A WEIGHT OFF YOUR MIND

A PLAN FOR PEOPLE WITH LIVED EXPERIENCE OF MENTAL HEALTH CONDITIONS AND/OR LEARNING DISABILITIES RECEIVING SUPPORT FROM NORTHUMBERLAND, TYNE & WEAR (NTW) AND TEES, ESK & WEAR VALLEYS (TEWV) NHS FOUNDATION TRUSTS TO ACHIEVE A HEALTHY WEIGHT

1. Foreword

This plan has been designed to address the risks of decreasing quality of life and premature death to the population who are in our care who have both lived experience of mental health conditions and/or learning disabilities, and face challenges in weight management and access to supportive interventions.

We recognise within the plan the importance of the connection between people's physical and mental health from childhood through to older age, and we are committed as NHS organisations to support people in contact with our services to manage their physical health equally as well as their mental health and/or disability, and build on the focused work undertaken on the tobacco agenda to ensure parity of esteem as outlined in the Five Year Forward View.

This plan follows on from the excellent work we have achieved together with our partners to treat nicotine dependence and create a smokefree NHS.

We know we are only part of the system and need support from our partners to help drive this work forward. Whilst we have initially focused internally within each Trust - 'getting our own house in order', we are keen to work with partners to make sure those living in the community and their carers get the support they need to address their physical health priorities. Developing accessible and timely pathways into community support and primary care is essential.

We know this is a long term piece of work however this plan sets out what we will do for the next 3 years and how we will ensure success. We will work with service users and carers to develop meaningful measures of success for the plan which will focus around reducing health inequalities. The plan will address both the mental and physical health needs of our services users; provide a healthy workplace; ensure that our staff, service users and carers have the education and information they need; and enable more access to community support – challenging discrimination and stigma where it exists.

We are grateful to those partners who have helped in the development of this plan as well as our staff and service users for their valuable contribution. Our thanks go to the steering group and authors.

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2. Executive summary

2.1 Our approach:

Over the last year, NTW and TEWV NHS Foundation Trusts have worked with service users and carers, the Northern England Clinical Network (NECN), Public Health England (PHE), Local Authorities (LA) and Teesside University to develop and launch this weight management plan. This builds upon our excellent partnership to become fully smokefree NHS organisations in 2016. Alongside this plan there is a separate detailed action plan which will be incorporated into the Trusts' implementation plans and will be monitored by the regional steering group.

2.2 Our commitments:

Our commitments to promoting healthy weight will be delivered through the shared responsibility of mental health and learning disability professionals, physical health professionals and service users themselves (supported by carers).

We collectively recognise that this is a health inequality issue and we want to bring the physical health, life expectancy and quality of life for those of us with lived experience of mental health conditions and/or a learning disability in line with those of the general population.

We will ensure people have access to evidence, information, and the skills to achieve and maintain healthy weight. This will also include developing a healthy workplace.

As a partnership we will work together to ensure we have appropriate weight management pathways and support in the community. We will advocate that the physical health needs (particularly weight management needs) of people with mental illness and learning disabilities are considered in all planning and delivery by our partners.

We commit to ensuring that the plan is implemented with an understanding of the diverse cultures and communities in which people live.

2.3 Our themes and actions:

Leadership

Over the next 3 years we will:

- Ensure Trusts are committed to the plan and its actions, with clear lines of accountability and governance to monitor progress
- Develop implementation plans (including a communication plan) so everyone is aware of the part they have to play in its implementation
- Promote a culture in NTW and TEWV which creates an environment that supports service users, staff, families and carers to manage their weight effectively
- Support staff and service users who are advocates of this plan to become champions and role models
- Work with commissioners to ensure that commissioning intentions reflect the physical and mental health needs of people in contact with our services
- Work with primary care to support them in the delivery of this plan

Physical Health Screening
Over the next 3 years we will:

- Ensure the Trusts have a sound understanding of the cardiovascular risks that impact on service users and ensure these are systematically recorded and reflected in care planning (this is supported by the 2017-19 CQUIN)
- Ensure service users are empowered with the information and tools to manage their weight. Where this involves referral to an additional service, the service user should be fully involved in this decision and be fully aware of why they have been referred and what they can expect
- Ensure staff have the skills, equipment and support to sensitively and appropriately undertake physical health screening
- Ensure that service users identified as meeting the Lester tool triggers are referred into the agreed pathways
- Ensure staff are aware of their role in managing cardiovascular disease and its relation to weight gain, including the relevant cardiovascular/nutritional pathway
- Ensure Trusts have good communication with primary care regarding physical health checks

Food and Nutrition
Over the next 3 years we will:

- Provide healthy food and drink for all service users, staff and visitors
- Work with the CQC, produce Trust guidance on restrictive practice in relation to food and drink including the use of takeaways and portion sizes
- Support Trusts to improve nutritional screening by increasing understanding and recording of an appropriate nutritional screening tool
- Develop nutritional pathways that provide helpful advice and signpost to dietetic services when a high nutritional need is identified (under or over nutrition)
- Have a culture that supports everybody who is trying to lose weight/prevent weight gain and identify good role model champions amongst staff and service users
- Aim to improve the quality of food served, and reduce the rigidity of meal times, in order to reduce the likelihood of service users seeking unhealthy alternatives such as takeaways, especially late at night
- Ensure dietary advice is accessible to all, available in a variety of formats, including easy read

Improved Access and Opportunity for Physical Activity
Over the next 3 years we will:

- Provide opportunities to engage in the recommended levels of physical activity each week (150 minutes) by promoting it as a treatment intervention
- Ensure that leisure services in the community proactively support those of us with a lived experience of mental health conditions and/or learning disability to engage in physical activity
- Offer physical activity alongside medications which are known to cause weight gain
- Ensure exercise prescription within hospital settings is evidence based and provided by appropriately qualified staff to be able to develop specific, individual care plans through shared decision making
- Improve links and referral pathways with community providers
- Work with the dedicated physical activity clinical champions funded by PHE as part of their work on ‘Everybody Active Everyday Framework’

Pharmacy / Medicine Management
Over the next 3 years we will:

- Change the culture around antipsychotic prescribing so that clinicians are trained to consider the impact of weight as part of prescribing. This includes discussing options

with service users, side effects of their medication (including antipsychotics) in order to come to a collective decision about future care plans
- Provide accessible information and guidance for staff, patients and carers on the impact of medication on weight gain
- Develop a prescriber decision-aid tool

Psychological Therapies

Over the next 3 years we will:

- Ensure we have a compassionate understanding of why we eat and move as we do
- Provide psychological support for service users and staff in managing their own excess weight
- Develop a model for the use of psychological approaches which includes all elements from brief advice to packages of psychological therapy
- Ensure that psychologists and therapists have the ability to confidently include eating and activity in psychological assessments, formulations and treatment plans in partnership with service users

Education and Information

Over the next 3 years we will:

- Increase the availability of education resources and training on weight management for staff including Making Every Contact Count, brief advice and more specialist training
- Work with Health Education England and the relevant training providers to ensure that physical and mental health is equally incorporated into undergraduate and postgraduate training for health professionals
- Work with Health Education England and training providers to deliver more bespoke weight management training for staff working in Mental Health/Learning Disability services
- Provide training to peer support workers so that they can deliver healthy lifestyles education to their peers
- Use a whole family approach to increase family and carers' (including young carers) knowledge and skills of healthy eating and physical activity so that they are able to support the physical health needs alongside the mental health needs of the person they care for
- Ensure those who use services are fully involved in decision making, and empowered to take action

Developing Community Pathways

Over the next 3 years we will:

- Work with the Local Authorities to map existing community based weight management and physical activity offers; ensuring information about what is available is accessible
- Ensure community-based specialist weight management, physical activity services (where they exist) and wider leisure offers are accessible and/or have referral pathways in place, providing training where appropriate and challenging stigma when services are seen to exclude individuals with lived experience of a mental health condition or a learning disability
- Work with primary care to develop clear referral pathways
- Ensure that Local Authorities and NHS commissioners consider the needs of people with lived experience of a mental health condition and/or learning disabilities within any weight management and/or physical activity and commissioning intentions

Children and Young People (C&YP)

Over the next 3 years we will:

- Work with families on weight related issues of all family members and to emphasise a family approach to healthy lifestyle
- Continue to incorporate daily physical activity into care planning to the recommended levels (60mins daily for 5-18year olds)
- Reduce consumption of high calorie/fat or sugary foods available for C&YP by increasing the availability of healthy food/snacks
- Ensure training to staff and support for families working with C&YP includes education on diet and physical activity
- Ensure that all C&YP accessing our service are offered the opportunity have their BMI checked on a regular basis

Learning Disabilities

Over the next three years we will:

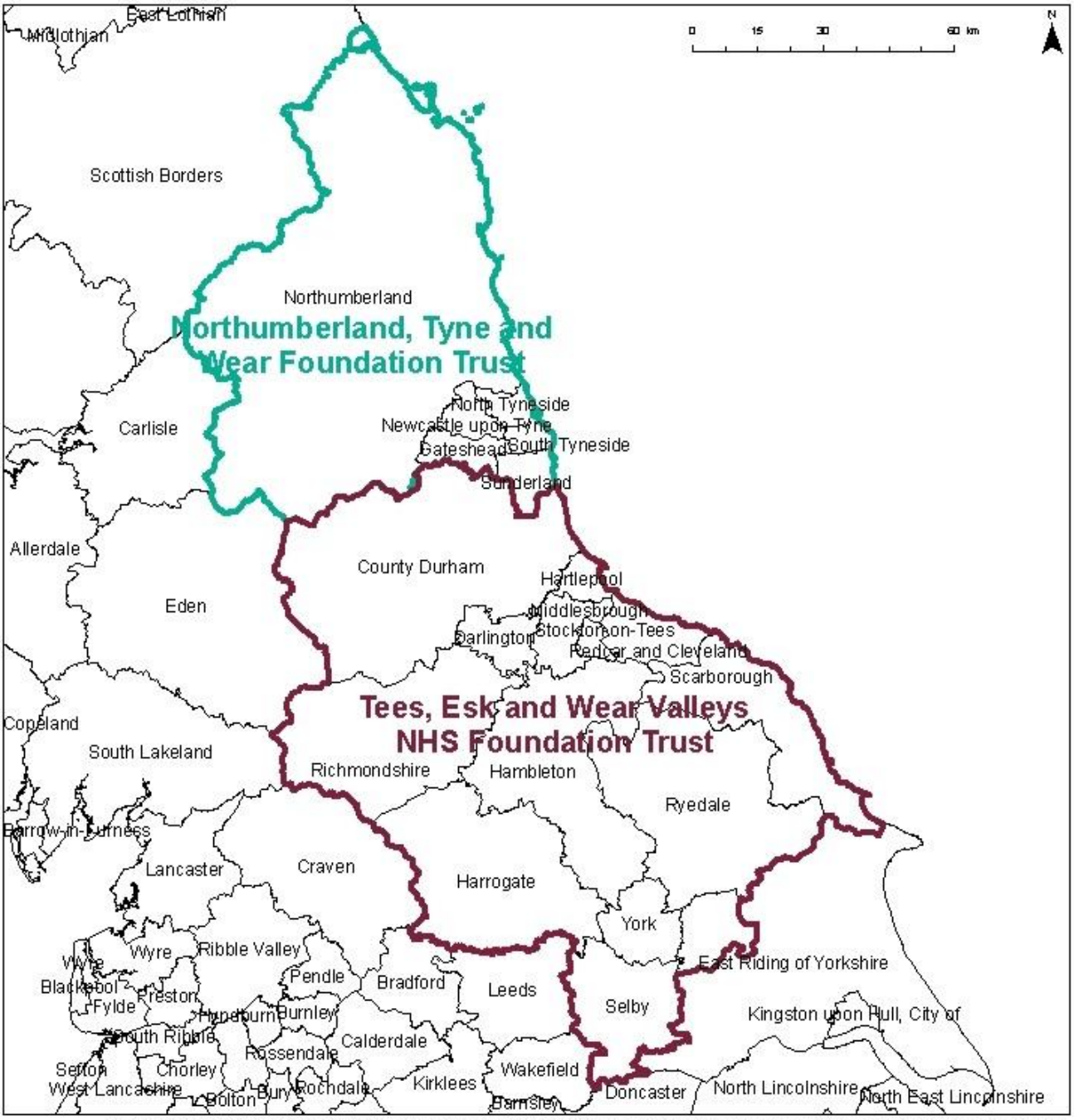
- Ensure every person with a learning disability has an annual health check led by General Practice
- Ensure issues relating to capacity and choice around diet and physical activity are fully addressed using robust risk assessment. The Health Equalities Framework (HEF) offers a tool that can be used by people with learning disabilities, family carers, support workers and health practitioners to discuss risks to health and wellbeing
- Develop a '12 Month Challenge' workbook to be piloted across NTW and TEWV. A 'team based' approach to this initiative would be agreed to ensure there is leadership, ownership and full engagement of the initiative
- Ensure that people with syndromes associated with problems of appetite or weight will have specific plans and support, and that all materials will be available in different accessible media
- Improve/establish access opportunities to appropriate and supported exercise groups for people with learning disabilities

3. Background to the plan

Given the scale and impact of excess weight amongst those with lived experience of mental health conditions and/or a learning disability in our region, TEWV and NTW NHS Foundation Trusts, the Northern England Clinical Network (NECN), Public Health England (PHE), the Local Authorities, Teesside University, service users and carers have joined together to launch this weight management plan. This builds on the excellent partnership approach to become fully smokefree NHS organisations. We are committed to address the physical health needs of our population, who often experience significant health inequalities and are vulnerable to the effects of stigma.

