Expert Testimony for The National Institute for Health and Care Excellence (NICE) Programme Development Group; 'Managing overweight and obesity in adults: lifestyle weight management services' ***(Presentation delivered July 9th 2013)***

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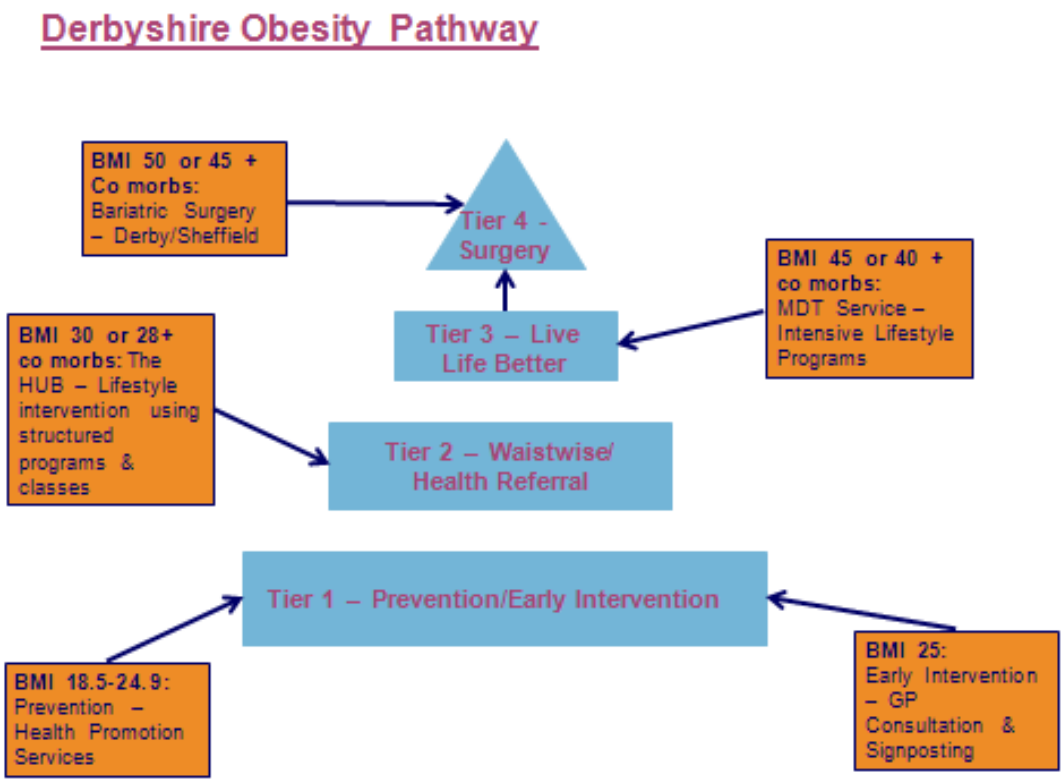
This paper is constructed and sub-titled according to six areas of expert testimony I was asked to prepare and present upon to the PDG. As I consider these points I will indicate evidence (with references) where this exists and to the best of my knowledge, where evidence is uncertain, views based upon clinical experience within our service and my own personal views where this is appropriate. The areas I was asked to consider in this paper are;

1. Consider 'readiness for weight management'
2. Consider 'rigid' behaviours / thinking styles / emotional processing people may develop in pursuing weight management goals
3. Consider the impact of weight management on mood and quality of life
4. Consider Re-referral or referral to another tier - how is this decided in practice (within the context of different working definitions of tiers across the country)
5. Consider wider beneficial or adverse effects of weight management
6. Consider maintenance of weight management behaviours in the longer term – what will support this?

My Clinical Experience and Service

I am a Consultant Clinical Psychologist and Service Lead for Live Life Better; a multi-disciplinary community team working to tackle adult obesity in Derbyshire County.

- Live Life Better currently sits at tier 3 of the Derbyshire Obesity Pathway
- Community multi-disciplinary team ; psychology led, psychologists/support workers/dietitians/physiotherapy
- Multi-component outreach work
- Range of Public Health commissioner-set outcomes
- Individualised lifestyle programme (up to 2 years) and pre-surgery preparation programme (8 weeks)
- Imminent introduction of website and online resources



The pyramid shows the Derbyshire pathway as it was March 2013. Changes in national commissioning policies for bariatric surgery and local plans for weight management services will bring further changes but essentially a tiered approach and pathway of escalation is likely to remain.

