then cook together on a Friday evening. This has been so popular, that one ward now has a 'fake-away' almost every week instead of the usual take-away.

We will continue working to tackle the issue of obesity within our site into 2018 and beyond. Mission Fit will grow and adapt with the changing population and we will continue to tap into community initiatives and local trends for exercise. Our next adventure is to link in with the walking for health programme which provide walking opportunities, not just for a walk, but for other means like fundraising. We hope to create links here and get our service users on regular planned walking groups.

Daniel Cockle, Physical Health and Wellbeing Coach, Kemple View

Birmingham and Solihull Mental Health Foundation Trust

Alternative Interventions on Tackling Weight Gain

Working in a forensic medium secure unit, I wanted to help our service users tackle their weight management issues. As it is identified nationally, there is a common association between mental health and obesity, I wanted to address this head on. I went and asked the service users what they were interested in doing. The ideas were coming in thick and fast as to what we wanted to do, but I needed funding. An opportunity came up where I could I pitch my ideas in front of a panel (it was our trust's dragons den). The panel was made up of our Chief Executive, a Doctor, a Service User Representative, The Head of Nursing for our trust and the Head of Finance. My idea was to take things back to basics, to get the service users interested in cooking, all from fresh ingredients, and not have the nag of weigh ins or referrals, or before and after pictures. I wanted to keep it informal and get them to enjoy cooking. I wanted to give them the knowledge and education they needed to cook for themselves not just in our unit but when they are well enough to live independently. I gained the approval from dragon's den and won £2000. This was to buy equipment and ingredients.

It started with letting them choose what they wanted to cook, then we made simple changes. These being; changing white flour to wholegrain flour when making a pizza from scratch, not using hydronic fat at all. We changed chips to sweet potato fries or sweet potato wedges, and we also used all fresh ingredients. By doing this in an informal way, not having to wait for a referral or be kept on a waiting list I had more people hearing about my idea and wanting to get involved. I worked with the ward managers, ward staff, and the trusts dietician. I was able to get service users who don't usually interact or get involved to participate, and it has proved a remarkable success, I have done this to give them choice (person centred approach), and to give them education into a basic life skill. We have made pizza from scratch, homemade burgers with reduced fat mince and made roast dinner for the whole ward to enjoy with all the trimmings. We have made endless curries with brown rice and salad, homemade quiche, fruit cocktail, paella, cheesecake with all reduced fat ingredients, and a whole trout, to include the ICU and the acute wards I have been doing

smoothies and finger foods so that they are included in this. I could put down everything we have done in the last six months but the list is endless.

I decided to get them to cook instead of ordering a take away and we had 9 out of 12 on one ward that had participated, so only three had takeaway, which is an achievement in itself.

I collated data from the whole of the hospital at the start and will collate the same information at the end of my two-year deadline and assess my findings.
However, my biggest weight loss so far, has been four stone from one person, although others have also lost weight. This is from them weighing themselves and telling me about their achievements. We still have a way to go but I'd say that this way is working for our unit.

We plan to make a recipe book for our unit with all the ideas and pictures of what we have done so far.

This idea has been great and I'm getting more and more interest, the ward staff are also doing this with them which is great. I do feedback forms after and they state that they wish they could do more of these sessions, so that will be my next aim…
We will continue to deliver this at our unit in the aim to tackle obesity in mental health.

Laura O'Hare, Assistant Practitioner, Tamarind Centre

Riverside Healthcare Ltd

A Charitable Approach to Weight Management

The third objective of the government strategy 'no health without mental health' is 'more people with mental health problems will have good physical health'. Combining overweight and obesity, Cheswold Park Hospital has similar rates to national averages. However, having recently implemented a smoking ban across the hospital in April 2017 there were fears these rates would increase, with smoking cessation being a well-recognised contributing factor to weight gain. Other reasons for weight gain within the hospital are similar to those faced nationally and include the effect of medications on appetite and energy levels, reduced activity, tensions between control and autonomy and eating for comfort and to soothe emotions.

