

1 **Obesity care pathway**

2 **A successful tool to manage obesity in North East Lincolnshire, UK**

3 **Introduction**

4 The increase in poor quality convenience foods, the prevalence of labour-saving
5 technology, increased car use and more people doing sedentary jobs, means that UK
6 residents weight and body mass index is increasing significantly. Obesity is a growing
7 problem which is recognised as a lifestyle disease which is preventable. Britain has one
8 of the highest rates for overweight children in Europe, with one in three adults predicted
9 to be obese by 2012. This has enormous implications for both health service providers
10 and individuals, as obesity is directly linked to serious health problems, increased
11 mortality, premature deaths, long term capacity, reduced quality of life and increased
12 expenditure to reduce obesity.

13 Within the UK, nearly 25 per cent of men and women are now obese. This is expected
14 to increase to 60 per cent of the UK population by 2050, which needs to be reduced. At
15 present 9,000 adults die an early death each year due to obesity-related illness. Being
16 obese puts you at greater risk of getting high blood pressure, type 2 diabetes, heart
17 disease, osteoarthritis, a stroke and some forms of cancer. The number of people who
18 are obese continues to increase at an alarming rate, with almost half coming from
19 disadvantaged or low-income communities.

20 Life expectancy within North East Lincolnshire is less than the national average with
21 males (76) and females (80.8), men from deprived areas having around eight years
22 shorter life expectancy than those in the least deprived areas (North East Lincolnshire
23 Care Trust Plus, 2009a). Within North East Lincolnshire there are 38.4% of people
24 living within the 20% most deprived areas of England, well above the national average

1 (North East Lincolnshire Care Trust Plus, 2007). Within North East Lincolnshire there is
2 also an increase within early deaths from heart disease, stroke and cancer which is
3 widening the health inequalities gap within the area (North East Lincolnshire Care Trust
4 Plus, 2009b).

5 Deprivation has led to a cultural shift with poor lifestyle behaviour changes and higher
6 than average obesity levels (obese adults, 26.8% and obese children, 11.3%)
7 (Association of Public Health Observatories, 2009) within North East Lincolnshire.

8 Within North East Lincolnshire there is an increase of children who are physically
9 unactive with only 90.7% 5-16 years olds who spent at least 2 hours per week on high
10 quality PE and school sport (Association of Public Health Observatories, 2009). The
11 obesity prevalence across reception year pupils in North East Lincolnshire is extremely
12 high across East Marsh (17.7%) in the worst deprived ward, obesity prevalence is
13 average within Humberston and New Waltham ward with 11.3% which is the most
14 affluent ward in North East Lincolnshire and a low prevalence in the Wolds ward 3.1%
15 (North East Lincolnshire Care Trust Plus, 2010a).

16 North East Lincolnshire is the seventh highest PCT in England and Yorkshire and the
17 Humber with adults who smoke (33.5%) (Association of Public Health Observatories,
18 2009). This is extremely alarming when considering the number of women smoking in
19 pregnancy is 29.8% well above the national average of 14.7% (Association of Public
20 Health Observatories, 2009). Within North East Lincolnshire there is a higher than
21 average number of deaths from smoking 239.4 per 100,000 population aged 35+
22 (Association of Public Health Observatories, 2009).

23 In North East Lincolnshire, hospital stays for alcohol related harm and drug misuse is
24 much higher than the England averages (North East Lincolnshire Care Trust Plus,

1 2009c). With 22.4% of adults binge drinking and 13% drug misusing (Association of
2 Public Health Observatories, 2009).

3 Overweight and obesity should be treated like any other medical condition,
4 and patients should have access to appropriate treatment and care. A sensitive,
5 empathic, non-judgemental approach should underpin all obesity-related intervention.
6 The advice provided within this pathway is intended to complement the National
7 Institute for Health and Clinical Excellence (NICE) guidelines (North East Lincolnshire
8 Care Trust Plus, 2010b), This pathway, while based on the best available evidence,
9 recognises the need for further research in the primary care setting.

10 **Weight-management strategies**

11 Treating overweight and obesity is undertaken in a variety of settings. After initial
12 assessment, healthcare professionals need to work with patients to try to understand
13 the causes of their condition, teasing out their healthcare beliefs and understanding of
14 their nutritional status.

