Obesity care pathway

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

Introduction

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

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

Life expectancy within North East Lincolnshire is less than the national average with males (76) and females (80.8), men from deprived areas having around eight years shorter life expectancy than those in the least deprived areas (North East Lincolnshire Care Trust Plus, 2009a). Within North East Lincolnshire there are 38.4% of people living within the 20% most deprived areas of England, well above the national average.
(North East Lincolnshire Care Trust Plus, 2007). Within North East Lincolnshire there is also an increase within early deaths from heart disease, stroke and cancer which is widening the health inequalities gap within the area (North East Lincolnshire Care Trust Plus, 2009b).

Deprivation has led to a cultural shift with poor lifestyle behaviour changes and higher than average obesity levels (obese adults, 26.8% and obese children, 11.3%) (Association of Public Health Observatories, 2009) within North East Lincolnshire. Within North East Lincolnshire there is an increase of children who are physically unactive with only 90.7% 5-16 years olds who spent at least 2 hours per week on high quality PE and school sport (Association of Public Health Observatories, 2009). The obesity prevalence across reception year pupils in North East Lincolnshire is extremely high across East Marsh (17.7%) in the worst deprived ward, obesity prevalence is average within Humberston and New Waltham ward with 11.3% which is the most affluent ward in North East Lincolnshire and a low prevalence in the Wolds ward 3.1% (North East Lincolnshire Care Trust Plus, 2010a).

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

In North East Lincolnshire, hospital stays for alcohol related harm and drug misuse is much higher than the England averages (North East Lincolnshire Care Trust Plus,
2009c). With 22.4% of adults binge drinking and 13% drug misusing (Association of Public Health Observatories, 2009).

Overweight and obesity should be treated like any other medical condition, and patients should have access to appropriate treatment and care. A sensitive, empathic, non-judgemental approach should underpin all obesity-related intervention.

The advice provided within this pathway is intended to complement the National Institute for Health and Clinical Excellence (NICE) guidelines (North East Lincolnshire Care Trust Plus, 2010b). This pathway, while based on the best available evidence, recognises the need for further research in the primary care setting.

**Weight-management strategies**

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

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

*NICE* (2006) recommended multicomponent interventions with structured programmes run by multiprofessional teams delivered in a variety of settings, aimed at reducing calorie load and increasing physical activity (*NICE*, 2006). Targets should be agreed, taking into account patients’ cultural and individual preferences and the general aim should be around a 600 kcal/day deficit, using the modified Harris-Benedict equation.
(Barnett et al, 2009). This formula applies an activity rating factor to the basic metabolic rate calculation to determine daily energy expenditure requirements.

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

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

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

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

Aim

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

Objectives

• To develop an evidence-based adult obesity care pathway based on the NICE obesity guidance, but incorporating local referral criteria and input.
To successfully implement the adult obesity care pathway across all general practices within the sector.

• To evaluate the effectiveness of the adult obesity care pathway.

Methodology

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

Context

Upon the publication of 'Choosing Health', the second author Public Health Lead established a strategic and operational obesity group within North East Lincolnshire Care Trust Plus. All the stakeholders and partners and other relevant healthcare professionals were invited to attend several obesity strategy meetings. The current obesity services within the Care Trust Plus were mapped to identify the provision of services available for the management of overweight patients and obesity. The results were subsequently analysed and compared against the latest evidence-based guidance (NICE obesity guidance). A number of key problem areas were identified: service provision varied across the Trust and within general practice, services were often under resourced and over-referred (e.g. dietetics), not provided (e.g. weight management clinics), the management of patients were not systematic and structured (e.g. patients not provided with first line advice prior to drug treatment). GPs were referring many patients to have bariatric surgery inappropriately without following the obesity care pathway. This adult obesity care pathway was subsequently developed to translate the
NICE obesity guidance into a local protocol which could be implemented within primary care. A resource pack and electronic EMIS template for GP computer systems will be developed to support the pathway. Training events will be held to launch the pathway and provide training for practice nurses and healthcare assistants.

Results

- An adult obesity care pathway was successfully developed collaboratively across North East Lincolnshire Care Trust Plus. This pathway will be adapted by the Trust and be related to local referral criteria.

- Currently, the pathway has been successfully implemented as a trial within several practices. The Trust will not be funding any surgical intervention without strict adherence to the obesity care pathway. GP’s, Practice Nurses and other health professionals are on board and are fully aware of the referral criteria for services.

- The effectiveness of the pathway will be evaluated by the Trust via semi-structured interviews with primary healthcare professionals (e.g. GPs, practice nurses, healthcare assistants). Initial feedback will be collected from practice nurses and healthcare assistants who will be implementing the pathway and considered the tool's usefulness in managing obese patients and applying the NICE guidance to practice. GPs were less positive about using the pathway but considered it useful for practice nurses.

- The pathway is effective at translating evidence into a local protocol but is hindered by the patient e.g. their motivation and readiness to change.

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

**Recommendations**

- Providing training and launch events were crucial for successful implementation. All general practices that attended the training events implemented the pathway. Those that did not implement the pathway will need to be approached and an education session will be offered to them.

- Re-visit and re-evaluate

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

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Conflict of Interest

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

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Obesity Care Pathway - Management of Adult Obesity

**Health Care Professionals**

**Identification & signposting (Non-clinical staff)**

**Self Referrals**

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**Nutrition and Dietetics in Children’s Centres**

For parents and families with children aged 0-5
- Cookery courses
- Balance Your Lifestyle weight management course (not for pregnant or breastfeeding women), Contact nearest Children’s Centre for further details.