Cheswold Park Hospital is taking a holistic and multifaceted approach to tackling this issue by working with the catering team, the on-site shop, offering appropriate training for staff, building health and well-being into the recovery college and providing a range of appropriate exercise opportunities.

Whilst this is all underpinned by a hospital obesity strategy and the views of service users, a need was identified to link all these efforts into one consistent approach which would generate enthusiasm about the topic and contribute to a change in culture.

With this in mind, the £1000 for 1000lb project was launched whereby the hospital has kindly offered to donate £1000 to the charity MIND if collectively, the staff and service users can lose 1000lb in weight.
To promote the project an information day was first held by the professional team leading it for staff and service users to attend and find out what was on offer. The project also features in the hospitals weekly newsletter, regular emails to all staff update them on activities, events and progression, several posters around wards and corridors have generated interest and there is a

display in the main foyer of the hospital showing the progression of 1000 sugar cubes gradually reducing as the number of plastic coins gradually increase. To promote consistency, a logo was designed and is on all promotional material including stickers which are handed out for staff to wear to generate discussion.
On registering to be part of the project, participants are provided with an information pack put together by the Dietitian. This includes tips on controlling appetite when on medication, where to search online for accurate information, a weight record, a food diary, the Eatwell Guide and other dietary tips such as 'hidden sugar' in sauces. The British Heart Foundation book 'Facts not Fads, Your Simple Guide to Healthy Weight Loss' is also provided.

Each week participants can get weighed confidentially by the Physical Healthcare Lead. This is designed to be a positive experience. If weight is lost, the participant is congratulated and encouraged to continue. If weight is maintained or gained, the participant is praised for changes they have already made to their diet and encouraged to make a small goal for the next area of change. Participants are provided with a sticker for their record when they have lost weight and a certificate once they have lost 1 stone. The Dietitian offers monthly drop-in style sessions for all participants to discuss particular struggles they are having. The weekly weigh-ins also provide an additional opportunity for service users to highlight any health issues they may have so physical healthcare needs are being discussed regularly and can be identified early.

Encouraging staff to also take part in the project not only contributes to the desired change in culture but provides an incentive for them to keep up to date with accurate weight management advice, lead by example, support service users and creates a competitive atmosphere between them both which we know from experience is inspiring for service users. Further to this it has also been agreed for the ward who collectively lose the most weight, to have the pounds lost in weight converted to monetary pounds to contribute to their social fund.

The hospital gym instructors are putting on a range of activities for participants to access, perhaps the most novel being a challenge of cycling the distance from Lands End to John O' Groats. A basic map from one side of the hospital to the other will be a visual tool demonstrating progress and it is another way of stimulating team work and service users contributing to a major achievement whatever their ability.
So far, the project has shown to be a success having raised £134 after its first month.

Lizzie Schofield, Dietitian, Cheswold Park Hospital

Tees, Esk and Wear Valley NHS Foundation Trust

Is there an issue with obesity in secure services?

Unfortunately if we have to ask ourselves this question we are somewhat burying our head in the sand. Weight and obesity along with associated health implications, especially the rise of type 2 diabetes has been increasing year-on-year within forensic mental health services and future predictions are rather frightening. Better monitoring and understanding have done nothing to solve the problem but only highlight the significance of the issue. This is not only a health issue but also one of quality of life. How can we continue to support systems that on one hand improve mental health but whilst doing so, can see

five-stone weight increases and the acceptance of a sedentary lifestyle within all age groups? Surely physical wellbeing needs to hold the same importance as mental wellbeing?

With this in mind the forensic mental health and occupational therapy departments in Ridgeway supported by the physical health and wellbeing steering group decided we needed a more radical holistic approach. This approach sees the FMH and OT department draw on past experiences as far back as 2004 and the "choosing health" white paper to shape delivery.