1. "Consider 'Readiness' for weight management"

Evidence

There are numerous theoretical models reporting on the key determinants of intention and human behaviour . Applied research studies have consistently pulled out three core predictive constructs which shape behaviour; attitudes, social norms and self-efficacy or ability. There is some evidence to suggest that changes in self-efficacy have the largest singular impact on intentions and behaviour but that interventions which target and influence all three predictors achieve the greatest cumulative change (12) . The Transtheoretical 'Stages of Change' model (TTM) (1) and Motivational Interviewing (MI) (2) have been widely adopted for their perceived practical approach and applicability in health behaviour change services, including those focused on weight management. This is despite there being mixed experimental evidence for the validity of TTM and stage-based interventions for behaviour change (3).

Some evidence does show that TTM may be more effectively used when linked to addressing specific behaviours rather than global behaviour change (4, 5, 6, 7, 8) . Current national guidance for weight management and obesity services (4, 9, 10) recommends that health care professionals talk with patients about willingness to change in relation to specific components of behaviours. This guidance also indicates that it can be useful to specifically assess patient rated importance of and confidence about such change.

Recent interesting work in the area of technology and persuasiveness to change behaviour considers the role that ability and triggers play in health behaviour change and has considerable face validity when considering our clinical experiences. BJ Fogg is a psychologist in behaviour design and founder of Stanford University's Persuasive Technology Lab. Fogg's Behaviour Model (25)suggests that motivation, ability and a trigger must all co-occur at one time for a target behaviour to happen. Fogg identifies an inverse relationship between ability and motivation eg. If motivation is very high then ability can be low for a behaviour to occur whereas 'hard to do' behaviours need high motivation to occur. Fogg also discusses the benefits of simplifying behaviours as much as possible into small, routine, socially acceptable 'baby steps' which don't strain mental/physical effort, or the time each individual can give to the behaviour. Encouraging an individual to plan with these factors in mind will help the behaviour to happen. Fogg also considers what types of triggers might work most effectively for different individuals according to their level of motivation and ability, and how to manipulate these triggers to get results and changed behaviour.

Alternative recent approaches to health behaviour change at a population level consider a dual process model in which human behaviour is influenced by two systems (11). The first system is a conscious, rational reflective and goal centred cognitive system which traditional health promotion approaches engage with through providing information to try to alter underlying beliefs, attitudes and values. The second system is identified as a more unconscious, automatic affective system, driven by our feelings and emotions in the moment, and triggered by environmental cues. This second system is targeted by advertisers and retailers for example to prompt us to buy chocolate at the checkout, and is also being increasingly referenced by public health experts considering the power of the 'nudge' to change environmental cues to influence the likelihood of certain behaviours.

When considering behaviour change in the area of weight management, Chapman and Ogden (26) review the application of various theoretical approaches including stage theories of health behaviour change, self regulation models and theories of will power; drawing on elements of each to suggest a composite model to explain how people change their diet. They describe how before people choose to act or change, they go through an initial stage of 'accumulating evidence' . This is where an individual who is putting on weight and experiencing a subsequent drop in fitness or increasing health problems ,becomes increasingly concerned that they need to do something different to restore a more comfortable sense of self. They may begin to draw up some goals for themselves and also look for inspiration, advice or guidance from others around them to help them shape a course of action, even before they begin to change anything. They will also be influenced by previous attempts to change and the perceived success of these efforts and Chapman and Ogden remind us that individuals are likely to be driven to seeking the *easiest* way for them to achieve their goals.

Applying evidence in practice

This backdrop of fascinating and potentially applicable research findings about general principles of behaviour change has shaped our ideas about how we have evolved and designed our service. However as this has and continues to be an ever changing and evolving area there is still a lack of clear guidance and agreement about what specific components of behaviour change an effective weight management service will include. We have slowly evolved our approaches and ideas, partly influenced by theoretical ideas and knowledge and partly through learning from observing and listening to our clients.

Foundations in MI

When we began as a service three years ago, we identified MI as a unifying approach and philosophy we could all subscribe to and which would help knit us together as a multi-disciplinary team in our interactions with each other and our clients . Not only is it recognised as an effective approach to underpin short term behaviour change (9) but it makes good intuitive sense to potential referrers and clients at the start of the journey.