A regional steering group was established in August 2016 (see Appendix 1) and we held an engagement event with service users, carers, staff and partners in November 2016. This event provided us with the opportunity to share our current work as well as showcase national examples of practice in the management of excess weight in mental health and / or learning disability services. Delegates contributed to the key themes and objectives of this plan. Alongside this plan there is a separate detailed action plan which will be incorporated into the Trusts' implementation plans and will be monitored by the regional steering group in addition to the Trusts' own project groups.

It is important to acknowledge that the scope of this document does not include the treatment of people with eating disorders. NTW and TEWV have established services for children and adults who have diagnosed eating disorders.



NTW Trust operates from over 60 sites. These consist of 7 principal sites and the remainder being made up of satellite properties across a large geographical area of 2,200 square miles. Our services are provided from a wide range of settings, including:

- Mental health, disability and acute hospital sites
- Health centres, clinics and GP surgeries
- Stand alone inpatient and community facilities
- Clients' homes

TEWV provide a range of mental health, learning disability and eating disorder services for the people living in County Durham and Darlington, the Tees Valley and most of North Yorkshire. With over 6,500 staff and an annual operating income of over £300 million we deliver our services by working in partnership with local authorities and clinical commissioning groups, a wide range of other providers including voluntary organisations and the private sector, as well as service users, their carers and the public.

4. The scale of the problem

In England 64.8% of adults are currently classified as overweight or obese and in the North East this is even higher at 68.6%. This excess body weight can increase the risk of developing a number of serious conditions which include diabetes, heart disease and some cancers. The cost of excess weight is significant both to the individual in terms of reduced quality of life and life expectancy, the NHS and wider economy in terms of costs associated with treatment and wider societal impacts such as sick leave. However, the rates of excess weight are even higher in adults with severe mental health illnesses and learning disabilities. The latest experimental statistics on the health and care of people with learning disabilities suggests that excess weight is twice as prevalent in adults aged 18-35 years with a learning disability whilst the prevalence of obesity in individuals with lived experience of mental health conditions can vary depending on the psychiatric diagnosis. Data suggests that individuals with schizophrenia have a 2.8-3.5 increase in the likelihood of significant weight gain, whilst those with bipolar disorders have a 1.2-1.5 increased risk. Whilst the relationship between excess weight and SMI and learning disabilities is complex, it may relate to their underlying condition, the effects of medication and poor lifestyle. Effective intervention is therefore imperative.

People with lived experience of mental health conditions and people with learning disabilities are at increased risk of poor physical health, and their life-expectancy is reduced by an average of 15–20 years mainly due to preventable physical illness. Two thirds of these deaths are from avoidable physical illnesses including heart disease and cancer, as well as type 2 diabetes. This is of particular importance, as evidence suggests that risk factors such as smoking, excess alcohol consumption, excess weight and sedentary behaviour ‘cluster’ together in populations. In recent years, the proportion of the general population that engages in three or more of these behaviours has fallen. However, this is not reflected in those from lower socio-economic and educational groups, which also account for a higher proportion of those with lived experience of mental health conditions. In these groups people are five times as likely to engage in all four unhealthy behaviours.

5. The national drivers for action

From a national perspective, there is support for the plan. Within the Five Year Forward View (2014) and the Five Year Forward View for Mental Health (2016), it clearly states that bringing mental and physical health care together to improve outcomes is a key priority, citing 'an integrated physical and mental health approach' as one of the three main deliverables. This is echoed in the Mental Health STP scoping document for the Cumbria and North East region, which places particular emphasis on 'physical health checks and treatment for people with a serious mental illness'.

Great importance has also been placed on 'preventative and early intervention services if we are to avoid ill health, develop individual and community resilience, improve the health and wellbeing of the population and ultimately support a financially sustainable system' (Mental Health STP scoping document, CNE). This is an approach that has been strongly incorporated into this plan, seeking to monitor and prevent weight gain and subsequent physical health in people with lived experience of mental health conditions.

In 2014, the National Audit of Schizophrenia (NAS2, an initiative of the Royal College of Psychiatrists' Centre for Quality Improvement) found poor monitoring (6%) and assessment (33%) of risk factors for cardiovascular disease and diabetes including body mass index (BMI: a validated measure of overweight and obesity). Subsequently, NHS England established a national Commissioning for Quality and Innovation (CQUIN) target in 2014/15 that incentivised the implementation of the new guidance for assessing and treating the physical needs of service users. The CQUIN was supported by an adaptation of the 'Lester Tool' (see Appendix 2). This tool provides a framework for the assessment of factors associated with increased risk of poor cardiovascular health (smoking, BMI, blood pressure, blood glucose and lipids) and thresholds at which interventions should be offered.

The current (2017-19) CQUIN focuses on improving physical health care for people with SMI in order to reduce premature mortality in this patient group (Indicator 3a). The aim is to ensure that patients with SMI receive comprehensive cardio metabolic risk assessments and have access to the necessary treatments/interventions. The cardio metabolic screening requirements are based on the Lester Tool Adaptation including a development which focuses on achieving outcomes in relation to BMI and smoking rates. Furthermore, this CQUIN is part of a suite of incentives that trusts will be working with, for example, Indicator 1a and 1b also include targets around the introduction of health and wellbeing initiatives for staff as well as a commitment to providing healthy food for NHS staff, visitors and patients. PHE provided guidance to commissioners to work together with providers to enable access into appropriate community and clinical weight management services for individuals suffering with mental health illness and/or with learning disabilities. This is also supported by the latest NICE clinical guidance on the treatment of schizophrenia and psychosis (NICE, 2014b) which provides new recommendations: 1) to routinely monitor weight in service users with psychosis or schizophrenia, and refer service users who have rapid or excessive weight gain to weight management programmes; and 2) mental healthcare providers should offer service users with psychosis or schizophrenia, especially those taking antipsychotics, a combined healthy eating and physical activity programme.

6. What does the evidence tell us?

Combined healthy eating and physical activity programmes are recommended as the initial course of action for individuals who are overweight, both within the general population and amongst those with lived experience of mental health conditions and/or learning disabilities. These “lifestyle interventions” may also be used in a preventative manner to avoid weight gain, for instance amongst those starting treatment with any antipsychotic medications associated with weight gain. Evidence has demonstrated that lifestyle interventions can have positive effects on physical and mental health outcomes amongst service users with lived experience of mental health conditions and/or learning disabilities.

There is a large amount of variation in the content of lifestyle interventions, with some including either physical activity or dietary components in isolation; however the evidence suggests that using a combined approach may be most effective. In particular, interventions focusing on exercise without dietary components may be ineffective at leading to clinically significant weight losses for those with lived experience of mental health conditions and/or learning disabilities although increased exercise is associated with other improvements in physical health and therefore may reduce risk of cardiovascular disease. There is also some evidence to suggest that the most effective interventions may be those which include a behavioural component, such as goal setting, feedback, skills training, problem solving, social support, motivational counselling, stress management, relapse prevention, assertiveness training, rewards or token reinforcements, stimulus control risk and benefit comparisons. In addition, interventions delivered through a combination of group and individual sessions appear to be the most effective and there is some evidence that the inclusion of peer and/or social support elements may help individuals begin and continue involvement with lifestyle intervention programmes.

Although most interventions focus on weight management at an individual level, a recent evidence synthesis and stakeholder engagement report considered the effects of larger scale policy change in secure forensic mental health settings. The authors reported that altering diet and physical activity policies was associated with positive changes in behaviour, suggesting that a combination of positive role modelling and policy changes can encourage cultural shifts in both inpatient staff and service users. A number of barriers to behaviour changes were documented and included: knowledge of nutrition; staff attitudes to intervening; service user/staff resistance; tension between patient autonomy and patient control; tendency to spend on high fat, high carbohydrate food; limited opportunity for physical activity and low motivation to change lifestyle. However, facilitators were also reported, and these included: staff training in holistic care; interventions that are fun and motivating; multiple approaches encourage change through a degree of choice; changing behaviour in a small way can lead to enthusiasm for change; and improvements in wellbeing also help reduce symptoms for service users with lived experience of mental health conditions.

<u>Reducing mental health stigma and weight stigma</u>

This section discusses the literature available on the intrinsic interactions between mental disorder, obesity, and their associated stigmas, and demonstrates that we must deal with them holistically. While there are many different ways of defining stigma, a highly developed and widely used definition is offered by Link and Phelan (2001): “Stigma exists when elements of labelling, stereotyping, separation, status loss, and discrimination occur together in a power situation that allows them.”

Gary (2005) defines mental health stigma as “a collection of negative attitudes, beliefs, thoughts, and behaviours that influences the individual, or the general public, to fear, reject, avoid, be prejudiced, and discriminate against people with mental disorders” (p.980). Similarly, Puhl & Latner (2007) define weight stigma towards children as ‘negative weight

related attitudes and beliefs that are manifested through stereotypes, bias, rejection, and prejudice towards children and adolescents because they are overweight or obese' (p. 558).

The government has recently been exploring whole systems approaches to mental health and to obesity. There are associations between common mental health disorders and obesity, and the risk factors associated with obesity and mental health. However there is minimal guidance with respect to dealing with the overlap of these health issues. The 2007 government Foresight Obesity System Map includes within it a subsystem of thirteen stress related factors that contribute to the causes of obesity, but relationships with weight stigma and mental health were not included.

A recent systematic review of the international literature on approaches that help to reduce weight stigma (all ages) aimed to understand how weight stigma can be reduced through the adoption of whole systems approaches. A conceptual synthesis was carried out in order to create new understandings of how working across sectors and across society can reduce weight stigma at scale. The review identified eight studies addressing the intersection between mental health and obesity.

Currently there is substantial research being undertaken on the intersections of stigma, for example between mental disorders and obesity, and there are a variety of other related intersections, such as disability stigma, LGBT stigma, etc. Mizock (2012) provides an overview of the concept of the 'double stigma' of obesity and mental illness and its effect on self-esteem, which is based on qualitative, survey and systematic review research. There is also the less explored relationship between weight stigma and eating disorders (including anorexia nervosa, bulimia nervosa and binge eating disorder). In all cases, it would appear that the underlying source of such stigma is the assumption that mental disorders, obesity and eating disorders are caused by individual choice.

The causal relationships between these complex issues are unknown and are being examined in current research. However, research does show that perceived weight discrimination accounts for a substantial proportion of the relationship between obesity and psychological wellbeing. Puhl & Heuer's (2009) large literature review shows that the negative consequences of weight stigma affect one's mental health (e.g. depression, low self-esteem, poor body image, psychiatric disorders) as well as their physical health (e.g. maladaptive eating behaviours, exercise avoidance, reduced motivation to lose weight).

Children's experiences of having their weight taken and health promotion of healthy diets and increased physical activity confirm these findings, as children associate excess weight with abuse and isolation, and feelings of anxiety about their body shape. Rees et al conclude that initiatives need to consider the social aspects of obesity and should seek young people's views on appropriate forms of support. This view emphasises how critical the inclusion of patients and the public (adults and children and young people) is to ensuring this plan is delivered appropriately as well as effectively, as the former predicts the latter.

A whole systems approach to this issue of intersecting stigma would endorse that health promotion, including healthy eating and increasing physical activity, be provided across the entire mental health system, including all people experiencing mental disorders, their families and service providers, not just targeting those who are classified as obese. Public campaigns that challenge mental health stigma and weight stigma are also a vital component. For example, a pilot workshop in Ontario for public health promoters, with topics covering the harms of weight stigma on mental health, healthy weight messages that reduce body image disturbances, and co-delivery of healthy weight promotion and mental health promotion, found that participants' weight biases were significantly reduced and increased their awareness of the need to address mental health stigma alongside healthy weight promotion.

Table 1. Examples of Local Evidence

NTW	Takeaway Audits (2016)	Two wards completed takeaway audits for all inpatients over a 7-day period. From a total of 26 inpatients, 12 ordered at least once and 7 ordered multiple times (max = 5 times).
	Trustwide BMI Figures (2016)	The audit indicated that 50% of patients had a BMI >25, of these, 28% were classed as obese and 4% had a BMI >40.
	Evaluation of Weight Management Programme: "Tyne to be Healthy" (2016)	Evaluation of an intervention aiming to improve knowledge of healthy eating in service users. 13 patients enrolled and 8 completed. Non-significant weight losses were observed in 7/8 patients; one patient gained a small amount of weight but did demonstrate improved knowledge of healthy eating.
	Report on Cardiovascular Risk Factor Progression in Patients with SMI (2016)	Data from 2014 and 2016 was obtained from the electronic records system and compared for the same 60 patients. The results showed that while physical activity had increased over time (average = 102 to 188 minutes/week), so had BMI (average = 28.8 up to 30.6). No other significant changes in physical health were observed.
	Exercise Therapy, Healthy Lifestyle Group Audit (2006)	Audit of the "Healthy Lifestyle Group", a course for in- and outpatients providing advice on healthy living, weight loss, and exercise. 16 service users from two intakes gave feedback on the course and completed lifestyle questionnaires before and after. All participants indicated that they found the group beneficial for physical and/or mental health and easy to understand. The majority (90%) met their goals and improved on the lifestyle questionnaire.
	Audit of 3-Month Trial of Exercise Therapists Conducting Physical Screens (2010)	Evaluated a 3-month pilot of the completion of physical health screens (excluding bloods and urine) by exercise therapists. Data from the pre-trial period showed that no patients received a full physical health screen; up to 80% received no screen at all. During the trial period 39-47% of patients received a full physical health screen and only 10-11% did not receive any form of screen.
	Exercise Therapy 6-Month Report (2011); Comparisons of Physical Health Measures (2015)	These audits examined improvements in physical health for service users from commencement of exercise therapy to the first review at 6-8 weeks. Both audits demonstrated improvements in physical health measures (including weight and BMI) in some patients, although others experienced deterioration in physical health; this was associated with factors such as poor diet and medication.
	Exercise Therapy Service User Feedback Questionnaire Evaluation (2011), Patient Experience Questionnaire (2013), Service User Feedback (2015); Feedback from Patient Experience Questionnaire (2016)	These audits assessed patient experience and satisfaction with exercise therapy. Across the audits positive feedback was received. Service users reported improvements to mental health such as reduced anxiety and stress, and the vast majority were satisfied with the programme and felt it helped them meet their goals. Staff were seen to be kind, compassionate, courteous, friendly, non-judgemental, polite and professional. Service users typically felt included in decisions regarding their prescribed exercises, and felt that staff took their personal circumstances into account.