"Take Control" was born; the take control programme was designed to give a strong identity and brand based around three booklets to encourage patient ownership towards positive life style changes. "Take 1" is a self-help weight management and lifestyle booklet that every patient in the service receives, "take 2" is a delivered weight management lifestyle programme and individualised personal manual, building on the take 1 booklet. "Take 3" is a menu booklet to promote quick, cost effective healthy meals. The Take Control initiative is a holistic vision encompassing on-site promotion, staff uniforms and positive role modelling by a dedicated Take control Team. The team is made up of Personal Trainers, Exercise Referral Instructors, level 4 diabetes and obesity specialists all under the supervision of a specialised occupational therapist, who feeds into the larger occupational therapy department and MDT. This programme sees the FMH and OT department turn any identified negatives into positives starting with the setting up and running of the on-site café with the slogan "by the patient, for the patient and for the benefit of the patient". Healthy food choices are available for our patients in an inviting social space away from the ward environment, encouraging activity in the daily routine. Volunteering and vocational opportunities are present, with funds from profits in the café being used to enhance future health and fitness initiatives. The team then purchased and operate on-site vending machines, stocked with snack items that all register "green", being less than 150kcals.

All structured and planned physical activity, ranging from structured gym sessions to internal or external walking and cycling is run by the take control team at the highest standards, working with national organisations, and all under the slogan "not just". Our facilities and equipment are again of exceptional quality, matching industry standards to enhance the patient experience, while helping meet our objectives of promoting not only an active day, but quality intervention. This is further enhanced by changing the planned one hour activity sessions into an open, drop-in gym, where patients can come and go unescorted at any time of the day (9.15am-4.00pm) and stop for as long as desired. This increases participation and capacity, so every patient can easily achieve the recommended 150 minutes of physical activity per week.

Education and rehabilitation plays a big part in the programme, ranging from gym orderly roles, internal health and fitness courses and patients attending external health and fitness courses at the local college, using bicycles to commute, not only to college but to local leisure and shopping facilities after progressing through the cycle National Standards training programme. Our belief is that only when all elements come together: ownership, choice, accessibility, education, expectation and empowerment can we truly achieve - making every contact count.

Melanie Hopkirk (Harrison), Take Control Team, Ridgeway

Essex Partnership NHS Foundation Trust

The Management of Diabetes in a Medium Secure Unit

Diabetes has become prevalent in our society. The increase in obesity has led to more people developing diabetes with 3.6 million with type 1 and 2 diabetes in the UK. It is estimated that a further 900,000 have the condition but have not been diagnosed. (Diabetes UK, 2016).

It is a degenerative condition that can be life limiting due to the co-morbid conditions that can develop including heart disease, kidney disease, retinopathy and neuropathy. Leading to loss of limbs, eye sight and even death. This is at a cost to the NHS of £14 billion every year (diabetes.co.uk).

Those with mental health conditions are at a high risk of developing diabetes due to their life style choices and opportunities as well as the medication that they can be prescribed that are known to cause weight gain or increase the risk of developing diabetes.

At Brockfield house a medium secure unit for male and female patients an audit was carried out in 2015 on one female ward which identified that 75% of the patients were overweight or obese which is higher than the national static of 58% for women in the UK.

To address the high risk of developing diabetes and the poor management of those with the condition within the client group at Brockfield House, I developed a programme to identify those at risk of developing the condition and for the management of the service user with diabetes.

All new admissions to the unit are screened, this includes a blood test to identify those with diabetes or a raised HbA1C level, cholesterol levels, blood pressure (BP) and BMI. If they have a BMI of above 35, high cholesterol and BP will be monitored every 6 months as they are at an increased risk of developing diabetes. Patients that are prescribed antipsychotics that are known to increase the risk of developing diabetes, Olanzapine and Clozapine are also monitored regularly.

A pathway for those with diabetes was established. In line with Nice Guidelines for the management of diabetes we have provided structured education with the focus on diet. This has been specifically designed to address the needs of the client group using the food options that are available within the unit and how to lower their sugar intake and choosing the healthy option.
I also provide education on diabetes to all new clinical staff and this is now part of the induction programme.