A useful practical definition of MI is;

'A directive, patient-centred counselling style for eliciting behaviour change by helping patients to explore and resolve ambivalence.' (*Rollnick and Miller* 1995)

As a practitioner I believe it is important to recognise that change is a process and not an event. We have designed an internal patient pathway, drawing on core concepts from MI and other change literature to help reflect this and to guide us to deliver effective interventions. MI philosophy is that resistance and reactance is a normal human response to confrontation. Applying that to our client group, our clinical experience tells us that being obese or significantly overweight brings regular and repeated confrontation about self, body and health (from self, family, friends, health professionals, the public, the media etc).

As a team it is therefore of great importance to us that we seek to bypass resistance as much as we can through initially focusing upon building collaboration, mutual respect, empathy, humour and curiosity with our clients. We are careful with the tone of our correspondence and service information and aim for client interactions to have a friendly but focused feel to them. Staff are trained in good listening and counselling skills and there is a recognition that all staff within the MDT need to be comfortable to provide a basic level of emotional care and bring a reflective style to their interactions. We regularly use simple techniques to scaffold interactions, for example a decision balance where clients explore pros and cons of specific change options to reinforce with the client that;

- there are choices
- each choice involves some pros and cons
- some of these pros and cons may be conscious thoughts and values, others more emotional and unconscious and driven by past experiences
- it is important they experience ownership of the process with self direction/determination to support longer term change

Our patient pathway

We consider principles and processes of supporting behaviour change all the way through our programme design and patient pathway from pre-referral to longer term maintenance;

Referral

- Primary Care referral ; we offer Primary Care MI training and resources
- Referral form prompts assessment of 'motivation'
- Service information and 'readiness' questionnaire sent to patient; starting self reflection and active engagement
- Patient invited to fill in and return questionnaire/contact to discuss
- Approximately 25% of referrals do not 'opt-in'

Assessment

- We explore triggers ('why now?'), desired outcome and perceived self efficacy as core parts of our first appointment
- Acknowledge changeable , complex nature of motivation and 'readiness'
- Discuss individual barriers to weight loss/ readiness
- Directive (discuss clear weight loss targets, time scales) and patient centred (listening, trust, respect, empathy)
- Homework reflective tasks on readiness and self efficacy; continuing with self reflection and active engagement.
- Patient contract about two way commitment to programme signed
- If uncertainty about 'readiness' on either side, may agree a trial period e.g. of 4-6 weeks
- Consider and discuss influence of wider context e.g. other procedures dependent on weight loss(IVF criteria BMI 30,knee/hip operations) ; realism of targets

Ongoing Progress Reviews

- Team involvement with primary more intensive role of support worker

- Weekly contact: goal setting, review and discussion of pros/cons/readiness
- Key written resources to reflect on underlying beliefs, self efficacy, hopes, fears
- Involving significant others
- Formal review points every 12 weeks
- Weight loss patterns monitored
- Behaviour change monitored by client (with staff support and consultation)
- Future plans, including discharge, negotiated with client
- Aim for insight as to what's working or not, why now or not and what factors are influencing readiness
- Accept that relapse is inevitable part of change process and can offer useful learning and insight and opportunities to develop new strategies and coping resources to manage emotional 'rollercoaster' of sustained weight loss efforts
- Aiming for improved self efficacy, insight and coping resources

MI and staff/service design

- Staff training and psychological supervision
- MDT Reflective practice / case discussion
- Primary Care Staff training in 'assessing readiness to change'
- Active participation/collaboration with patients
- Directive; clear but realistic weight loss targets and expectations (including weight stabilising as a target for some)
- Patient centred; staff model acceptance , understanding, respect; honesty
- Client pathway supports ongoing dialogue about readiness
- Aim for every patient contact, even with early discharge, to improve insight, knowledge and to support development of self compassion

Future developments in patient pathway

We continue to question and learn from our work and are seeking to further refine what and how we deliver our service. We are considering how we screen and support people to opt-in to our service at an effective time for them. We also wish to develop models for evaluating the process of change and to support individuals to pause or stop a programme of change at various points, to embed change in a way and at a pace that works best for them. This challenges the traditional notion of 'completion' of a programme and the measuring of outcomes from a commissioning perspective. Another balance which we feel we can improve upon is how we strive to offer excellent long term support and guidance, whilst wishing to promote independence, self confidence and self efficacy to underpin long term change. With the current development of our online website and resources we are also considering the content and impact of electronic resources and the power of other modes of communicating and triggering behaviours that this will allow us to explore.