TEWV	Clinical Re-Audit of NICE CG43 – Obesity (Forensic Mental Health/Forensic Learning Disabilities)	Audit comparing compliance to criteria/standards developed in response to NICE CG43 from 2011 to 2013 for 145 patients. Many areas observed either no improvement or a drop in compliance over time, with monitoring of BMI dropping from 85% to 50% of patients. Verbal advice was provided to around 90% of patients, however provision of information leaflets dropped from around 90% to around 50%.
	Forensic Thematic Analysis (Forensic Mental Health/Forensic Learning Disabilities)	Provides a summary of current initiatives and recommendations. Dietary issues that were highlighted included patients eating excessive amounts of unhealthy foods such as takeaways and snacks, as well as having excessive portion sizes. There were issues highlighted with regards to whether restricting food would be viewed as restrictive practice by the CQC. Service users had access to a robust timetable of physical activities.
	Clinical Audit of Obesity Management (2016)	Analysis of patient records for 10 consecutive inpatients on one ward indicated that 7 patients had a BMI >25 with 4 being classified as obese. Although each patients' BMI was monitored in line with care plan and verbal advice was given, patient leaflets were not provided as appropriate.
	Healthy Living Advisor Evaluations (2016)	Patients (*n*=12) showed improvement in understanding and frequency of healthy behaviours (healthy diet/physical activity) following completion of physical activity sessions with a healthy living advisor. Of 15 patients, 11 lost weight over the six month period (0.9-14.65kg), however four gained weight (0.85-3.25kg). 32-61% of patients saw an improvement in mood following physical activity.
	The Body Mass Index and Dietary Intakes of Adults with Learning Disabilities Detained on Secure Units (2008)	Examined the nutritional status of adults with learning disabilities on secure units (*n*=16, 75% male). 50% of patients were classified as obese. Longer length of stay and greater age were associated with higher BMI; gender and medication use were not but this may have been due to the small sample being insufficient to detect differences. Patients classified as obese had higher than recommended energy consumption. Informal discussions highlighted issues around inadequate portion sizes, poor food quality, lack of fruit/healthy meal options and a lack of opportunity for physical activity.

7. The picture locally

Figure 1 reflects the findings of data extracted from the clinical records of all service users who were in contact with TEWV on 1st August 2016. The main findings from the data analysis were:

- 27% of adults were classified as overweight
- 35% of adults were classified as obese
- 7% of 4-10 year olds were classified as obese, 16% were overweight
- 7% of 11-15 year olds were classified as obese, 23% were overweight
- Overweight/obesity was most common in the 25-64 age group
- Overweight/obesity were most prevalent in those with schizophrenia or a schizoaffective disorder

However, only 11% of service users had their BMI recorded and the results may also be influenced by the inpatient eating disorder service that TEWV host. Hence, the results may not be entirely representative of the population of service users in contact with this service. This data therefore needs to be interpreted with caution as it is likely that the percentages of service users who have excess weight are significantly higher.

Figure 1

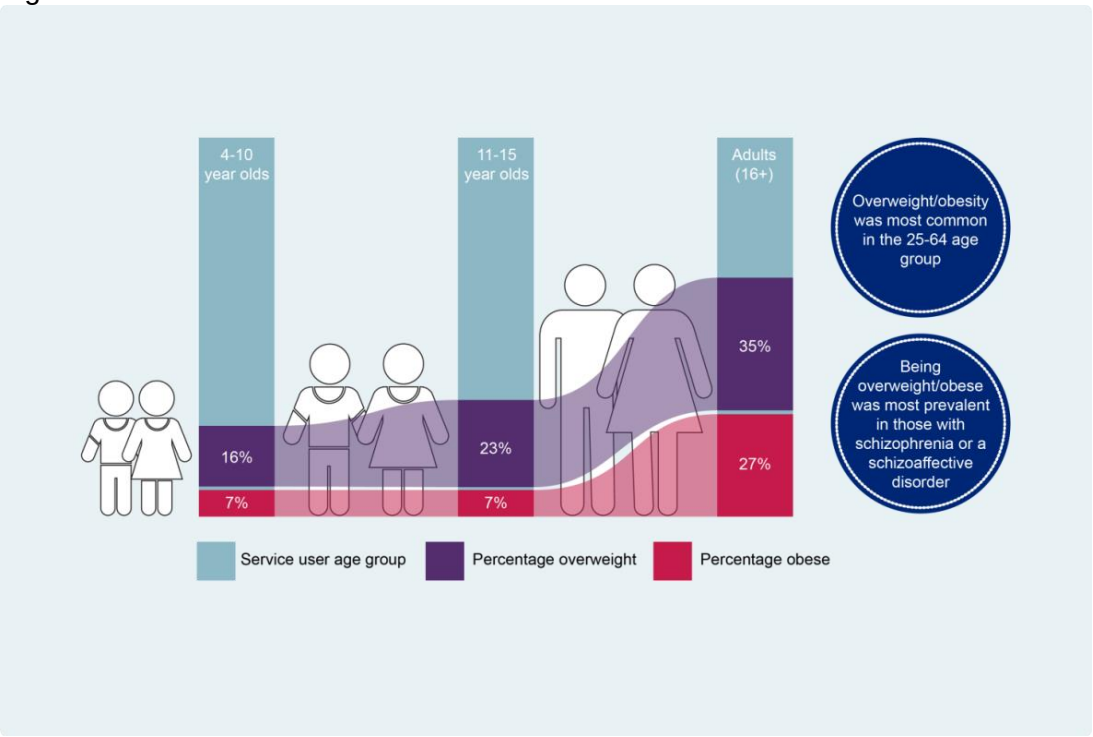
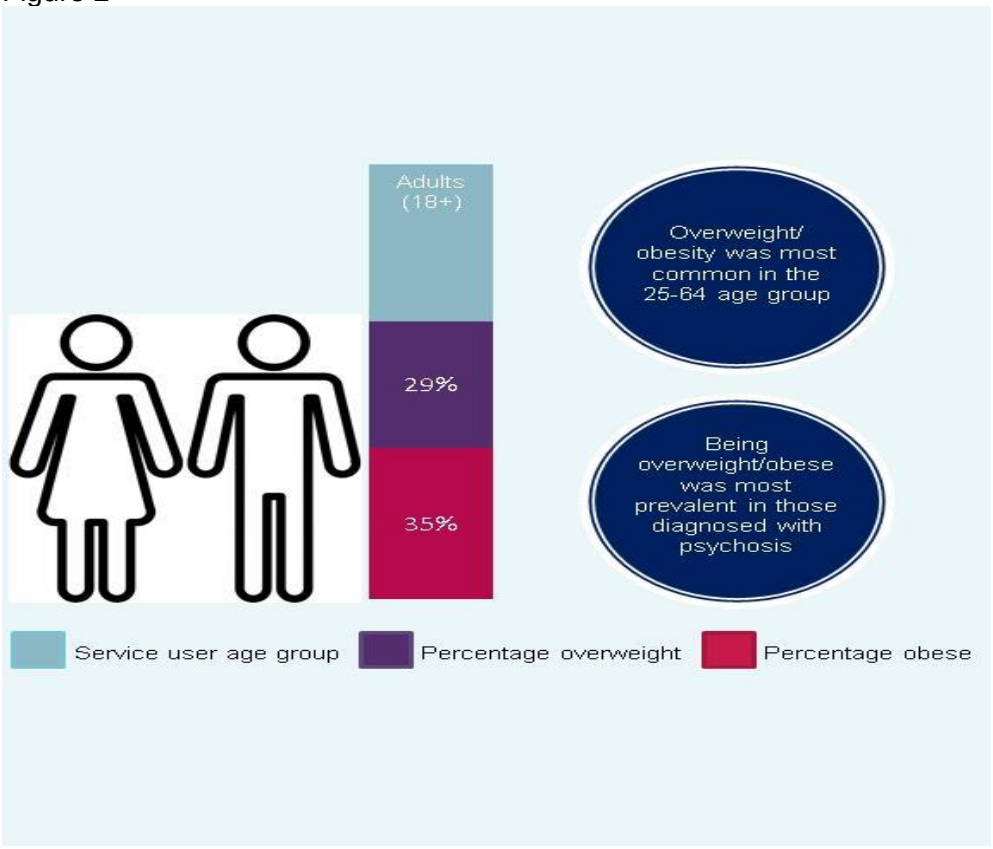


Figure 2 reflects the findings of data extracted from the clinical records of all inpatient service users who were in contact with NTW on 30th June 2016. The main findings from the data analysis were:

- 29% of adults were classified as overweight
- 35% of adults were classified as obese
- There were too few records to determine the prevalence of excess weight among service users under 18 years of age with any certainty
- Excess weight was most common in the 25-64 age group
- Excess weight was significantly more prevalent among those with psychosis (71%) compared to other inpatients (58%).

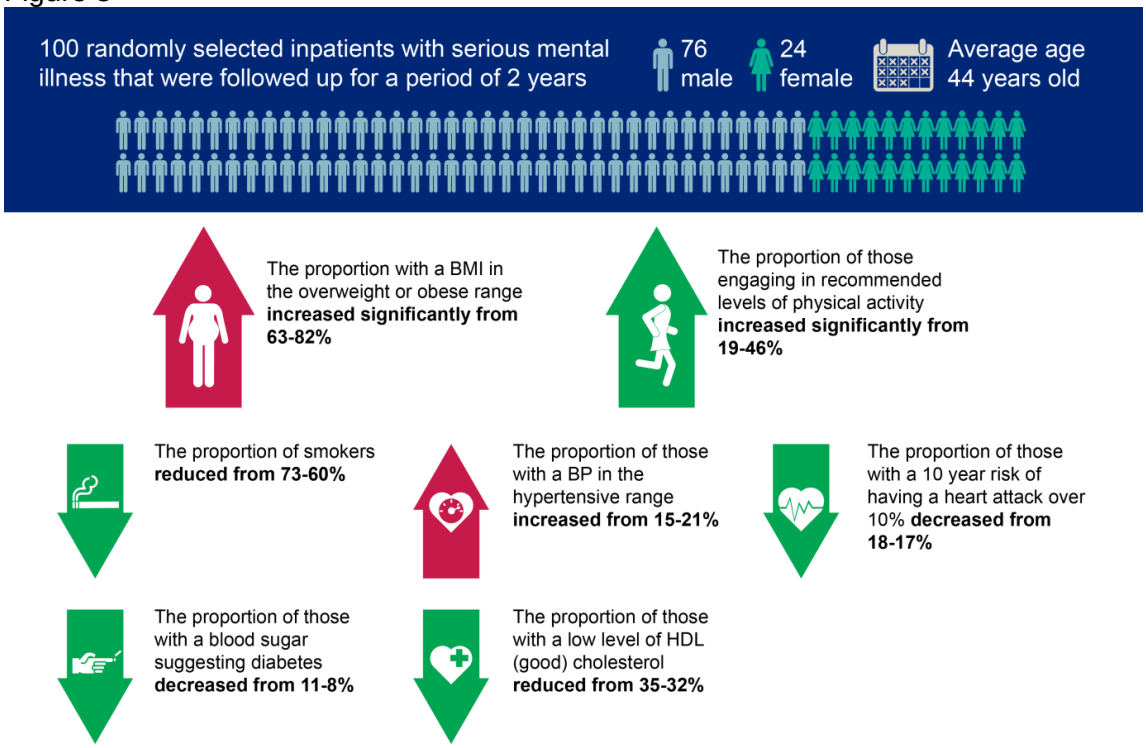
82% of inpatients had a valid measure of height and weight. There is still room for the proportion of inpatients for whom height and weight is unknown to be reduced further. However, these results provide a reasonable benchmark for comparison with similar figures in future years. Thus, the trend in the prevalence of excess weight can be used as one measure of the efficacy of continuing interventions which support service users to maintain a healthy weight.

Figure 2



Data also suggests that service users admitted to inpatient facilities are discharged, on average, having gained a significant amount of weight. A random survey of 30 NTW inpatients suggested that 65% of them had gained weight during their admission despite engaging with the exercise therapy team. A small cohort study of 100 inpatients with SMI followed up over 2 years (2014-16) also demonstrated that the proportion of service users with a BMI in the overweight or obese range increased significantly from 63-82% (see Figure 3).

Figure 3


100 randomly selected inpatients with serious mental illness that were followed up for a period of 2 years
76 male
24 female
Average age 44 years old
The proportion with a BMI in the overweight or obese range **increased significantly from 63-82%**
The proportion of those engaging in recommended levels of physical activity **increased significantly from 19-46%**
The proportion of smokers **reduced from 73-60%**
The proportion of those with a BP in the hypertensive range **increased from 15-21%**
The proportion of those with a 10 year risk of having a heart attack over 10% **decreased from 18-17%**
The proportion of those with a blood sugar suggesting diabetes **decreased from 11-8%**
The proportion of those with a low level of HDL (good) cholesterol **reduced from 35-32%**

8. Themes of the plan

There are ten identified themes that emerged to inform this plan. They are each outlined below with background information, a description of current activity and a summary of actions for the next 3 years.