To address the long term risk of those with diabetes we have retinal screening on site every six months and all those with diabetes have yearly foot checks to check their pulses and sensation. We have established links to the local services including podiatry, tissue viability team and the community leg ulcer clinic to enable the servicer user to receive the appropriate treatment.

I work with the community specialist diabetic team closely, who will visit the unit regularly and review those with raised HbA1C levels to give advice on medication including insulin levels.

Since the introduction of this pathway for screening and the management of those with diabetes we have seen an improvement of the control of the service user's diabetes which can be seen with the reduction in their HbA1C levels and less patients needing to be on the case load of the specialist diabetic team. We have been able to identify those with the condition at admission who were not previously diagnosed and been able to act with those who are at risk of developing the condition with advice on weight and diet The service user's within secure services are

likely to be inpatient for a period of time and as such we need to address their physical health issues especially their weight as well as treating their mental health to enable them to become productive member of our society in the future.

Cheryle Grote, Deputy Sister, Brockfield House

Tees, Esk and Wear Valley NHS Foundation Trust

Pharmacological management of obesity in secure care

We are aware of high prevalence of obesity in forensic settings. In a 2003 study 86% of women and 70% of men diagnosed with schizophrenia were either overweight or obese[1]. It's estimated that during long inpatient stays, such as forensic admissions, up to 10kg of weight can be gained[2]. It was reported that half of psychiatrists based within the medium secure setting felt there was no effective strategy for obesity within their service[3].

Within secure care settings, antipsychotic use is common. A study noted that up to 97% of those diagnosed with schizophrenia are prescribed an antipsychotic medication. It is observed that there is high use of clozapine (33%) in secure setting which is an antipsychotic associated with higher risk of weight gain[1,2].

A key first step involves lifestyle and dietary interventions, with most trials including this alongside medication changes[4]. Using these interventions effectively had a larger impact on weight gain than medication changes alone[4]. However, this may not be possible or be limited due to restrictions or risk posed.

Pharmacological management
Medication changes and optimisation can play a role in management of antipsychotic associated obesity, with 4 main options for MDT consideration:

1. Changing antipsychotic
Service user history and response to medication are key factors to consider if reviewing antipsychotic choice. Risk of relapse and deterioration in mental health may outweigh potential benefits**.** Examples of low risk antipsychotics include Haloperidol, Aripiprazole and Amisulpride. Quetiapine, Risperidone and Paliperidone present medium risk of weight gain, though this is significantly lower risk than Olanzapine[4].

2. Addition of metformin (oral antidiabetic drug)
Although systematic review of metformin found limited used in the general population for those who are classed as overweight (BMI 25–29.9kg/m^2) or stage 1 obesity (BMI 30–34.9kg/m^2)[5], there is evidence to support its use in patients on antipsychotic medication. Average weight loss of 3kg was seen with metformin, compared to placebo[4,6].

3. Addition of Aripiprazole (antipsychotic)
Use of Aripiprazole for antipsychotic associated weight gain is supported in patients currently taking clozapine or olanzapine[4], with weight loss of 2kg when compared to placebo. Aripiprazole also had a significant impact on blood lipids[5].

4. Other medication options
A variety of proposals have been considered, however, they have limited evidence or are restricted in their use due to side effects.

- Orlistat (prevents the absorption of fats demonstrated 3kg of weight loss in the general population, however, this was coupled with high levels of discontinuation. There is limited

evidence to support its use in the antipsychotic patient population[4].

- Topiramate (anticonvulsant drug) has also displayed promise in those taking olanzapine with weight loss of 4.4kg over 10 weeks, compared to weight gain of 1.2kg in the placebo control group[6]. Difficulty may arise as a result of side effects mimicking mental illness.
- Modafinil (wakefulness-promoting drug) has also been investigated for weight loss in patients taking both Olanzapine and Clozapine. Some benefit was demonstrated in the Olanzapine group however this was based on a small trial of 20 individuals, with no benefit being observed in the clozapine group[6,7].