2. "Consider rigid behaviours, thinking styles and emotional processing in weight management"

Holistic, multi-component models of weight management are recommended (4, 10) with recommendations that weight management programmes are designed and based upon psychological interventions and evidence rather than seeing these as an 'add-on' to eating and activity interventions (15). There is an acknowledged bi-directional association between mental health problems and obesity (14) and a range of psychological interventions are considered to be effective (4), including behavioural and CBT interventions (13).

Setting the context for the psychological experience of being overweight or obese

As we discussed in the previous section, all sustained behaviour change involves an underpinning shift in psychological constructs such as values, beliefs, self-efficacy and sense of self. We therefore need to think a little about where people might be at psychologically, when they begin to engage with a weight management service, before we can think about what processes may help them engage with behaviour change that lasts.

In our experience, clients may have often engaged in many years of repeated dieting and inability to maintain weight loss. They may identify themselves as an 'expert' on any number of diets; building up a range of associated strong beliefs and behaviours around food and activity picked up since childhood and over time. In our clinical experience, they also commonly identify themselves as a failed dieter with low confidence and self efficacy that anything might work to help them lose significant amounts of weight and keep it off. For all of us, our lifestyle is shaped by and influences our weight and size as well as our physical and mental health and our sense of who we are in the world. We therefore need to consider how a person's size and weight influences their relationships, social life, job or lack of job, chosen ways to spend time, their ways of interacting with the world as well as their health and their sense of who they are.

We also need to consider the role that being active and the process of eating and drinking takes as a social, emotional and habitual process for each of us; developed through our individual and familial histories as well as influenced by wider cultural and environmental factors. How we behave can we seen as reflecting what we believe and feel and attending to the symbiotic relationship between these three factors allows us as a service to think with someone about whether, how and why they want to change. We can also then, consider the potential impact change may have on themselves and their lives, why rigid behaviours, feelings and thoughts will occur and how to work with these when they are encountered.

Service design and psychological work with emotions/behaviours/beliefs

Common psychological models being used across weight management services include Cognitive Behavioural Therapy, Transactional Analysis (19) Compassion Focused Therapy (18), Interpersonal Psychotherapy, Acceptance and Commitment Therapy (20). Services often offer a mixture of groups and individual work with varying intensity of input depending on the complexity of the client and their level of psychological rigidity. Within most services there is therefore a tiered or matched care approach. The majority of clients will receive programme

information and one to one or group interactions which incorporate a degree of psychological knowledge and approach as a front line approach.

In our service, all information and resources are designed to incorporate and reference psychological aspects of weight and behaviour change. All our support workers are supervised by psychologists and are trained in MI and behaviour change. Psychologists are case holders and co-ordinate join and co-working across the team and we engage in regular case review and reflective discussion.

For those who are assessed to be more complex and displaying more rigid characteristics, they will be offered more intensive psychological intervention with more in-depth focus upon the development of thinking and emotional patterns and how these interplay with their behaviour. This kind of model is also shown in other services; for example in Glasgow and Clyde Weight Management Service, initial standard group work is delivered by dietitians (with CBT elements designed and supervised by psychologists) and psychological assessment and intervention is available in groups or one to one for more complex patients.

There is growing evidence that complex patients can achieve both weight loss and improved psychological functioning through the provision of well matched and integrated psychological and weight management interventions (17).

Below I consider in more depth how in our service we might address rigid psychological constructs through our general philosophy and approach, and some illustrative strategies we might commonly use.

a) Thinking styles in clients attending weight management services

Common thinking styles may include negative thoughts of being helpless and hopeless and may indicate misinformation or limiting beliefs. The style of thinking may be judgemental, extreme (all or nothing) and catastrophic ; much as you might find in all clinical presentations of psychological distress.