8.1 Leadership

For this plan to be as effective as possible there needs to be strong leadership from both NHS Trusts, supported by our partners. Both Trusts will develop local implementation plans and invest in its delivery. It is critical that service users, carers and staff are supported to attend weight management services and leisure facilities in their own local area and these services are accessible for people with lived experience of mental health conditions and or/learning disabilities. This will require robust pathways and support to access the services of choice. There is already a lot of good work happening in NTW, TEWV, primary care, local authorities and VCS organisations around healthy eating, weight management and physical activity so we need to utilise these services. When it is identified that there are no accessible weight management services in a particular area or for a group of service users, leaders in NTW and TEWV will work with commissioners to make a case for new weight management services or where existing ones are, ensure they are accessible for people with lived experience of mental health conditions and/or a learning disability.

TEWV- Practice Example
TEWV also has a Physical Health and Wellbeing Group that reports to the Quality Assurance Committee. The Trust also has a Food and Drink Strategy that includes objectives around the management of excess weight and the delivery of healthy food for service users, staff and visitors.

NTW- Practice Example
NTW has an established Physical Health and Wellbeing Group that aims to ensure that appropriate systems and processes are in place to implement, protect and promote the physical health and wellbeing of service, visitors and staff. This group reports to the Trust's governance structures.

Over the next three years we will:

- Ensure Trusts are committed to the plan and its actions, with clear lines of accountability and governance to monitor progress
- Develop implementation plans (including a communication plan) so everyone is aware of the part they have to play in its implementation
- Promote a culture in NTW and TEWV which creates an environment that supports service users, staff, families and carers to manage their weight effectively
- Support staff and service users who are advocates of this plan to become champions and role models
- Work with commissioners to ensure that commissioning intentions reflect the physical and mental health needs of people in contact with our services
- Work with primary care to support them in the delivery of this plan

8.2 Physical Health Screening

Access to high quality physical healthcare assessment and interventions is one of the key requirements of the NICE recommendations for management of SMI (NICE, 2014). An audit carried out by the Healthcare Quality Improvement Partnership (HQIP) on service users accessing early intervention psychosis services demonstrated that screening for BMI, smoking status, lifestyle, blood pressure, cholesterol and glucose levels only took place in around 22% of cases sampled (range of 0%-82%) and all indicated interventions were offered in only 13% of cases sampled (range of 0-64%).

NHS England's 2017-19 CQUIN focuses on improving physical health care for people with SMI to reduce premature mortality in this service user group. NICE recommends that all hospital inpatients should be screened for malnutrition on admission (repeated weekly). NICE recommends that screening is achieved by assessing BMI, percentage weight loss, and the time which nutrient intake had been compromised (NICE, 2006). In mental health and / or learning disability settings, the standard tools for nutrition screening such as the Malnutrition Universal Screening Tool (MUST) have been found to be ineffective by both NTW and TEWV as they do not detect excess weight. In TEWV, there has therefore been agreement to introduce the St Andrew's Healthcare Nutrition Screening Instrument (SANSI). This validated screening tool is easy to use and identifies both malnutrition and excess weight in one, easy to use screening tool. The Trust Food and Drink Strategy outlines a plan for the introduction of the SANSI tool and a nutritional pathway that addresses both under and over-nutrition for those that screen positive.

Obesity also contributes to metabolic syndrome. The British Association for Psychopharmacology has developed guidelines for the management of metabolic syndrome in people with psychosis. This now needs to be embedded within each trust's clinical pathways and systems. The cardiovascular network and the mental health network meet regularly about this. There is a pilot initiative in Gateshead, supported by the British Heart Foundation, which seeks to prepare and empower service users to engage in holistic conversations with their clinicians in Primary Care to maximise cardiovascular health. The cardiovascular team are hoping to develop an extension of this project to see if it delivers benefits in terms of reduced risk. Mental Health Professionals should be both actively aware of cardiovascular risk and work with primary and acute care in the management of cardiovascular disease.

See Appendix 4 and 5 for Physical health screening algorithms.

TEWV- Practice Example
A Physical Healthcare Policy enables clinicians to assess, monitor and manage service users' physical healthcare need. This work supports the implementation of the Lester tool to screen and intervene for cardiometabolic risk factors and has been implemented across TEWV within inpatient, community and Early Intervention in Psychosis (EIP) Services. The Lester tool is already incorporated within Model Line-Psychosis and Mental Health Services for Older People Functional Pathways. Ongoing staff training from the CQUIN has included assessing background information which may contribute to the premature mortality in this particular service user population.

NTW- Practice Example
NTW also has a CQUIN for implementing the Lester tool. A programme supporting physical health monitoring allows clinicians to record physical health parameters in one place; aiding consistency, audit and data capture. A team of physical health champions have received additional training in physical health skills to support the implementation of the Lester tool across their clinical areas. As part of this, the exercise therapy team have implemented an adapted (Trust specific) version of the tool highlighting pathways for action when service users are identified as meeting trigger criteria

Links between the cardiovascular network and the mental health network, as outlined in Section 9.2, are a very important aspect of pathway development and these should be supported by all trusts.

Over the next three years we will:

- Ensure the Trusts have a sound understanding of the cardiovascular risks that impact on service users and ensure these are systematically recorded and reflected in care planning (this is supported by the 2017-19 CQUIN)
- Ensure service users are empowered with the information and tools to manage their weight. Where this involves referral to an additional service, the service user should be fully involved in this decision and be fully aware of why they have been referred and what they can expect
- Ensure staff have the skills, equipment and support to sensitively and appropriately undertake physical health screening
- Ensure that service users identified as meeting the Lester tool triggers are referred into the agreed pathways
- Ensure staff are aware of their role in managing cardiovascular disease and its relation to weight gain, including the relevant cardiovascular/nutritional pathway
- Ensure Trusts have good communication with primary care regarding physical health checks

8.3 Food and Nutrition

Many people will assume that food and nutrition is the most important section of this healthy weight plan. The food and drink we consume is certainly one of the most important factors in why people gain weight (and find it difficult to lose weight). But it is important that we change people's diets in conjunction with the other sections of this plan for weight management to be as successful as possible.

If we consume more energy from food and drink than we use this results in our body storing the excess energy as fat. We know that worldwide trends over the past 10 years are that people are eating more energy (calories) and exercising less than previous generations. This means that more people than ever are gaining excess weight. For many years, people who are admitted to hospital tell us that the food they are provided with does not meet their needs. This means that they frequently choose to buy snacks from the hospital café or vending machines, or opt to order take away foods instead of (and sometimes in addition to) the foods provided by the hospital. It is therefore important that we address the reasons why the food provided does not meet the needs of service users and provide healthier choices in cafes and vending machines for those who wish to buy additional foods.

TEWV- Practice Example
The Dietetic Service has developed and piloted a weight management clinical link pathway. This includes an algorithm for the assessment and management of excess weight in both inpatient and community settings. The pathway signposts the service user to a range of evidence based treatment options depending upon their need. The algorithm is detailed in Appendix 1.

NTW- Practice Example
The Dietetic Service has developed nutritional information in the Nutrition File which is available to all staff through the intranet. This resource also provides many printable resources on food and nutrition for staff to use with service users.

Over the next three years we will:

- Provide healthy food and drink for all service users, staff and visitors
- Work with the CQC, produce Trust guidance on restrictive practice in relation to food and drink including the use of takeaways and portion sizes
- Support Trusts to improve nutritional screening by increasing understanding and recording of an appropriate nutritional screening tool
- Develop nutritional pathways that provide helpful advice and signpost to dietetic services when a high nutritional need is identified (under or over nutrition)
- Have a culture that supports everybody who is trying to lose weight/prevent weight gain and identify good role models champions amongst staff and service users
- Aim to improve the quality of food served, and reduce the rigidity of meal times, in order to reduce the likelihood of service users seeking unhealthy alternatives such as takeaways, especially late at night
- Ensure dietary advice is accessible to all, available in a variety of formats, including easy read

8.4 Improved access and opportunity for physical activity

In England, only 57% of adults report that they undertake the recommended 150+ minutes of physical activity each week; in the North East this is even lower at 52.9%. The World Health Organisation (WHO) identifies physical inactivity as the fourth leading risk factor for global mortality causing an estimated 3.2 million deaths each year globally.

"Exercise improves and changes the way I think and helps me cope with my thoughts."
"I've found a focus in exercise and found medication side effects can be managed through exercise."
"Feeling fitter but the biggest improvement has been in my mental health." (NTW service users 2016)

People suffering from SMI have been shown to be less physically active than the general population. This may result from negative feelings that impair motivation and confidence as well as the sedating effects of some medications. In addition, people with SMI are among the most socially excluded members of our society and it is estimated that just 21% of those of working age are in employment making the financial costs associated with some forms of exercise potentially prohibitive. There is also a strong link between regular exercise, improved health and wellbeing and better chronic disease outcomes. There is also evidence for the psychological benefits of exercise in clinical populations and evidence that exercise can alleviate secondary mental health symptoms such as low self-esteem and social withdrawal. This means improving access and opportunity for physical activity for our service users must be a priority.

TEWV- Opportunities for physical activity are wide and varied. Gymnasiums are available on all the main sites, including in the Children and Young Person's Unit on Teesside, that are manned by qualified fitness instructors and a few additional gymnasiums are also managed by physiotherapists for targeted rehabilitation. In addition to this, additional physical activity sessions are led by a variety of health professions (mainly OT, Physiotherapy, nursing) which include –

- Walking for Health – all staff trained as volunteer walk leaders
- Cycling delivered by National Standard Bikeability Instructors in secure services on Teesside.
- Rebound Therapy – is provided by appropriately trained health professionals in secure services
- Swimming – facilitated access by a variety of health professions
- Gardening
- Sports – including badminton/ football
- Tai Chi
- Ward based exercise groups
- 1:1 tailored exercise programmes prescribed by Physiotherapists
- Fitness MOT for older people
- Healthy lifestyle programme such as 'Take control' or 'LEAN' facilitated with dieticians

Opportunities for staff include facilitated walks, gym access, Zumba, golf and so on as part of staff health and wellbeing initiatives through human resources.

NTW - Exercise Therapy Service
A service providing a range of exercise groups to benefit physical and/or mental health, provided by qualified exercise practitioners. All exercise therapy programmes form part of the inpatient care plan and are developed in conjunction with the Lester Tool. Groups include gym, walking, cycling, team sports and a range of exercise classes and healthy lifestyle and weight management groups.

Service user feedback:
89% reported improvements to health and wellbeing.
73% reported improvements in mental health.
99% felt supported to achieve exercise goals.
96% stated exercise therapy should be available to all MH service users.
71% would like continued support following discharge to maintain exercise programme.
96% were very satisfied or satisfied with their exercise therapy treatment plan.
Service users stated multiple benefits, including: structure in their daily routine; improved health and fitness; improved mental well-being, confidence and self-esteem; and improved social interactions associated with the exercise therapy service.
NTW also has an exercise therapist in CYPS providing exercise for the young people at Alnwood.
In specialist services we have sports instructors providing exercise sessions into the Bamburgh Clinic and Northgate for forensic and LD service users.
NTW also has physiotherapists providing more targeted rehabilitation and mobility groups.

Staff have access to gyms across the Trust, discounts at local gyms and access to exercise classes.

Over the next three years we will:

- Provide opportunities to engage in the recommended levels of physical activity each week (150 minutes) by promoting it as a treatment intervention
- Ensure that leisure services in the community proactively support those of us with a lived experience of mental health conditions and/or a learning disability to engage in physical activity
- Offer physical activity alongside medications which are known to cause weight gain.
- Ensure exercise prescription within hospital settings is evidence based and provided by appropriately qualified staff to be able to develop specific, individual care plans through shared decision making
- Improve links and referral pathways with community providers
- Work with the dedicated physical activity clinical champions funded by PHE as part of their work on ‘Everybody Active Everyday Framework’

8.5 Pharmacy / Medicine Management

For the majority of people with lived experience of mental health conditions, psychiatric medications are an important part of their recovery. WHO has estimated that over 80% of people with schizophrenia can be free of relapses at the end of one year of treatment with antipsychotic drugs combined with family intervention.

It is clear therefore that medication has a crucial role to play in recovery. However, medications are not without side-effects. Treatment with antipsychotic medication used to be associated with distressing movement disorders such as stiffness, tremor, restlessness and/or uncontrollable facial grimacing. Thankfully, increased awareness around appropriate dosing means that such side-effects are now less common and those who experience them at lower doses have the option of trying newer antipsychotics.

Over the last twenty years, advancements in psychiatry have led to the development of a new generation of antipsychotics which are far less likely to cause movement disorders and therefore have proven very popular with people suffering from psychosis. This advantage has come at a price however. Since their launch over twenty years ago we have witnessed the following changes: previously 'slim' people who were prescribed these new "second generation antipsychotics" have been observed to put on large amounts of weight in a very short period of time. For instance, it is estimated that around 85% of people prescribed olanzapine will gain more than 7% of their baseline bodyweight in the first year of treatment, with the first six weeks of treatment being the key predictor of overall weight gain by the second year of treatment. An average weight gain of 10 kilograms has been observed for people prescribed clozapine.

Following the introduction of a second generation antipsychotic, the degree of weight gain and associated complications has been found to be more significant in those with a normal or low baseline body weight, which needs to be taken into consideration when these medications are prescribed to manage symptoms of SMI in children and younger adults. Left unchecked, antipsychotic-induced weight gain can lead to complications including high blood pressure, high blood cholesterol, Type 2 Diabetes mellitus and heart failure. Young people are particularly at risk of physical health complications as, unlike in adult service users, weight gain appears to continue for as long as they continue to take the medication.

Another vulnerable group are those with learning disabilities or dementia, who may be prescribed antipsychotic medication for the management of challenging behaviour and may not be fully informed about the impact of weight gain on their physical health in the future.