Summary
Obesity and weight gain are clear problems within the forensic inpatient population, with antipsychotics contributing to this. Lifestyle and diet modification are key components to management of this, though they are not always possible.

Medication review can play a part in management of obesity within this population. Metformin and Aripiprazole have demonstrated weight loss in the patient population taking antipsychotic medication. The type of antipsychotic used and switching to one with a lower propensity to cause weight gain may also play a role.

Please contact the Network for the full reference list relating to this article.

Dr Paul Cooper, Core Trainee
Dr Pratish Thakkar, Consultant Forensic Psychiatrist and Clinical Director Ridgeway, Roseberry Park, Middlesbrough

Upcoming Events

Patient Engagement and Involvement, 04 April 2018

It will be an interactive day dedicated to patients in forensic mental health services. We would like to see patients accompany staff to the event, as it will be a great opportunity for individual personal development, and for patients to feel inspired and hopeful by what they see. Our patient reviewers are supporting with the organisation of the event, and would like to see as many patients attend as possible.

Save the Date: NHS England Toolkit for Family Support & Involvement in Secure Mental Health Services Launch, 27 March 2018

The toolkit was co-produced with professionals, carers and service users, who were all passionate about not only giving guidelines to commissioners and service providers, but raising the profile of forensic carers generally. The event will explore the varying elements of the toolkit and there will be opportunity for discussion.

Save the Date: Medium Secure Annual Forum, 22 May 2018

Save the Date: Low Secure Annual Forum, 12 June 2018

For further information on event locations and booking enquiries, please visit gnfmhs.co.uk or email forensics@rcpsych.ac.uk

USEFUL LINKS

Care Quality Commission
www.cqc.org.uk

Centre for Mental Health
www.centreformentalhealth.org.uk

Department of Health
www.doh.gov.uk

Health and Social Care Advisory Service
www.hascas.org.uk

Institute of Psychiatry
www.iop.kcl.ac.uk

Ministry of Justice
www.gov.uk/government/organisations/ministry-of-justice

National Forensic Mental Health R&D Programme
www.nfmhp.org.uk

National Institute for Health and Care Excellence
www.nice.org.uk

NHS England
www.england.nhs.uk

Offender Health Research Network
www.ohrn.nhs.uk

Revolving Doors
www.revolving-doors.org.uk

Royal College of Psychiatrists' College Centre for Quality Improvement
www.rcpsych.ac.uk/quality.aspx

Royal College of Psychiatrists' Training
www.rcpsych.ac.uk/traininpsychiatry.aspx

See Think Act (2nd Edition)
www.rcpsych.ac.uk/sta

Contact the Network

Megan Georgiou, Programme Manager
Megan.Georgiou@rcpsych.ac.uk
020 3701 2701

Daniella Dzikunoo, Project Worker
Daniella.Dzikunoo@rcpsych.ac.uk
020 3701 2670

Anita Chandra, Project Worker
Anita.Chandra@rcpsych.ac.uk
020 3701 2684

Cassie Baugh, Project Worker
Cassandra.Baugh@rcpsych.ac.uk
020 3701 2534

Twitter
Follow us: **@rcpsych @ccqi_** and use **#qnfmhs** for up-to-date information

Matt Oultram, Deputy Programme Manager
Matthew.Oultram@rcpsych.ac.uk
020 3701 2736

Holly Lowther, Project Worker
Holly.Lowther@rcpsych.ac.uk
020 3701 2673

Jem Jethwa, Project Worker
Jemini.Jethwa@rpsych.ac.uk
020 3701 2673

Email Discussion Group
msu@rcpsych.ac.uk
lsu@rcpsych.ac.uk

Royal College of Psychiatrists' Centre for Quality Improvement
21 Prescot Street, London, E1 8BB

www.qnfmhs.co.uk

Editor: Cassie Baugh