15 Food is consumed not just for taste or nutritional value but also for its symbolic value.
16 Often patients' deep-rooted misunderstandings about meals and exercise need
17 unravelling. Translating technically complex nutritional issues into an everyday, easy-to-
18 understand language for patients is an important issue.

19 [NICE](#) (2006) recommended multicomponent interventions with structured programmes
20 run by multiprofessional teams delivered in a variety of settings, aimed at reducing
21 calorie load and increasing physical activity (NICE, 2006). Targets should be agreed,
22 taking into account patients' cultural and individual preferences and the general aim
23 should be around a 600 kcal/day deficit, using the modified Harris-Benedict equation

1 (Barnett et al, 2009). This formula applies an activity rating factor to the basic metabolic
2 rate calculation to determine daily energy expenditure requirements.

3 NICE recommended that physical activity is important to everyone; it is particularly
4 beneficial in those who are overweight or obese and have co-morbidities (NICE 2006).

5 NICE (2006) recommended using diet and exercise interventions first-line as part of a
6 multicomponent regimen. Diets should be nutritionally sound and not unnecessarily
7 restrictive. Very low calorie diets are recommended only for obese people who have
8 reached a plateau and should be carefully supervised and medically managed.

9 When adults do not reach their target weight loss or have reached a plateau on dietary,
10 activity and behavioural change alone, pharmacotherapy may be included in the
11 strategy (NICE, 2006).

12 It is crucial that health care professionals are encourage to use an evidence based
13 approach to manage adult obesity which is the aim of this paper.

14 **Aim**

15 To develop an evidence-based adult obesity care pathway 8 collaboratively across the
16 North East Lincolnshire Care Trust Plus and to ensure successful implementation of the
17 pathway within the Trust. Consequently, to evaluate the effectiveness of implementing
18 an adult obesity care pathway in primary care, using qualitative methodology.

19 **Objectives**

- 20 • To develop an evidence-based adult obesity care pathway based on the NICE
21 obesity guidance, but incorporating local referral criteria and input.

- 1 • To successfully implement the adult obesity care pathway across all general
2 practices within the sector.
- 3 • To evaluate the effectiveness of the adult obesity care pathway.

4 **Methodology**

5 An Obesity Strategy Group was set up to develop an evidence-based adult obesity care
6 pathway based on the NICE guidance. The care pathway was widely consulted on
7 through stakeholder engagement and partnership working. The pathway was launched
8 at an official event open to the community, primary care staff and stakeholders across
9 North East Lincolnshire.

11 **Context**

12 Upon the publication of 'Choosing Health', the second author Public Health Lead
13 established a strategic and operational obesity group within North East Lincolnshire
14 Care Trust Plus. All the stakeholders and partners and other relevant healthcare
15 professionals were invited to attend several obesity strategy meetings. The current
16 obesity services within the Care Trust Plus were mapped to identify the provision of
17 services available for the management of overweight patients and obesity. The results
18 were subsequently analysed and compared against the latest evidence-based guidance
19 (NICE obesity guidance). A number of key problem areas were identified: service
20 provision varied across the Trust and within general practice, services were often under
21 resourced and over-referred (e.g. dietetics), not provided (e.g. weight management
22 clinics), the management of patients were not systematic and structured (e.g. patients
23 not provided with first line advice prior to drug treatment). GPs were referring many
24 patients to have bariatric surgery inappropriately without following the obesity care
25 pathway. This adult obesity care pathway was subsequently developed to translate the

1 NICE obesity guidance into a local protocol which could be implemented within primary
2 care. A resource pack and electronic EMIS template for GP computer systems will be
3 developed to support the pathway. Training events will be held to launch the pathway
4 and provide training for practice nurses and healthcare assistants.

5 **Results**

- 6 • An adult obesity care pathway was successfully developed collaboratively across
7 North East Lincolnshire Care Trust Plus. This pathway will be adapted by the
8 Trust and be related to local referral criteria.
- 9 • Currently, the pathway has been successfully implemented as a trial within
10 several practices. The Trust will not be funding any surgical intervention without
11 strict adherence to the obesity care pathway. GP's, Practice Nurses and other
12 health professionals are on board and are fully aware of the referral criteria for
13 services.
- 14 • The effectiveness of the pathway will be evaluated by the Trust via semi-
15 structured interviews with primary healthcare professionals (e.g. GPs, practice
16 nurses, healthcare assistants). Initial feed back will be collected from practice
17 nurses and healthcare assistants who will be implementing the pathway and
18 considered the tools usefulness in managing obese patients and applying the
19 NICE guidance to practice. GPs were less positive about using the pathway but
20 considered it useful for practice nurses.
- 21 • The pathway is effective at translating evidence into a local protocol but is
22 hindered by the patient e.g. their motivation and readiness to change.