> *"In my* [psychiatric medication review] *clinic for people with learning disability and a mental health diagnosis, we allocate a healthcare worker who will see the client before my appointment to measure BP, pulse, weight, waist etc. and facilitate bloods and an ECG if the GP cannot or will not do this. We thus ensure full monitoring and lifestyle advice for all clients taking psychotropic medications"*
>
> Dave Gerrard, Senior Clinical Pharmacist at Northumberland, Tyne & Wear NHS Foundation Trust Pharmacy Lead, NHSE – STOMP campaign (STOMP = Stopping The Overmedication of People with a learning disability or autism)

Whilst it is recognised that some antipsychotics are associated with a lower degree of weight gain, it is important that individual preference is not overlooked. It is also recognised that the majority of people do not take medication as prescribed, and that informed choice is crucial for improved adherence to prescribed medication regimes. Adherence may be compromised due to perceived severity of side-effects experienced by the individual. Therefore, simply opting to prescribe an antipsychotic with a lower risk of weight gain without acknowledging what the individual considers acceptable in terms of other possible side-effects may actually hinder their recovery.

Arguably therefore, more focus needs to be given to targeted interventions at the beginning of treatment to help prevent or reduce the degree of weight gain whilst on medication, rather than attempting to address already established weight gain following a successful period of treatment by switching to a different antipsychotic medication.

By supporting people in our services who are started on these newer medications with the appropriate tools to help prevent weight gain in the first place, our goal as part of the weight management plan is that no-one should have to compromise their physical health and wellbeing during their recovery.

TEWV- Practice Example
An on-going piece of work is the development of an algorithm (Appendix 3) to sensitise prescribers to the risk of weight gain and to guide them through a thoughtful process of medicine management with regard to minimising the risk. The key recommendations in this algorithm are based on the 2016 BAP guidelines on the management of metabolic syndrome in psychosis.

NTW- Practice Example
To support service users with early interventions around healthy weight, the Medicines Management Team have reviewed their guideline on physical health monitoring for children and adults prescribed antipsychotic medication to include a mandatory discussion with service users about the risk of weight gain prior to starting an antipsychotic, along with the provision of support with weight management.

See Appendix 6 for additional information on current activity.

Over the next three years we will:

- Change the culture around antipsychotic prescribing so that clinicians are trained to consider the impact of weight as part of prescribing. This includes discussing options with service users, side effects of their medication (including antipsychotics) in order to come to a collective decision about future care plans
- Provide accessible information and guidance for staff, patients and carers on the impact of medication on weight gain
- Develop a prescriber decision-aid tool

8.6 Psychological Therapies

Before we can help a person lose weight we first need to come to a compassionate understanding of why they eat and move as they do. We need to understand how their mental health and intellectual issues affect their eating and activity. So, we need to make sure that all clinical teams are able to understand (or "formulate") the psychological issues involved in obesity (as well as the medical and lifestyle issues). Without such an understanding we can easily slip into blaming the person for "lacking willpower", being "lazy", or not wanting to change: if we do this we will normally make the person feel worse and more likely to eat more and move less. Not everyone feels ready to start working on losing weight right now. Some people are ready and will only need a bit of help to make progress. Other people are keen to tackle their weight directly, but will find it hard to do, and will need help. Others will require help to deal with different psychological problems before directly tackling their weight. So we will need to make a range of psychological approaches available, some that help people think about losing weight, some that help people directly tackle their weight and some that indirectly lead to weight loss as a consequence of improved mental wellbeing. For many people, particularly children and young people, families will need to be involved. Some professionals in our services also may be classified as overweight or obese. They will also need support to come to a constructive understanding of their own eating and moving behaviour if they are going to be able to act as effective change agents for service users. They will also need access to the same range of psychological approaches.

TEWV- Practice Example
The Trust provides a comprehensive range of psychological services to all client groups and all ages as part of a multidisciplinary team. In addition, IAPT can be accessed by primary care or self-referral. Whilst these services may not focus on treating excess weight as the primary problem, the psychological treatment provided within these services may well have a positive impact on excess weight due to the reduction of the distress that was being caused by other psychological problems.

NTW- Practice Example
NTW provides a comprehensive range of psychological services to all client groups and ages within secondary and tertiary care settings. NTW provides primary care psychological wellbeing and IAPT services in partnership with other organisations. While weight management is not likely to be a primary target of a psychological intervention, eating and exercise behaviours may be addressed where appropriate and underlying issues such as low self-esteem, low mood and/or low self-efficacy may benefit significantly from psychological help.

Over the next three years we will:

- Ensure we have a compassionate understanding of why we eat and move as we do
- Provide psychological support for service users and staff in managing their own excess weight
- Develop a model for the use of psychological approaches which includes all elements from brief advice to packages of psychological therapy
- Ensure that psychologists and therapists have the ability to confidently include eating and activity in psychological assessments, formulations and treatment plans in partnership with service users

8.7 Education and Information

Staff Education
Additional guidance, support and encouragement are required from those supporting individuals with lived experience of mental health conditions and/or a learning disability to make the first steps towards healthier lifestyle choices. Development of physical health skills amongst staff working in mental health is in line with Public Health England's Public Mental Health Workforce Development Framework. The framework highlights the need to develop a competent and confident workforce to deliver this agenda as one of its 6 priorities.

Service User Education
Evidence suggests that people with lived experience of mental health conditions may not be equipped with skills to manage weight gain that may be associated with their underlying diagnosis or treatment. Commonly, individuals with learning disabilities may also have limited knowledge or understanding of diet and its potential consequences, and may have difficulty understanding self-monitoring techniques. Individuals may also be dependent on carers to make food choices for them and to cook and prepare food. The carers may not have the necessary knowledge to be able to plan menus or cook healthy meals.

TEWV- Practice Example
The Trust has developed a health promotion page on the staff internal intranet, to assist clinical staff in undertaking healthy conversations with service users. This includes links to national initiatives as well as local schemes to promote healthy living.

Across TEWV, peer trainers deliver workshops on lifestyle (including nutrition and exercise) at the Recovery Colleges. Online versions of these are soon to be made available on TEWV's Recovery College webpage, which will be accessible for those across the region.

NTW- Practice Example
Health Education North East has funded the Dietetics Service to create a range of online resources for service users, carers and health professionals. Online training for nurses/carers will include healthy lifestyle advice, ways to approach good nutrition and methods to assist service users in making healthier food choices.

In the Tyneside Recovery Colleges, there are already some initiatives that combine physical health with mental health i.e. boxercise and mindfulness with a gym in the west end, and gardening with peers at St Nicholas Hospital in Gosforth.

Over the next three years we will:

- Increase the availability of education resources and training on weight management for staff including Making Every Contact Count, brief advice and more specialist training
- Work with Health Education England and the relevant training providers to ensure that physical and mental health is equally incorporated into undergraduate and postgraduate training for health professionals
- Work with Health Education England and training providers to deliver more bespoke healthy weight training for staff working in MH/Learning Disability services
- Provide training to peer support workers so that they can deliver healthy lifestyles education to their peers
- Use a whole family approach to increase family and carers' (including young carers) knowledge and skills of healthy eating and physical activity so that they are able to support the physical health needs alongside the mental health needs of the person they care for
- Ensure those who use services are fully involved in decision making, and empowered to take action

8.8 Developing Pathways

NICE guidance makes recommendations on community based activity to prevent excess weight in adults and children. This highlights the importance of commissioners joining up excess weight prevention and treatment programmes within the community. There is a need to ensure that any opportunities to participate in lifestyle and healthy weight programmes in the clinical setting can be followed up and built on in the community. The commissioning landscape in the North East and North Yorkshire is varied and currently presents challenges for commissioning services. There are a variety of different healthy weight and lifestyle programmes commissioned by LAs and CCGs. These programmes vary by local authority area. Across the North East there is a Public Health Obesity and Physical Activity Leads network which meets to discuss joint working and joint programmes of activity. This group will coordinate the relevant community link sections of the plan. There is also a Yorkshire and Humber Healthy Weight and Physical Activity Community of Improvers network which is led by PHE, North Yorkshire. This has its own strategic group to implement their own strategy - *Healthy weight, healthy lives strategy.*

A recent review of weight management programmes across the North East showed a variation in the strategic engagement with mental health and/or learning disability services/service users. These ranged from including mental health and learning disabilities in the obesity strategy to those areas that had no strategy at all. There were also differences across the region in those exclusions to weight management programmes which had a mental health element. One of the main challenges is that the two main trusts cover multiple local authority areas which could lead to different services being offered to the same group of service users varying depending on where people live. It is vital that within the programme of activities that we do not reinforce inequalities or build them in to the system.

NTW Practice Example
NTW Sign post service users to general population groups running in the community once discharged from hospital.

TEWV Practice Example
A Weight Management Pathway (CLiP-see Appendix1) has been developed and piloted in a variety of settings across TEWV. This pathway screens for excess weight and signposts to a variety of evidence based treatment. A Directory of Services was developed to provide guidance on when to refer on to the Trust Dietetic Service and how to address the issues of capacity and consent relating to weight management.

Over the next three years we will:

- Work with the Local Authorities to map existing community based weight management and physical activity offers; ensuring information about what is available is accessible
- Ensure community-based specialist weight management, physical activity services (where they exist) and wider leisure offers are accessible and/or have referral pathways in place, providing training where appropriate and challenging stigma when services are seen to exclude individuals with lived experience of a mental health condition or a learning disability
- Work with primary care to develop clear referral pathways
- Ensure that Local Authorities and NHS commissioners consider the needs of people with lived experience of a mental health condition and/or learning disabilities within any weight management and/or physical activity and commissioning intentions

8.9 Children and Young People

Obesity and excessive weight gain in children are defined by the National Child Measurement Programme as a BMI over the 85th or 95th centile respectively. Rates of excessive weight gain and obesity have increased sharply in children since the mid-1980s. This means that one in five children start their school life being classified as either overweight or obese, increasing to one in three by the last year of primary school. In the North East, rates are higher than the England average, with 23.7% of 4 to 5-year-olds, and 35.9% of 10 to 11-year-olds reportedly being classified as overweight or obese. In particular, children with lived experience of mental health conditions and/or learning disabilities may have their physical health problems (such as obesity) further compounded by psychosocial factors, access to a good diet, nutrition and physical activity, and the effects of antipsychotic medication on metabolism and appetite. In addition, evidence suggests that children who are classified as overweight or obese may be prone to mental health symptoms (such as depression).

Studies suggest that when professionals identify children as overweight or obese, it may prompt families to seek support, without evidence of it doing any harm. NICE suggests that combined behavioural and lifestyle interventions (diet and physical activity with or without pharmacological treatment) can be effective in children, and that interventions must include a focus on parents and families to be effective. Indeed, it is important to tackle the weight-related issues of all family members and to emphasise a family approach to a healthy lifestyle.

TEWV- Practice Example
In County Durham and Darlington, TEWV has a Consultant Clinical Psychologist working into the Specialist Paediatric Weight Management Service, alongside a Consultant Paediatrician and Dietitians. The service sees children and young people aged between 0-16 whose BMI falls above the 99.6th centile (98th if they are under 2 or have medical comorbidities). The service accepts referrals from mental health services for children and young people who meet their criteria and can also offer training/consultation/supervision and joint working on cases, including helping to signpost to services across the locality.

NTW- Practice Example
Each ward in Children and Young People's Services (CYPS) has staff representatives or ward champions who take the lead for ensuring that several healthy weight initiatives are supported. These representatives/champions attend regular multi-disciplinary team meetings within CYPS. There are several interventions in place within CYPS to support children and young people to achieve a healthy lifestyle, including the opportunity for young people to participate in the Duke of Edinburgh Award and a twice weekly "healthy tuck shop" being offered to young people as part of their education timetable.

Over the next three years we will:

- Work with families on weight related issues of all family members and to emphasise a family approach to healthy lifestyle
- Continue to incorporate daily physical activity into care planning to the recommended levels (60mins daily for 5-18year olds)
- Reduce consumption of high calorie/fat or sugary foods available for C&YP by increasing the availability of healthy food/snacks
- Ensure training to staff and support for families working with C&YP includes education on diet and physical activity
- Ensure that all C&YP accessing our service are offered the opportunity have their BMI checked on a regular basis

8.10 Learning Disabilities

The most recent data on prevalence of excess weight in adults (aged 18 and older) with learning disabilities is based on analysis of data from GPs across the whole of England carried out by the Learning Disabilities Public Health Observatory in 2016.
This showed that, in comparison to the general population, a smaller proportion of people with learning disabilities are in the milder category termed 'overweight' (30% of men and 25% of women compared to 41% of men and 31% of women without a learning disability). However, there are higher proportions in the more severe category of obese (31% of men and 45% of women compared to 24% of men and 27% of women without a learning disability).

Some people with learning disabilities have particular problems with weight control as a result of conditions such as Prader-Willi Syndrome or because of specific medications they take. However, whatever underlying causes people have for their weight problems, diet and exercise are almost always important elements in achieving and maintaining a healthy weight.

People with learning disabilities have substantially higher rates of conditions associated with being overweight, such as diabetes, heart failure and stroke that can contribute to a 15 – 20 year premature mortality of this group of people.

Recent (unpublished) research looked at perceptions of weight in young people with learning disabilities in comparison to young people without learning disabilities. The results suggested that people with learning disabilities were likely to hold more positive beliefs about their bodies, irrespective of their size. Women with learning disabilities tended to perceive their bodies as being smaller than they were. This finding has implications for the approaches needed when supporting people with learning disabilities to lose weight.

Morbid obesity in people with learning disabilities when a person is found to have capacity to make food choices should not be accepted without challenge; support to enable people to understand and retain concepts about consequences of eating themselves into serious ill health and potential premature mortality is a requirement of every member of the staff team. Capacity issues are more likely to be a challenge for people with learning disability; it is therefore critical that proactive risk management of issues relating to capacity and choice about diet and exercise should be utilised at every opportunity.