Some examples might be;
e.g. I have no will power
I am disgusting and ugly
My family are all overweight so it's all in my genes
I have a low/no metabolism
I can't exercise so I cant lose weight
I can't lose weight because of my health condition/medication
Nothing will help me lose weight

Working with rigid or habitual thinking styles

When working with rigid thinking styles in our service, we aim to support the client to;

- Recognise that they have a thinking style; reflective tasks and questioning, self monitoring
- Recognise the relationship of how they think effects how they feel and what they do

- Acknowledge why and how their thinking styles has developed (more in depth for more complex clients)
- Develop more flexible and helpful thinking habits
- Engage, gently (non confrontational) with education around mis-information
- Gently challenge limiting beliefs
- Identify when further mental health intervention is needed

b) Rigid Behaviours in clients attending weight management services

In our experience these may commonly include behaviours that are automatic, irrational (experienced as undermining or self sabotage), erratic, habitual and may be active or avoidant.

Some examples might be;

Irregular eating
Binge eating
Lack of planning
Activity cycling
Avoidance (activity, socialising, relationships/intimacy, shopping/clothes, travel)
Impulsivity
Cravings or 'addiction' to certain foods
Eating to 'soothe' or 'treat'

Working with rigid and habitual behaviours

When working with rigid and habitual behaviours in our service, we aim to;

- Be directive but not confrontational; to avoid polarity response and support active choice.
- Support individuals to recognise that they have a style of behaving
- Help clients identify that how they behave is linked to how they feel and think and begin to learn about the role of conditioning and reinforcement
- Acknowledge with the client why and how their behavioural styles has developed (more in depth for more complex clients); historical and cultural context
- Encourage the client to develop flexible and helpful behavioural habits; 'experiments' with new conditioning, reinforcers or 'treats'
- Recognise that behavioural change may not all be directly linked to weight loss.
- Carefully pace goal setting/change

c) 'Rigid' Emotional Processing in clients attending weight management services

In our experience this may manifest itself within a range of emotional experience from mild to severe stress/depressions/anxiety , low self esteem, social anxiety and low self-efficacy. There may be differential awareness of emotional experience; some may feel 'blank' or dissociated from their emotions. There may also be differential individual attribution about the role emotions play in weight, eating and activity behaviours with some clients believing their emotions play a crucial part in their eating, activity and weight and others believing that is has very little relevance.

Some examples might include;

Eating when stressed/upset/angry/bored
Binge eating; emotional triggers
Low mood low activity
Dissociation; feeling blank, numb

Working with habitual or rigid emotional processing

When working with emotional processing in our service we aim to;

- Support individuals to recognise their emotional styles/experiences
- Explore links between these and behaviours as triggers/reinforcers
- Acknowledge and possibly work with roots of emotional processing (more in depth for complex clients)
- Encourage development of relaxation, self soothing and other strategies to calm, soothe and 'treat' oneself

3. "Consider the impact of weight management on mood and quality of life"

There is clear evidence of a relationship between weight loss in obese population and improvement in quality of life (16, 21) and mental health (14). Bi-directional associations show poorer quality of life and mental health influencing the incidence of obesity as well as being documented side effects of the experience of obesity (14). The measurement of impact on quality of life is recognised as important when evaluating weight management interventions with treatment aiming to improve quality of life whether weight loss is achieved or not (21).

Measurements of quality of life tap into aspects of experience that are relevant and meaningful to clients considering why they wish to lose weight and how behaviours and feelings may be linked with the experience of gaining or losing weight.

Across different services there are a range of outcome measures used to assess quality of life (OWLQOL, WRSM, IWQOL, WHOQOL-BREF)

In our service we use OWLQOL and WRSM (22). . Our own outcomes shows mood and quality of life improve with weight loss and are briefly summarised below;