**Slimming on referral**

Referral criteria: BMI>25
Age 18-75
Please refer to eligibility criteria. If your surgery or practice would like to offer this please contact Kelly Reddington on 01472 625519 (see appendix 1)

**STEPS exercise referral scheme**

Referral criteria apply:
Contact STEPS co-ordinator on 01472 625504 or see http://www.heartwell.org.uk/steps.htm (see appendix 2)

**Healthy lifestyle interventions**, open to all regardless of BMI (see appendix 3)

**Health Trainer Service**

Referral Criteria:
Contact service on 0845 450 6712

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**Progress**

- Re-evaluate
  - Is the individual ready & willing to implement lifestyle changes?
  - Discuss other community based options for management.
  - If appropriate, consider referral to dietetics (see appendix 4).
  - GP to consider Anti-Obesity Prescribing Guidelines (appendix 5).

- Maintenance
  - Agree further follow up or possible referral to other services

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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

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**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.

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**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.

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**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.

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**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.

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**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.
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| All referrals must be aged 16+ and fulfill at least one of the following criteria:          | • Previously completed the STEPS programme  
| • Considered inactive                                                                     | • Unstable Angina                                                                          |
| • Are not moderately active for a total of thirty minutes more than twice a week            | • High hypertension (over 179mmHg/109mmHg) or uncontrolled hypertension                     |
| **Exhibit at least one of the following risk factors for coronary heart disease:**          | • Unstable diabetes                                                                        |
| • Obesity/Overweight (BMI 25+)                                                              | • Unstable COPD                                                                            |
| • Hypertension (140/90 to 179/109mmHg) (ACSM, 1995)                                        | • Unstable Heart Failure                                                                   |
| • High cholesterol levels (consistently above 5.2 total cholesterol)                        | • Severe asthma                                                                            |
| • Family history of heart disease                                                          | • Chronic muscle, joint or bone conditions that greatly impede mobility or require physiotherapist treatment |
| • Smoking                                                                                  | • Unstable severe mental health state                                                      |
| • Controlled diabetes                                                                      | • Patients who in the Healthcare Professionals opinion are not medically fit to undertake an exercise programme |
| ✓ 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                               |                                                                                  |

**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
Healthy lifestyle interventions

Other healthy lifestyle interventions, open to all regardless of BMI

Physical Activity & Health Eating
- WalkWell
- Fun n Fitness class
- Community Chair Based exercise classes
- T’ai Chi classes
- 100 Day Challenge
- Health DVD’s
  - Chair based exercise
  - Fit Lincs
  - Men’s Health Matters
  - Street Beat
  - Fit Family Food
- Recipe cards

NHS Stop Smoking and Tobacco Control
- NHS Stop Smoking and Tobacco Control
- Contact the NHS Stop Smoking Service on 08456 03166 or visit their website www.freedomfromsmoke.co.uk

For more information call 01472 625500 or visit the Specialist Health Promotion Service website http://healthpromotion.nelctp.nhs.uk
Dietetic Service referral

Dietetic Service BMI >30 with co-morbidity refer to dieticians

- Balance Group
  12 weekly Sessions leading to one year support

- Multi Disciplinary Team Clinic with dietitian, psychology and doctor in development

- Balance 1:2:1 Individual consultation with dietitian

- Change 4 Life Together Family Clinic
  Helping adults and children make healthy lifestyle changes together.

Progress

No

Yes

GP to Consider Drug Treatment

See appendix 1

- According to NICE Guidance
- Must show weight loss commitment pre-treatment
- Must be in conjunction with support strategies
- Maximise treatment before considering surgery
- Ensure patient compliant with treatment**
- Dieticians, GP and Patient consider drug received if BMI >30

Maintenance

Agree further follow up or possible referral to other services

Refer to Surgeon if meets Bariatric Surgery Criteria

Look at the Low Priority List Criteria

All Appropriate non surgical measures have failed to achieve or maintain adequate clinical beneficial weight loss for at least 6 months.
Anti-Obesity Prescribing Guidelines

Initiate only where patient has made a previous serious attempt to lose weight by diet, exercise and/or behavioural modifications.

Orlistat

According to NICE

**BMI:** >30 or >27 with significant co-morbidities

**Licensed age range:** 18-75 years

**Contra-indications:** chronic malabsorption syndrome, cholestasis, breastfeeding

**Dose:** 120mg (one capsule) immediately before, during or up to 1hr after each main meal- maximum 360mg daily

If meal is missed or contains no fat then omit dose

Specific ongoing advice, support and counselling on diet, physical activity and behavioural strategies

Needs record of advice given, BMI progress, reason for discontinuation etc. in GP records

Review after one month’s treatment to help manage side effects & improve concordance with treatment

* Or Community Pharmacist Medicines Use Review- where service available

Continue Treatment.....

• Beyond 3 months if 5% weight loss since start of treatment
• Beyond 6 months if cumulative 10% loss since start of treatment
• Check concordance

Discontinue if non-concordant or after two consecutive unsuccessful treatment periods

Referral for Bariatric surgery can only be considered if the patient was unsuccessful but concordant

Please Note that: Sibutramine has been suspended from the UK market and doctors are advised not to issue any new prescriptions.