The North East and Cumbria Learning Disability Network (supported by NECS) recently analysed numbers of people with learning disabilities registered with a GP with a BMI > 30 compared to the population without learning disabilities; this revealed that the population of people with a BMI over 30 amongst those with a learning disability was 22.3%, while those without a learning disability was only 9.7%.

NTW- Practice Example

- STOMP – a programme to review and challenge ongoing need for psychotropic medication thereby reducing side-effect burden including problems with maintaining a healthy weight lead by pharmacy
- 'Tyne to be healthy' dietetics led 10 week programme to improve the overall health and wellbeing of patients at the Northgate site (forensic in-patient services) by improving their knowledge of healthy eating.

TEWV- Practice Example

LEAN – Lifestyle, Energy, Activity and Nutrition – A 10 week programme for weight loss management for people with learning disabilities lead by dietetics

Over the next three years we will:

- Ensure every person with a learning disability has an annual health check led by General Practice
- Ensure issues relating to capacity and choice around diet and physical activity are fully addressed using robust risk assessment. The Health Equalities Framework (HEF) offers a tool that can be used by people with learning disabilities, family carers, support workers and health practitioners to discuss risks to health and wellbeing
- Develop a '12 Month Challenge' workbook to be piloted across NTW and TEWV. A 'team based' approach to this initiative would be agreed to ensure there is leadership, ownership and full engagement of the initiative
- Ensure that people with syndromes associated with problems of appetite or weight will have specific plans and support, and that all materials will be available in different accessible media
- Improve/establish access opportunities to appropriate and supported exercise groups for people with learning disabilities

9. Implementation and Evaluation

As indicated above, both Trusts will develop an implementation plan that will be monitored through the relevant Trust governance structures. However in order to maintain engagement with external partners the 'A *Weight off Your Mind' s*teering group will continue to meet quarterly for the first year of the plan to monitor the action plan and update on progress.

It is key to evaluate the impact of this plan. We are delighted to work with Public Health England and Teesside University to develop an evaluation framework. This will be undertaken in two phases.

Phase 1: overall plan implementation evaluation. This evaluation phase will collect data on how the plan has informed: a) national policy (e.g. feeding into the weight management blueprint development, informing the development of e-learning resources) and b) local practice (e.g. the impact of the proposed vision and initiatives as determined by the associated measure of success). This latter strand will also involve the development of a robust mixed method protocol (to be aligned with the smoke free evaluation). Additional funds will be sought to undertake this in-depth evaluation, which will examine the process and impact of the plan through a qualitative exploration of barriers and facilitators to local implementation and quantitative examination of changes in routinely collected relevant data (e.g. BMI, disease status).

Phase 2: local evaluation support. This phase will involve the adaptation of the diet, physical activity and weight management evaluation frameworks, to provide a robust and tailored set of essential and desirable criteria for local areas to collect when evaluating weight management programmes delivered as part of this plan. Evaluations conducted using the adapted frameworks will help inform local practice in addition to supporting the overall plan evaluation (phase 1).

During implementation it will be important to follow good practice, in particular in circumstances that have the potential to constitute restrictive practice. An anonymized example is provided below:

CQC - Practice Example *Sarah lives in a mental health rehabilitation unit; she is sectioned under the Mental Health Act. Her rehabilitation is going well; she has leave every day to go out and is managing her personal self-care. In addition to her mental health problems Sarah has type II diabetes. When Sarah goes out she buys sweets, cakes and other foodstuff not advisable given her diabetes. Staff have discussed this with her and given advice and information about diabetes.*

Staff are very concerned that she does not follow the advice and are considering ways they can restrict her intake of food and drink detrimental to her health. Sarah's believes that type II diabetes does not exist. She is sure of this as she gets messages from her dead sister and the TV about this and that only type 1 exists and believes good has no impact. Staff understand that a physical illness cannot be treated under the mental health act.

They carry out a mental capacity assessment to see if Sarah has the capacity to continue to spend her money on food or drink that is not suitable for her diabetes. They know capacity is decision specific. Step 1 shows she has a disorder of the brain and it is serious enough to impact on this decision as she believes she is getting messages from her dead sister and the TV. They spend some more time helping her to be able to understand and make an informed decision but this does not work.

The next step is a best interests meeting and a discussion about how to make any restrictions the least restrictive possible. The team decided that while stopping her leave would be effective it was overly restrictive . The decision was for leave to remain in place but for her access to money to be reduced and therefore to reduce the amount she could buy.

Of importance was to reassess capacity regularly as this decision was based on Sarah's lack of capacity at that time. An improvement in her mental health could mean she understood the impact certain foods had on her diabetes and she could have the capacity to make her own decision and it could be a wise or unwise decision which would need to be respected.

10. Appendices

Appendix 1 - Acknowledgements

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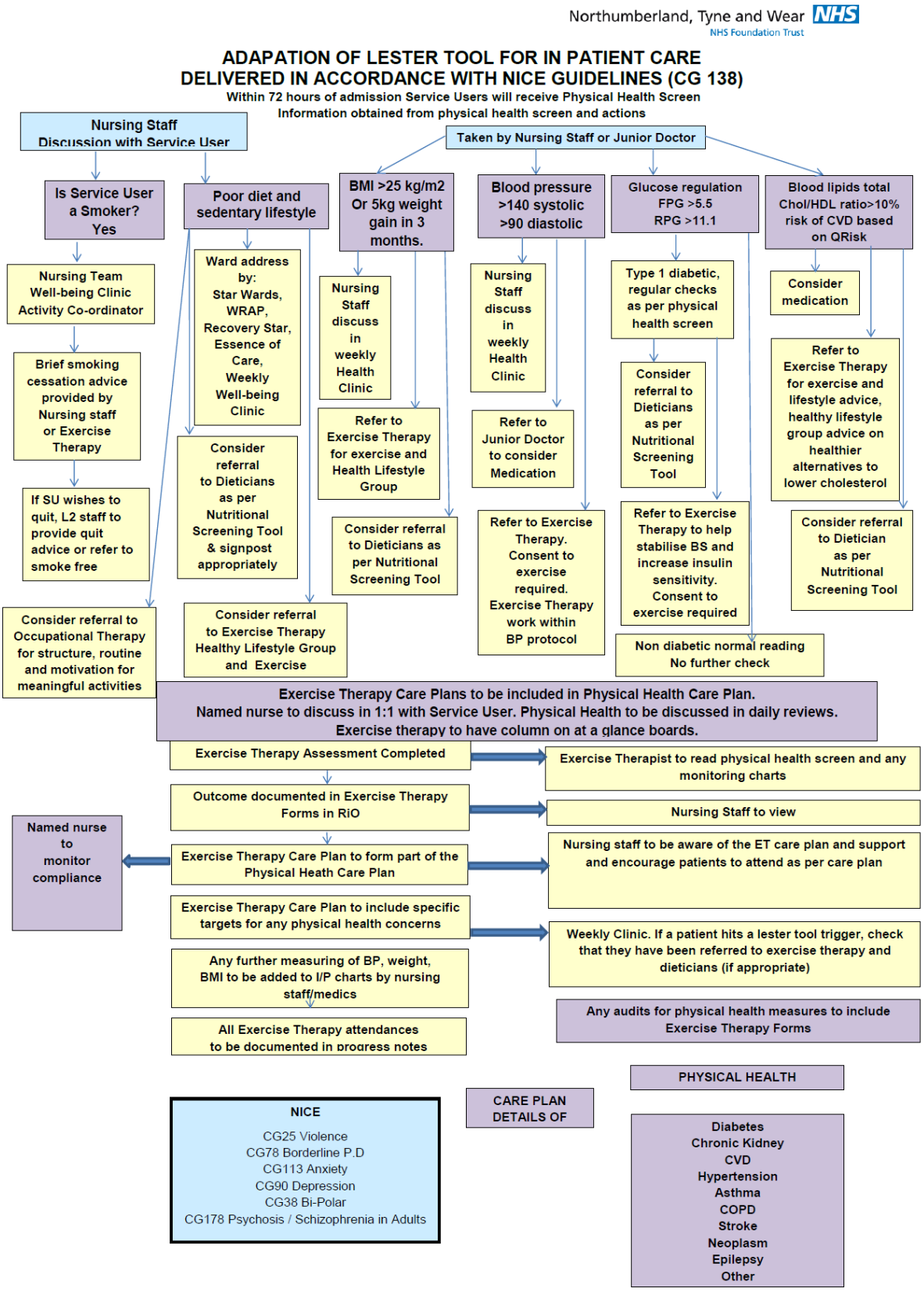
Appendix 2 – Lester Tool



Appendix 3 - Tees Esk and Wear Valleys NHS Foundation Trust Weight Management Clinical Link Pathway Clinical Algorithm

Trigger questions

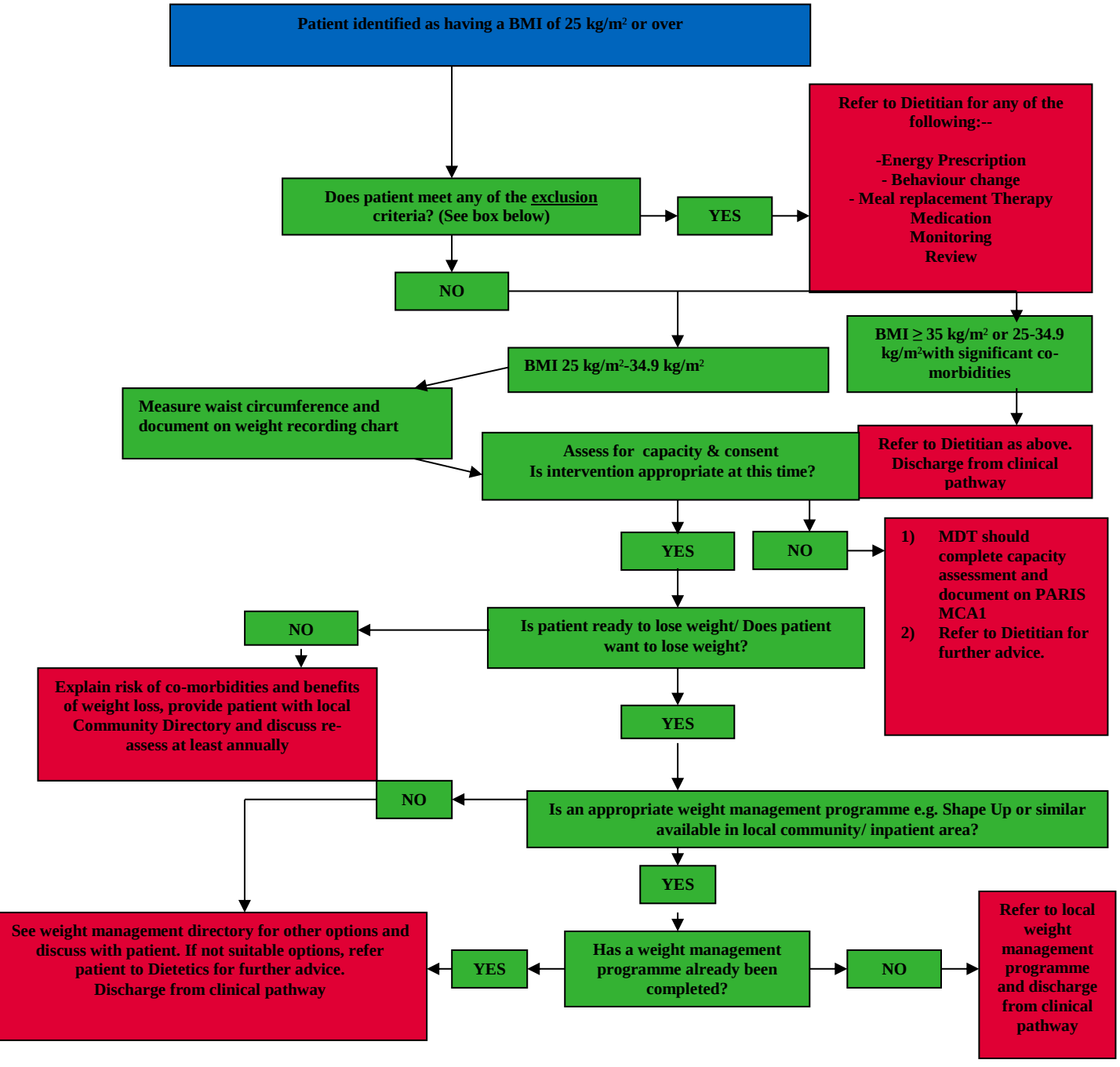
- **Has the patient lost or gained weight?**
- **Does the patient appear visually overweight or underweight?**
- **Has the patient had any loss/increase in appetite?**

Be aware of

- Presenting symptoms & underlying causes of obesity
- Co-morbidities & risk factors (type 2 diabetes, CVD, hypertension, sleep apnoea, lipid profile, blood glucose and BP)
- Lifestyle, environmental, psychosocial distress, social & family factors
- Family history of obesity & co-morbidities
- Willingness & motivation to change
- Potential to gain health benefits with weight loss
- Physical activity
- Psycholgical problems
- Medical problems and medication
- Eating behaviour

EXCLUSION CRITERIA

- **NEWLY DIAGNOSED DIABETES (NO PREVIOUS DIETETIC INPUT)**
- **SLEEP APNOEA**
- **PREGNANT**
- **ACTIVE CARCINOMA**
- **DIAGNOSED/SUSPECTED EATING DISORDER**



Antipsychotic therapy being considered / reviewed
Screen for cardiovascular risk using JBS RISK CALCULATOR
http://www.jbs3risk.com/pages/risk_calculator.htm

Advise all service users on healthy lifestyle measures to reduce risk of weight gain and cardiovascular disease

Is patient at High Risk?