Live Life Better OWL Quality of Life Score

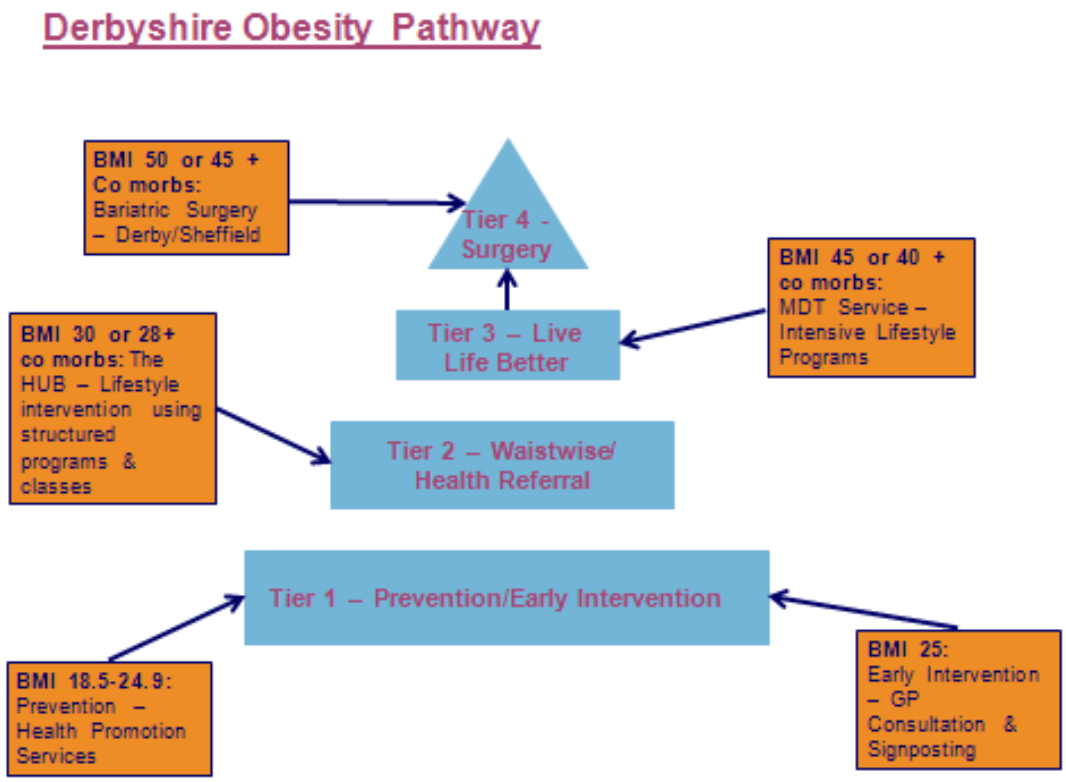
- OWLQOL measures a person's global evaluation of position in life related to weight, weight loss, and weight-loss treatment
- After 24 weeks on the Live Life Better Lifestyle program 70.2% of patients had increased their QOL score by at least 10points

Live Life Better Weight Related Symptoms Measure

- The WRSM is designed to measure the severity of symptoms associated with obesity and obesity treatment
- After 24 weeks on the Live Life Better Lifestyle program 69.3% of patients had decreased their WRSM score by at least 10points

d) "Consider how re-referral or referral to another tier occurs in weight management services"

The pyramid shows the Derbyshire pathway as it was March 2013. Changes in national commissioning policies for bariatric surgery and local plans for weight management services will bring further changes but essentially a tiered approach is likely to remain.



External or internal referral processes can result in movement up and down tiers influenced by:

- Patient choice (if meets criteria)
- Patient having tried other tiers first and failed to lose/maintain weight loss
- Referrer knowledge/decision about what might suit patient best (e.g. one to one versus group, surgery versus lifestyle, service offering more psychological input)
- Planned re-referral after specified time point when circumstances change/ for a refresher/when weight loss not maintained
- Internal referral by clinician between tiers after assessment based on triage for what level of service is most appropriate
- Patient may be working with tier 3 service whilst simultaneously accessing e.g. health referral (exercise on prescription) at a lower tier 2 as part of their programme.

Currently, patients may work through the tiers in order from tiers 1 to tier 3 and 4, or may bypass tiers 1 and 2 if meets criteria for direct entry to tier 3

Referral to other non weight-management services

May occur depending on primary problem, level of complexity, risk and identifying barriers to engaging with weight mgt process/service. This may include considering referring on to address e.g. mental health (CMHT, IAPT via GP) or eating disorder.

May consider joint working alongside other service input if judged to be appropriate, non-conflicting and manageable for client.

Other service models around the country

These differ slightly but share some similar characteristics;

Glasgow: Pathway of stepped care services with increased psychological intervention for increasingly complex clients. GCWMS at tier 3 processes referrals to surgery if failed to lose weight at lower tiers.

Somerset: No tier 2 weight management but may link with community dietitians; slimming world/weight watchers vouchers. Tier 3 offers joint group work between psychologist and dietitian.

North London: Refer on to tier 2 for further weight loss/mgt but retain case management in tier 3 service after a period of assessment and intervention.

e) "Consider wider beneficial or adverse effects of weight management"

Overall benefits of weight loss are well documented and include improved:

- Physical health
- quality of life
- mental health and self esteem
- levels of activity, physical fitness
- nutritional knowledge and choice

On an individual level all these changes may not co-occur at once and in that order or level of association.