23 **Monitoring and evaluation**

1 Evaluation of the pathway will be conducted in the coming few months. Implementation
2 of the pathway will continue to be monitored by the primary care staff.

3

4 **Recommendations**

5 • Providing training and launch events were crucial for successful implementation.

6 All general practices that attended the training events implemented the pathway.

7 Those that did not implement the pathway will need to be approached and an
8 education session will be offered to them.

9 • Re-visit and re-evaluate

10 • The Local Service Agreement with the Trust highlighted obesity as one of the
11 three criteria. This seems to have led to increased levels of implementation. A
12 whole practice approach led to higher levels of implementation, e.g. the practice
13 manager, practice nurses, GPs, all needed to support implementation of the
14 pathway. Targeting all professionals together (e.g. presenting at individual
15 practice meetings) or separately (e.g. nurse forum, practice managers meetings)
16 would increase implementation and effectiveness. Electronic component of the
17 pathway increased implementation levels as it acted as a prompt during
18 consultations. A pathway supported by an electronic template is therefore a
19 valuable addition.

20 **Acknowledgements**

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22 Service.

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1 Lee Marriott Public Health Intelligence Analyst

2 Greg Gilbert Tobacco Control Co-ordinator

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4 **Conflict of Interest**

5 The authors declare that there is no competing financial interests in relation to the work
6 described.

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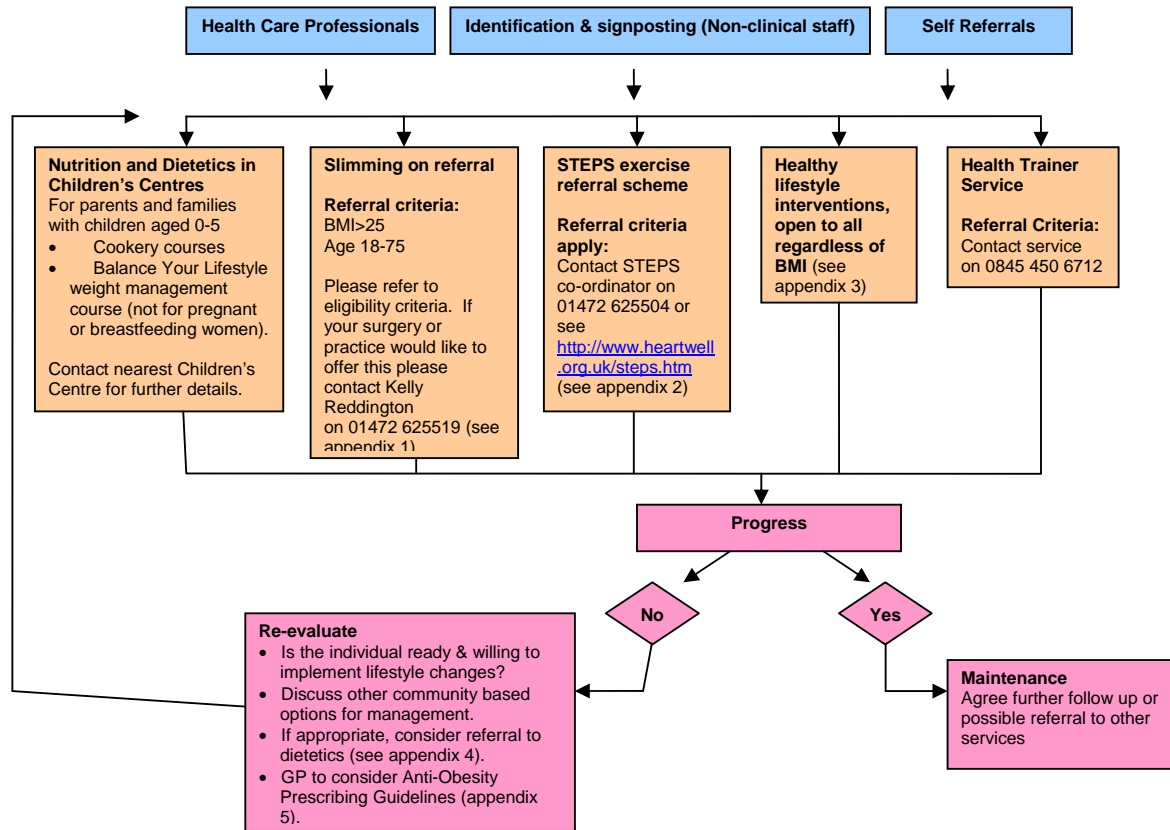
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- 8
- 9 * Miss Phillipa Hobson and Professor Abdallah Mangoud
- 10 Word count 1,826