Yes

No

Check weight and BMI:
- weekly x 6 weeks
- 1-2 x monthly x 6 weeks
- 6-monthly thereafter

At any point - Is weight or weight gain clinically significant? *

No

Yes

Are lifestyle interventions effective? **

Yes

No

New treatment – avoid antipsychotic with HIGH risk of weight gain, i.e. olanzapine, clozapine
Existing treatment - consider switching to antipsychotic with LOWER risk of weight gain,
e.g. Amisulpride (low dose)
Or Haloperidol
Or Aripiprazole

Is treatment tolerated and effective?

Yes

No

Consider adjunctive medication for weight loss

See Trust guidelines on "Unlicensed and Off-label medicines" for approved options

Is treatment tolerated and effective?

Yes

No

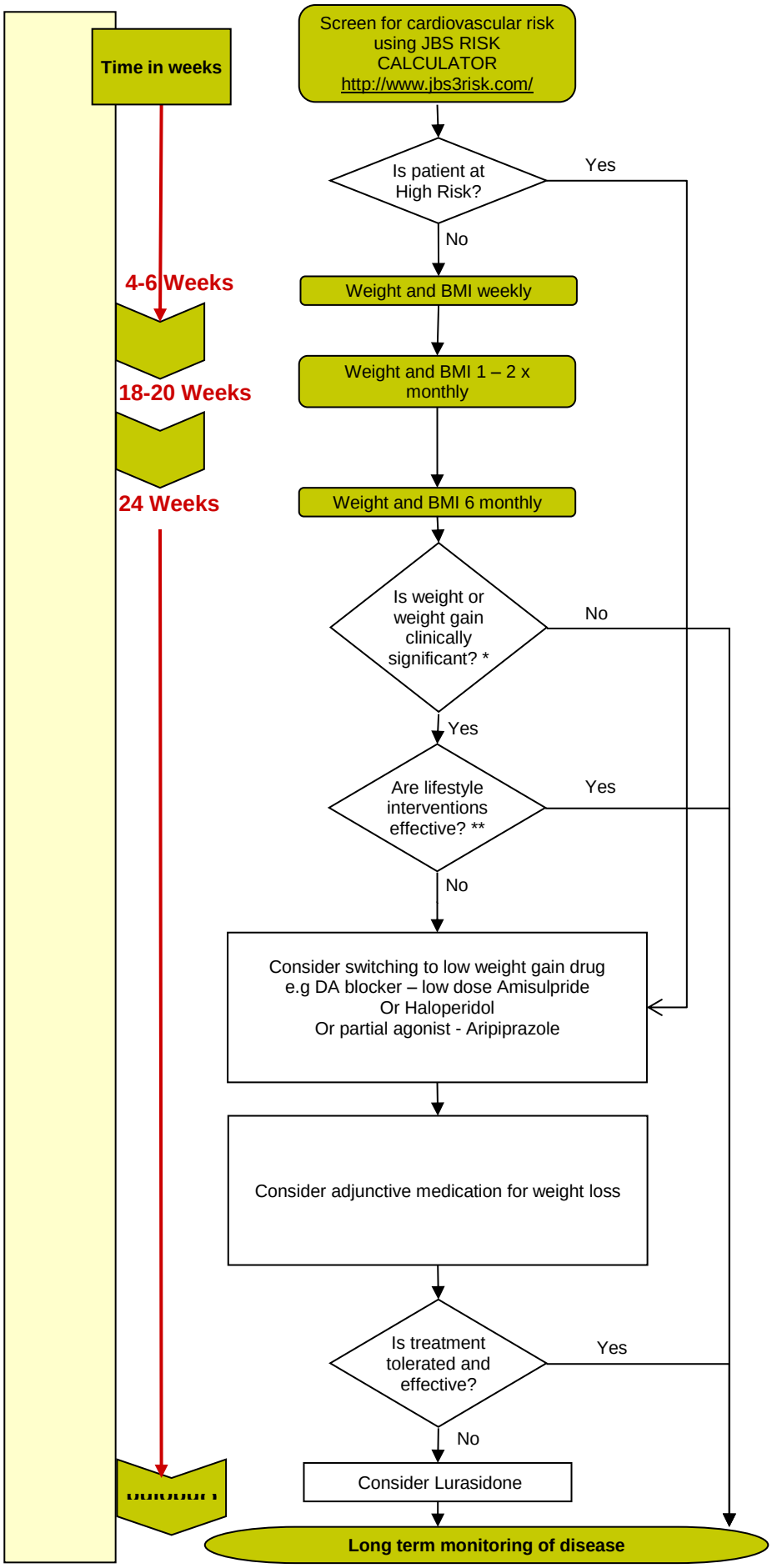
Consider switching to Lurasidone

Long term monitoring of weight (minimum annually)

* i.e. BMI >25 kg/m2 or increase >7% body weight
** over 6 weeks – 3 months

Appendix 4: Pathway Version v4 TEWV) January 2017

Appendix 5 – Physical Health screening algorithm



* e.g. high BMI or > 7% body weight
** over 6/52 – 3/12

Pathway Version 3.0 November 2016

Appendix 6 - Additional pharmacy / medicine management information on current activity

Current work at NTW

The implementation of the Lester Tool following a pilot at four Mental Health Trusts (including NTW) on inpatient wards means that the medication review process is now an integral part of the NTW patient journey. The medication review is an opportunity for service users to become more informed about their medication and as part of the process, the pharmacist will look at ways to reduce 'pill burden' and rationalise complicated regimes, for example, where service users are prescribed more than one type of antipsychotic or unusually high doses of antipsychotic. All senior pharmacists are being offered the opportunity to train as independent prescribers so that medication review process may be enhanced by enabling pharmacists to adjust doses themselves or "deprescribe" unnecessary medications. There are already examples of pharmacist independent prescribers conducting medication review clinics within community services (see Dave Gerrard's example in the learning disability setting). NTW Pharmacy have also issued several practice guidance notes for prescribers around the prescribing of high dose antipsychotics and antipsychotic polypharmacy (polypharmacy = more than one medicine), as these can have more of an impact on overall weight management and associated physical health problems.

The Lester Tool also recommends that service users prescribed antipsychotics are weighed weekly for the first six weeks and that any change in baseline weight is addressed at this point. This is linked to the observation that the degree of weight gain in the first six weeks predicts overall long term weight gain. To support service users with early interventions around healthy weight management, NTW Pharmacy have updated the practice guidance note on physical health monitoring for children and adults prescribed antipsychotic medication. It now includes the requirement that prescribers must have a discussion with service users about the risk of weight gain prior to starting treatment and that weight must be measured weekly for the first six weeks of treatment and where weight gain is noted, staff are obliged to signpost service users to appropriate weight management services.

It is also recognised that some service users will prefer to receive written information about their medicines in addition to or in place of a discussion with the pharmacist. However, written information is not always user friendly and can make people feel overwhelmed or alarmed by unusual side-effects. There is also currently very little Trust approved information on the impact of antipsychotics & other medicines for mental health on weight and what to do about it. From April 2017 NTW Pharmacy has subscribed to the Choice and Medication^{TM} resource. This is an online library of patient information aimed exclusively at people accessing mental health services. In addition to the standard information leaflets, which will bear the Trust logo, the information is also provided in easy read, single page and large print formats and in different languages. There is also the option to select a version of the information leaflet which is aimed at younger people and links to resources for people with learning disability who may have difficulty understanding standard patient information leaflets. There are also several information leaflets which will be available for use in discussions around weight gain with medications for mental health. One of these information leaflets is specifically targeted at people prescribed antipsychotics who are at risk of weight gain and provides tips on how to reduce this risk. These leaflets were previously only available for those accessing services at TEWV.

To further support patient choice, NTW Pharmacy has produced a patient decision aid for those considering antipsychotic treatment. This decision aid allows the reader to easily identify which antipsychotics are most likely to cause a particular side-effect, including weight gain. The Choice and Medication resource will enhance patient choice further as it

contains “Handy Charts” comparing other medications for mental health in addition to antipsychotics (e.g. mood stabilisers, antidepressants).

Current work at TEWV

Over recent years the organisation has become increasingly mindful of the impact of metabolic side-effects with second generation antipsychotics. We are aware of various cases where non-compliance with treatment, resulting in loss of symptom control and deterioration in mental state, has been directly associated with a fear of or actual weight gain associated with antipsychotic therapy.

Guidelines and tools have been developed to support prescribers in monitoring service users receiving antipsychotics, particularly with regard to the impact they can have on physical health. The Trust “Psychotropic Medication Monitoring Guide” sets out minimum monitoring requirements in line with NICE guidelines and specific product information – for antipsychotics, this includes checking weight at baseline, every week for 6 weeks, at 3 months, then annually thereafter. If adhered to, this monitoring will pick up significant weight gain in the first 6 weeks of treatment which is known to be an indicator of long-term weight gain associated with antipsychotics – hence, there will be opportunity to adjust treatment or add treatment to offset weight gain at an early stage.

In order to meet the Trust’s monitoring requirements, community teams have been provided with a tool to establish and maintain a register of their service users receiving antipsychotics. Using a RAG system, the register alerts teams when monitoring is due or overdue, and allows them to record when it has been completed – this includes weight monitoring as described above.

In an inpatient setting, metabolic effects of antipsychotics are receiving increasing attention and scrutiny. Adult inpatients have their weight checked weekly, regardless of whether or not they are taking antipsychotics, and how long they have been taking them for. Current weight, or change in weight, is flagged daily so that significant changes can be picked up and addressed. This is established on many wards but further work is required to implement it across the whole Trust. Adding “change in weight since admission” to visual control boards on wards has been suggested as one way of achieving this.

An on-going piece of work is the development of the algorithm to sensitise prescribers to the risk of weight gain and to guide them through a thoughtful process of medicine management with regard to minimising the risk (Appendix 3*)*. The key recommendations in this algorithm are based on the 2016 BAP guidelines on the management of metabolic syndrome in psychosis.

Appendix 7- Bibliography

- Aldridge, M.A. (2012) *Addressing non-adherence to antipsychotic medication: A harm-reduction approach*. Journal of psychiatric and mental health nursing. **19**(1),pp.85–96. http://www.willhall.net/files/AddressingNonadherenceToAntipsychoticMedicationAHarmReductionApproach-AldridgeJournPsychMentHeallthNurs2011.pdf
- Allan C. (2016) *Evidence of system-wide interventions to prevent, control or mitigate the risks of overweight and obesity in patients with severe mental illness: a review*. (Unpublished).
- Alvarez-Jimenez M, Martinez-Garcia O, Perez-Iglesias R, et al. (2010) *Prevention of antipsychotics-induced weight gain with early behavioural intervention in first-episode psychosis: 2-year results of a randomized controlled trial*. *Schizophr Res* 116: 16-19.
- Brown, S. (1999) *The unhealthy lifestyle of people with schizophrenia*. Psychological Medicine. 29(3): 697–701.
- Bruins J, Jorg F, Bruggeman R, et al. (2014) *The effects of lifestyle interventions on (long-term) weight management, cardiometabolic risk and depressive symptoms in people with psychotic disorders: a meta-analysis*. *PLoS ONE* 9: e112276.
- Buck, D. and Frosini, F. (2012) *Clustering of unhealthy behaviours over time*. King's Fund. Available at: http://www.kingsfund.org.uk/publications/clustering-unhealthy-behaviours-over-time
- Cabassa, LJ, Ezell, JM and Lewis-Fernandez R. (2010) *Lifestyle interventions for adults with serious mental illness: a systematic literature review*. *Psychiatric Serv* 61: 774-782.
- Casey AF, Rasmussen R. (2013) *Reduction measures and percent body fat in individuals with intellectual disabilities: A scoping review*. Disability and Health Journal. 6(1): 2–7.
- Cooper SJ, Reynolds GP, Barnes TRE, et al (2016) *BAP guidelines on the management of weight gain, metabolic disturbances and cardiovascular risk associated with psychosis and antipsychotic drug treatment*. *J Psychopharmacology* 30: 717 – 748.
- Correll, C.U., Manu, P., Olshanskiy, V., Napolitano, B., Kane, J.M. and Malhotra, A.K. (2009) *Cardiometabolic risk of second-generation antipsychotic medications during first-time use in children and adolescents*. Jama. 302(16),pp.1765–1773.
- Day M, Johnson M. (2017) *Working together to address obesity in adult mental health secure units: a systematic review of the evidence and a summary of the implications for practice*. London: Public Health England.
- De Hert M. Correll C.Uk, Bobes J, et al (2011) *Physical illness in patients with severe mental disorders. I. Prevalence, impact of medications and disparities in health care*. World Psychiatry. 10(1): 52-77
- Department of Health (2015a) Five Year Forward View for Mental Health. HMSO: London.
- Department of Health (2015b) Future in Mind: promoting, protecting and improving our children and young people's mental health and wellbeing. HMSO: London.
- Department of Health (2015c) [Online] Whole systems approach to obesity: pilot programme invitation. https://www.gov.uk/government/publications/whole-systems-approach-to-obesity-pilot-programme-invitation [Accessed] 08/08/17.
- Department for Environment, Food and Rural Affairs (2015) *Government Buying Standards for Food and Catering Services.* Accessed online: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/418072/gbs-food-catering-march2015.pdf
- Department of Health and Age UK (2014) *Standards for Food and Drink in NHS Hospitals* Accessed online: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/523049/Hospital_Food_Panel_May_2016.pdf
- Dodd KJ, Shields N. (2005) *A systematic review of the outcomes of cardiovascular exercise programs for people with Down syndrome*. Archives of Physical Medicine and Rehabilitation. 86(10): 2051–2058.