Significant weight loss can be life changing; and individuals may need pacing and preparation for this.

Adverse effects of weight management

From my own clinical perspective these may include;

- Confounding factors if not adequately screened for and managed (e.g. eating disorder, unstable mental health) may derail or be worsened by weight loss efforts.
- Significant weight loss without adequate and thorough pacing and preparation about pros and cons of change may precipitate crisis in self identity, social relationships and reduction in quality of life and mental health.
- Weight management 'failure' may reconfirm existing beliefs about what is possible/responsibility/ability to change and therefore undermine future further attempts if this is not addressed.
- Dependency on weight mgt team/intervention; without ongoing support may relapse if doesn't develop internal resources/other support to carry forwards.
- Worsening body image with weight loss; e.g. Effects of Loose skin
- Sense of grief over wasted years; why has it taken me so long to do this?

Managing potential for adverse effects

- To manage these potentially adverse outcomes we in our service have found the following approaches can be useful;
- Using a range of holistic outcomes and self-report to help measure and monitor effect of change process and flag up concerns as they arise
- Anticipate possible difficulties and encourage recognition of potential adverse/challenging outcomes from the start as a normal part of the process
- Pace change; small steps and gradual habit change allow gradual adjustment
- Promote independence through gradual reduction in intensity of service interactions, focus on sel- monitoring and self-reflection and direction, involving significant others and wider social network to provide ongoing support and encouraging strategies to build self-efficacy.
- Promote patient directed outcomes to help change be meaningful and personal to client
- Discuss individual different factors and order of change; a patient may wish to focus on psychological adjustment prior to feeling able to make much adjustment to eating and activity

or weight. Negotiating a personal pathway, focus and pace of change may work best for that individual, but may be controversial with commissioners if threatens achievement of certain overall service weight loss outcome targets.

f) "Consider how you support long term weight maintenance behaviours"

There is still little robust evidence for how to support long term weight reduction.

National weight control registry data (23) suggests some key behavioural steps associated with successful maintenance of weight loss which allows a person to continue to maintain a lower calorie, lower fat diet whilst doing high levels of activity; these include;

- Eating breakfast every day.
- Monitoring weight at least once a week.
- Watching less than 10 hours of TV per week.
- Exercise, on average, about 1 hour per day

Cognitive Behavioural therapy for disordered eating also includes some potentially useful strategies for managing relapse and planning for long term maintenance and further change that could be transferable into a weight management setting (24).

Some services have distinct weight loss and then weight maintenance phase to help address longer term change:

Glasgow; build in a weight management phase to their groups and drawon MI, CBT, relapse prevention whilst using self- monitoring to underpin this

Somerset- refer patients back to primary care for longer term monitoring and support; may soon trial supporting an on-going support group. Some patients use commercial slimming groups.

Derbyshire Live Life Better: in our service we have a number of ways in which we seek to support weight maintenance as part of our weight reduction programmes. We have a short hand slang for referring to how we support someone to achieve successful sustainable behaviour change, which we describe as 'getting it'.

We strive to support people to 'get it' for themselves through;

- Information exchange
- Support (gradually stepped back to promote independence)
- Setting well formed outcomes; short and longer term
- Continual process of goal setting, behavioural change experiments, self-monitoring, review, reflect, learn, try again/some more
- Accumulation of small steps of change; new habits
- Overtly preparing for the end of our contact from the beginning
- Promoting increasing degrees of independence and self direction
- Longer term support through online resources/buddying
- Service delivery happening in client's own community/locality, involving where possible own social network and support and linking to community initiatives where possible to help support longevity (opposite of 'boot camp approach' where people are removed from their usual environment).
- Linking with lower tiers (1 and 2) to for long term monitoring and support
- Process of stopping programme, pausing at a positive point, planned re-referral i.e. exploring a cycle of change at rate that is acceptable to works/ for that person.

How do we know when someone 'gets it' and what do we mean by this?

- Something we are exploring through patient stories/case discussion/longer term outcomes
- Underpinning of psychological shift
- Congruence of behaviours with underlying emotional and cognitive state and sense of self
- Honesty and ownership of change
- Forever change; we are evaluating outcomes for up to 2 years where we can and are slowly building up our data sets to allow us to better report on this in the future

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