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Figure 1
Obesity Care Pathway - Management of Adult Obesity



When to initiate a discussion about weight (* refer to NICE CG 43)

- If the adult expresses concerns about their weight
- If the individual had weight-related co-morbidities
- If the individual is visibly overweight

The opportunity to raise the issue of weight may arise at health checks, or at regular clinic appointments such as asthma check-ups

Full Assessment

Stress that obesity is a clinical term with health implications, rather than a question of how a person looks. Assess lifestyle, co-morbidities and willingness to change. Consider the following:

- The adults views of the diagnosis, and why they have gained weight.
- Current lifestyle – diet and activity levels – and their beliefs about eating, activity and weight.
- Be aware that people from some ethnic and socioeconomic backgrounds may be at greater risk from obesity and may have different attitudes and beliefs about weight management.
- Family history of overweight/obesity & co-morbidities.
- Environmental, social & family factors that may influence weight status and success of intervention
- Find out what they have already tried and what they have learned from this.
- Readiness to make changes and confidence in making changes.

Measuring progress

The priority in weight management is to reduce risk factors for the patient, rather than to return them to a healthy weight range. For some individuals, a weight loss of as little as 3.0-5.5kg (7-12lb) can achieve health benefits. Clinically significant changes result from a loss of 5-10% body weight. Use the following to help individuals set realistic goals for themselves:

- BMI between 25 to 30 with no associated co-morbidities and not from a high-risk ethnic group → Aim to prevent further weight gain.
- BMI 30+ or 28+ with associated co-morbidities and/or from a high-risk ethnic group → Aim to lose 5-10% body weight over 3-6 months or to at least prevent further weight gain.

Maintaining weight loss

Maintenance of changes in eating and physical activity, and maintenance of weight loss, is a major challenge. Individuals are prone to relapse and for many, maintaining their weight requires a lifetime of support and increased effort. Setting goals to help maintain changes should be encouraged along with finding acceptable methods of ongoing monitoring.

Communication between professionals

- Where a referral is made, results will be fed back directly to the referring GP.
- Referring GP will be informed of non-attendance.

Slimming on referral

Patient Criteria for Slimming on Referral

At least 18 years old.

BMI of at least 26 kg/m².

Must not have attended a slimming group within the last 6 months.

Pregnant or breastfeeding women should seek the advice of their Midwife or Health Visitor regarding weight management.

If the patient is under the supervision of a Dietitian for any reason, then they should discuss Slimming on Referral with them first.

No continuation vouchers provided i.e. only 1 set of vouchers per person.