- Dombrowski SU, Avenell A and Sniehotta FF. (2010) *Behavioural interventions for obese adults with additional risk factors for morbidity: systematic review of effects on behaviour, weight and disease risk factors*. *Obes Facts* 3: 377-396.
- Ebneter DS & Latner JD (2013) Stigmatizing attitudes differ across mental health disorders:A comparison of stigma across eating disorders, obesity, and major depressive disorder. *Nerv Ment Dis* 201: 281-285.
- Falconer CL, Park MH, Croker H et al (2014) *The benefits and harms of providing parents with weight feedback as part pf the national child measurement programme: a prospective cohort study*. BMC Public Health; 14:549
- Firth J, Cotter J, Elliott R, French P, Yung AR. (2015) *A systematic review and meta-analysis of exercise interventions in schizophrenia patients*. Psychological Medicine. 45(7), 1343–1361.
- Fontaine, K.R., Heo, M., Harrigan, E.P., Shear, C.L., Lakshminarayanan, M., Casey, D.E. and Allison, D.B. (2001) *Estimating the consequences of antipsychotic induced weight gain on health and mortality rate*. Psychiatry research. 101(3),pp.277–288.
- Gary, F. A. (2005). Stigma: barrier to mental health care among ethnic minorities. *Issues in Mental Health Nursing* 26(10): 979-999.
- Gatineau M. Dent M (2011) *Obesity and mental health*. Oxford: National Obesity Observatory
- Gracious, B.L. and Meyer, A.E (2005) *Psychotropic-induced weight gain and potential pharmacologic treatment strategies*. Psychiatry. 2(1),pp.36–42.
- Gross J, Vancampfort D, Stubbs B, Gorczynski P, Soundy A. (2016) *A narrative synthesis investigating the use of social support to promote physical activity among individuals with schizophrenia*. Disability and Rehabilitation. 38(2): 123-150.
- Harriger JA & Thompson JK (2012) Psychological consequences of obesity: Weight bias and body image in overweight and obese youth. International Review of Psychiatry 24(3):247-253.
- Improving Health and Lives (2016) *Health and care of people with learning disabilities*, NHS Digital, Leeds available at http://content.digital.nhs.uk/article/7543/Health-and-Care-of-People-with-Learning-Disabilities
- Jinks, A., Cotton, A. & Rylance, R. (2011) *Obesity interventions of people with a learning disability: an integrative literature review*. *Journal of Advanced Nursing.* Vol 66 Iss 3 pp. 460-471
- Link BG and Phelan JC (2001) Conceptualizing Stigma. Annual Review of Sociology. Vol. 27:363-385.
- McCreadie, R.G. (2003) *Diet, smoking and cardiovascular risk in people with schizophrenia: descriptive study*. British Journal of Psychiatry. 183: 534–539
- McVey GL, Walker KS, Beyers J, Harrison HL, Simkins SW, Russell-Mayhew S (2013) Integrating Weight Bias Awareness and Mental Health Promotion into Obesity Prevention Delivery: A Public Health Pilot Study. Prev Chronic Dis 10:120185.
- Mizock L (2012) The double stigma of obesity and serious mental illnesses: Promoting health and recovery. Psychiatric Rehabilitation Journal 35(6): 466-9.
- Mukundan A, Faulkner G, Cohn T, et al. (2010) *Antipsychotic switching for people with schizophrenia who have neuroleptic-induced weight or metabolic problems*. Cochrane Database Syst Rev 12: CD006629. DOI: 10.1002/14651858.CD006629.pub2.
- National Audit Office (2001) Tackling Obesity in England, London, NAO
- National Obesity Observatory, (2011) *Obesity and mental health*. Available at http://www.noo.org.uk/uploads/doc/vid_10266_Obesity%20and%20mental%20health_FINAL_070311_MG.pdf
- NHS Digital (2016a) *Health Survey for England*: 2015 http://www.content.digital.nhs.uk/article/2021/Website-Search?productid=23711&q=Health+Survey+for+England+2015+findings.+&sort=Relevance&size=10&page=1&area=both#top [accessed 18/01/2017]

- NHS digital (2016b) *Health and care of people with learning disabilities: experimental statistics: 2014 to 2015*. http://www.content.digital.nhs.uk/catalogue/PUB22607 [accessed 18/01/2017]
- NHS England (2014) *Reducing mortality for people with serious mental illness (SMI)*. Available at: http://www.england.nhs.uk/ourwork/forward-view/sop/red-prem-mort/smi/
- *NHS five year forward view*, (2014), available at https://www.england.nhs.uk/wp-content/uploads/2014/10/5yfv-web.pdf
- NICE (2014) *CG178 Psychosis and schizophrenia in adults: prevention and management*. London: NICE
- NICE (2014a) *CG189 Obesity: identification, assessment and management*. London: NICE
- NICE (2014b) *PH53 Weight management: lifestyle services for overweight or obese adults*. London: NICE
- NICE (2014) *Psychosis and schizophrenia in adults: prevention and management*. NICE Clinical Guideline 178. London: National Institute for Health and Care Excellence.
- NICE (2014a) *Obesity: identification, assessment and management*. NICE Clinical Guideline 189. London: National Institute for Health and Care Excellence.
- NICE (2006) *Obesity Prevention*, available at https://www.nice.org.uk/guidance/cg43?unlid=9530234402016122033248
- NICE, (2014) *CG178*. available at http://www.who.int/whr/2001/media_centre/press_release/en/
- Norenberg A, Cairns J, Gadsby E, Henderson EJ. Systematic review of recommendations to reduce weight stigma across society: A conceptual synthesis taking a whole systems approach.
- Pearce M, Webb-Phillips S, Bray I (2016) *Changes in Objectively measured BMI in children aged 4-11years: data from the national child measurement programme*. Journal of Public Health, 38 (3) (459-466)
- Pearsall R, Smith DJ, Pelosi A, Geddes J. (2014) *Exercise therapy in adults with serious mental illness: a systematic review and meta-analysis*. BMC Psychiatry. a4.
- Public Health England "2015) *Public Health Outcomes Framework: Active People Survey 2013-2015*, available at http://www.phoutcomes.info/documents/APSweight_ForWebsite_2013-2015.xls
- Public Health England (2016) Public Health Outcomes Framework, indicator 2.13i, available at www.phoutcomes.info
- Public Health England (2016) *Making Reasonable Adjustments to Obesity and Weight Management Services for People with Learning Disabilities*. London: PHE.
- Public Health England (2014a) *From evidence into action: opportunities to protect and improve the nation's health*. London: PHE
- Public Health England (2015) *Making the case for tackling obesity: why invest*. Access online: https://www.noo.org.uk/gsf.php5?f=314110&fv=21940
- Public Health England (2016) *Making reasonable adjustments to obesity and weight management services for people with learning disabilities*. London: PHE
- Public Health England (2015) available at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/410351/Public_mental_health_leadership_and_workforce_development_framework_executive_summary.pdf, accessed 16/2/17
- Puhl RM & Heuer CA (2009) The Stigma of Obesity: A Review and Update. Obesity 17: 941–964
- Puhl RM & Latner JD (2007) Stigma, obesity, and the health of the nation's children. Psychological Bulletin 133:557-580.
- Rees R, Oliver K, Woodman J and Thomas J (2011) The views of young children in the UK about obesity, body size, shape and weight: a systematic review. BMC Public Health 11:188.

- Rimmer, J. H., Rowland, J. L. & Tamaki, K. (2007) *Obesity and secondary conditions in adolescents with disabilities: addressing the needs of an underserved population. Journal of Adolescent Health,* Vol. 41 pp. 224-229
- Robson, D. and Gray, R. (2007) *Serious mental illness and physical health problems: A discussion paper*. International Journal of Nursing Studies. 44 (2007) 457–466
  Royal College of Psychiatrists. (2014) Report of the second round of the National Audit of Schizophrenia (NAS2), The National Audit Office of Schizophrenia
- Samele C, Seymour L, Morris B. (2006) *A formal investigation into the health inequalities experienced by people with learning difficulties and people with mental health problems – Area Studies report*. London: Disability rights commission
- Shaw KA, O'Rourke P, Del Mar C, et al. (2005*). Psychological interventions for overweight and obesity*. *Cochrane Database Syst Rev* 2: CD003818. DOI: 10.1002/14651858.CD003818.pub2.
- Singh, N. N., Lancioni, G. E., Singh, A. N., Winton, A. S., Singh, J., McAleavey, K. M. & Adkins, A. D. (2008*) A mindfulness-based health wellness program for an adolescent with Prader-Willi syndrome.* Behaviour modification, Vol 32 iss 2 pp. 167-81
- Smith, J and Jowett, A. (2017) *Workforce Scoping and Benchmarking in Mental Health, Learning Disabilities and Eating Disorders Dietetics***.** Birmingham: The Mental Health Specialist Group of the British Dietetic Association https://www.mentalhealth.org.uk/sites/default/files/food-for-thought-mental-health-nutrition-briefing-march-2017.pdf
- Smith, S. et al (2007) *A well-being programme in severe mental illness. Reducing risk for physical ill-health*: A post-programme service evaluation at 2 years. European Psychiatry. 22, 413-418.
- Spanos, D., Hankey, C. R., Boyle, S., Koshy, P., Macmillan, S., Matthews, L., Miller, S., Penprazem V., Pert, C., Robinson, N. & Melville, C. A. (2013) *Carer's perspectives of a weight loss intervention for adults with intellectual disabilities and obesity: a qualitative study. Journal of Intellectual Disability* research, Vol 57 iss 1 pp. 90-102
- Strassnig, Martin; Brar, Jaspreet S.; Ganguli, Rohan (2005) *Self-reported body weight perception and dieting practices in community-dwelling patients with schizophrenia*, Schizophrenia Research; vol. 75 (no. 2-3); p. 425-432
- Stubbs B, Williams J, Shannon J, Gaughran F, Craig T. (2016) *Peer support interventions seeking to improve physical health and lifestyle behaviours among people with serious mental illness: A systematic review*. International Journal of Mental Health Nursing. 25(6): 484–495.
- Tarricone, I, Farrari Gozzi B, Serretti A, et al. (2010) *Weight gain in antipsychotic-naïve patients: a review and meta-analysis*. *Psychological Medicine* 40: 187-200.
- Tate, D. F., Wing, R. R. & Winett, R. A. (2001) *Using internet technology to deliver a behavioural weight loss program*. The Journal of the American Medical Association, vol 285 iss 9 pp. 1172-77
- Teasdale SB, Ward PB, Rosenbaum S, et al. (2016) *Solving a weighty problem: systematic review and meta-analysis of nutrition interventions in severe mental illness*. *Br J Psychiatry* 1-9. DOI: 10.1192/bjp.bp.115.177139
- Ting W.-H; Huang C.-Y; Tu Y.-K; Chien K.-L, (2012) *Association between weight status and depressive symptoms in adolescents: Role of weight perception, weight concern, and dietary restraint*. European Journal of Pediatrics; vol. 171 (no. 8); p. 1247-1255
- *The world health report (2001) Mental Health: New Understanding, New Hope.* World health report 2001 press kit
- Vancampfort D, Rosenbaun S, Schuh F et al. (2017) *Cardiorespiratory fitness in serve mental illness: a systematic review and meta-analysis*. Sports Med. 47:343-352.
- Verhaeghe et al. (2011) *Effectiveness and cost-effectiveness of lifestyle interventions on physical activity and eating habits in persons with severe mental disorders: A systematic review.* International Journal of Behavioral Nutrition and Physical Activity, 8:28

- Victoria State Government (2010) *Ministerial Advisory Committee on Mental Health. Improving the physical health of people with a severe mental illness*: Ministerial Advisory Committee on Mental Health Report
- Wright N, Wales J (2016) *Assessment and management of severely obese children and adolescents*, Archives of Disease in Childhood, 101 (1161-1167)
- World Health Organisation (2015) *Physical Inactivity: A Global Public Health Problem*. Available at: http://www.who.int/dietphysicalactivity/factsheet_inactivity/en/
- Wong (2010) *MMC Body weight perception and methods of weight reduction used by patients with first-episode psychotic disorders in Hong Kong, East Asian Archives of Psychiatry*; vol. 20 (no. 4); p. 169-173
- WHO (2001). *Mental disorders affect one in four people*. WHO World Health Report. [Online]. [Accessed 10 April 2017]. Available from: http://www.who.int/whr/2001/media_centre/press_release/en/ .
- Zipursky, R.B., Gu, H., Green, A.I., Perkins, D.O., Tohen, M.F., McEvoy, J.P., Strakowski, S.M., Sharma, T., Kahn, R.S., Gur, R.E., Tollefson, G.D. and Lieberman, J.A. (2005) *Course and predictors of weight gain in people with first-episode psychosis treated with olanzapine or haloperidol*. The British Journal of Psychiatry: The Journal of Mental Science. 187,pp.537–543

Appendix 8 - Glossary of Terms

Term / Abbreviation	Meaning
BMI	Body Mass Index
CCG	Clinical Commissioning Groups
CQC	Care Quality Commission
CQUIN	Commissioning for Quality and Innovation
MH	Mental Health
NECN	Northern England Clinical Network
NTW	Northumberland & Tyne and Wear NHS Foundation Trust
NICE	National Institute for Health and Care Excellence
PHE	Public Health England
TEWV	Tees Esk & Wear Valleys NHS Foundation Trust
SMI	Severe mental illness
STP	Sustainable Transformation Partnership
Overweight including Obese	Adults are defined as overweight (including obese) if their body mass index (BMI) is greater than or equal to 25kg/m2 For children, age and gender specific BMI reference charts are used and action is recommended when the child reaches or exceeds the 91st centile
Excess Weight	A term that is used to define overweight and/or obesity
VCS	Voluntary and Community Services
WHO	World Health Organisation

Public Health England Protecting and improving the nation's health	NHS Northumberland, Tyne and Wear NHS Foundation Trust	Tees, Esk and Wear Valleys NHS NHS Foundation Trust
ADPH North East	NHS Northern England Clinical Networks	North East and Cumbria learning disability network
Teesside University	ADPH Yorkshire and the Humber	NEt