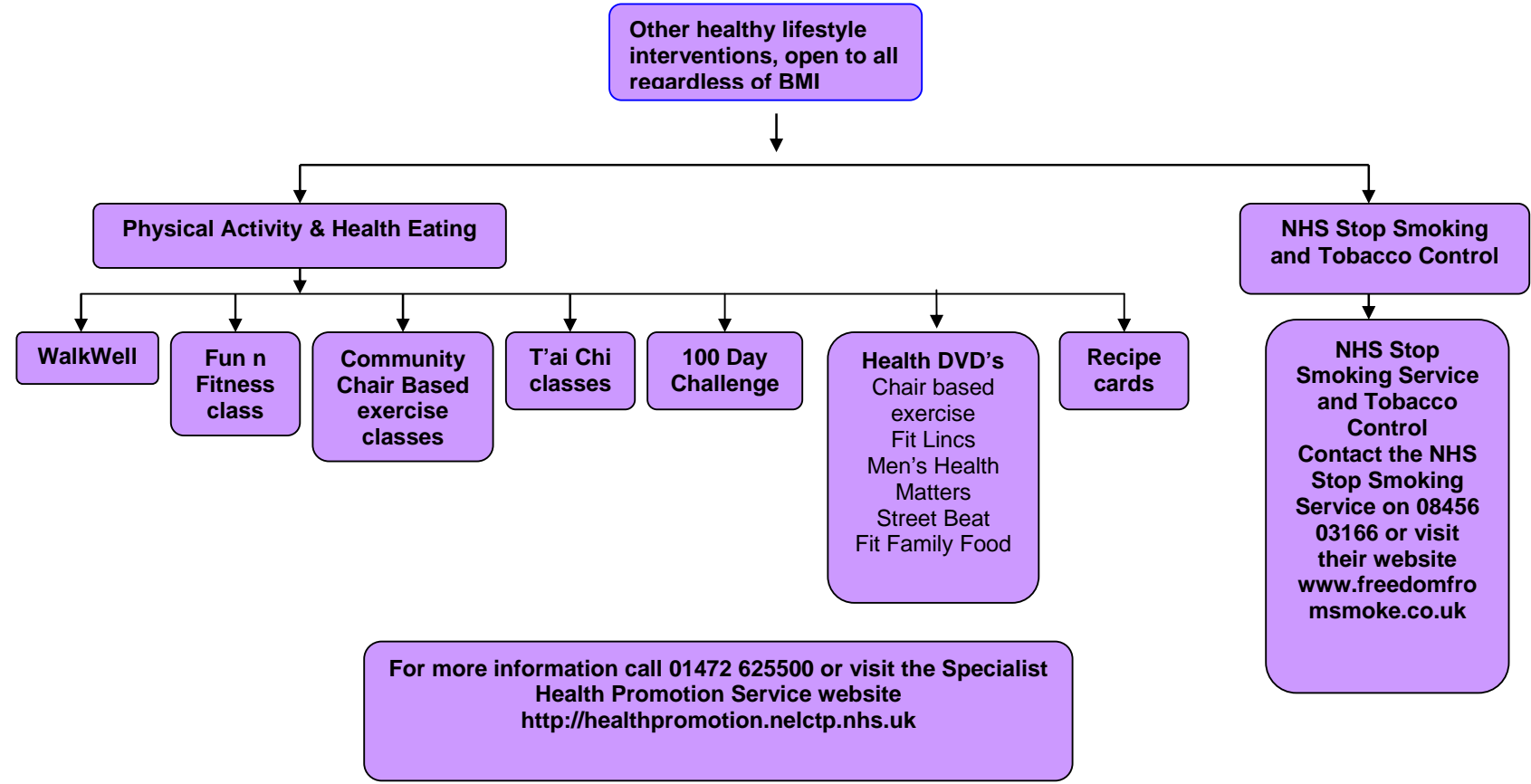
STEPS

Patient <u>can</u> be Referred	Patient <u>cannot</u> be Referred
<p>All referrals must be aged 16+ and fulfil at least one of the following criteria:</p> <ul style="list-style-type: none"> ▪ Considered inactive ▪ Are not moderately active for a total of thirty minutes more than twice a week <p>Exhibit at least one of the following risk factors for coronary heart disease:-</p> <ul style="list-style-type: none"> ▪ Obesity/Overweight (BMI 25+) ▪ Hypertension (140/90 to 179/109mmHg) (ACSM, 1995) ▪ High cholesterol levels (consistently above 5.2 total cholesterol) ▪ Family history of heart disease ▪ Smoking ▪ Controlled diabetes ✓ Post Cardiac Rehabilitation Phase 3 ✓ Controlled Asthma ✓ Suffer from mild to moderate rheumatoid arthritis or osteoarthritis ✓ Suffer from mild to moderate depression, stress or anxiety 	<ul style="list-style-type: none"> ✗ Previously completed the STEPS programme ✗ Unstable Angina ✗ High hypertension (over 179mmHg /109mmHg) or uncontrolled hypertension ✗ Unstable diabetes ✗ Unstable COPD ✗ Unstable Heart Failure ✗ Severe asthma ✗ Chronic muscle, joint or bone conditions that greatly impede mobility or require physiotherapist treatment ✗ Unstable severe mental health state ✗ Patients who in the Healthcare Professionals opinion are not medically fit to undertake an exercise programme

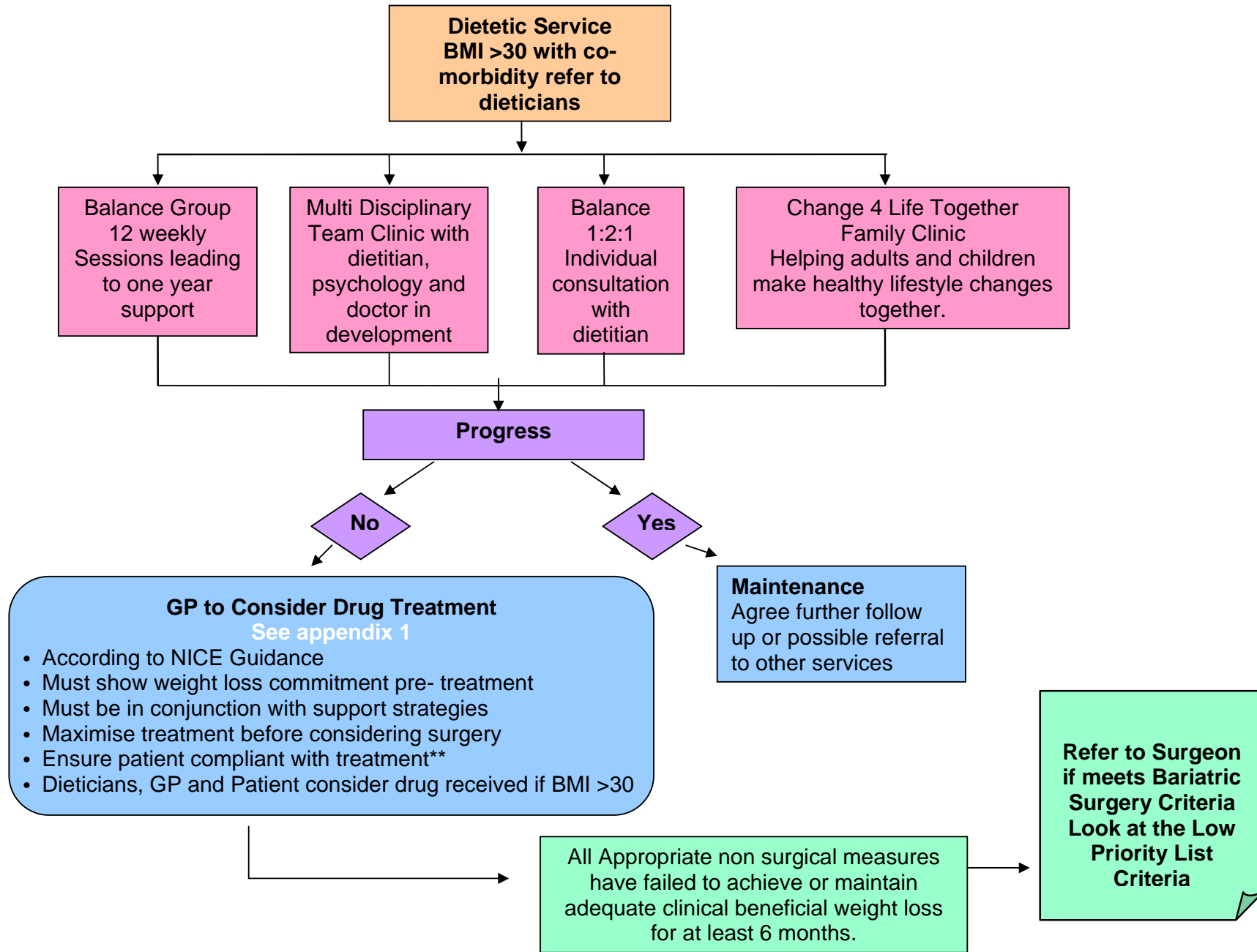
STEPS REFERRAL FORM MUST BE COMPLETED

STEPS...to a more active life
 Specialist Health Promotion Service
 NELPCT
 1 Prince Albert Gardens
 Grimsby
 North East Lincolnshire
 DN31 3HT
 01472 625500

1 Healthy lifestyle interventions



Dietetic Service referral



Anti-Obesity Prescribing Guidelines

