

Reference Number: UHB 224 Version Number: 2	Date of Next Review: 18 Feb 2020 Previous Trust/LHB Reference Number: N/A
--	--

Optimising Outcomes Policy Supporting Procedures

Introduction and Aim

This document outlines the supporting procedures for the optimising outcomes policy in order to achieve consistent implementation across the Cardiff and Vale University Health Board (UHB)

Objectives

- Outline the background, evidence and rationale for the policy
- Provide details of the policy statements, aims, objectives, scope and exclusions
- Provide guidance on the implementation of the policy in practice
- Provide details of the resources available to support implementation
- Summarise the finding of the EqIA
- Outline plans for monitoring and audit
- Identify recommended review period

Scope

These procedures apply to all staff in all locations, including those with honorary contracts, who manage patients that may need to access elective surgical pathways.

Equality Impact Assessment	An Equality Impact Assessment (EqIA) has been completed and this found there to be a positive impact. Key actions have been identified and these can be found in the EqIA/HIA document
Health Impact Assessment	A Health Impact Assessment (HIA) has been completed and this found there to be a positive impact. Key actions have been identified and these can be found in the EqIA/HIA document.
Documents to read alongside this Procedure	Clinician information sheet – smoking cessation Clinician information sheet – weight management Frequently Asked Questions for Clinicians No Smoking and Smoke Free Environment Policy
Approved by	Quality, Safety and Experience Committee

Accountable Executive or Clinical Board Director	Executive Director of Public Health
---	-------------------------------------

Author(s)	Consultant in Public Health Medicine
<p><u>Disclaimer</u></p> <p>If the review date of this document has passed please ensure that the version you are using is the most up to date either by contacting the document author or the Governance Directorate.</p>	

Summary of reviews/amendments			
Version Number	Date of Review Approved	Date Published	Summary of Amendments
1	28/07/2016	18/08/2016	<ul style="list-style-type: none"> • Contents previously contained in policy. Transferred to separate document in line with revised UHB style. • Operational details of services update • Literature review updated
2	18/02/2020	03/03/2020	<ul style="list-style-type: none"> • To reflect expected changes in legislation effecting smoking on hospital sites • Update to service referral details and current versions of information resources • Additional evidence added to evidence in appendix 1

CONTENTS

		Page
1	Introduction	4
2	Guidance and Evidence	4
3	Aim	4
4	Objectives	4
5	Definitions	5
6	Roles and Responsibilities	5
7	Application of this policy	6
8	Training	9
9	Communication	9
10	Resources	10
11	References	10
12	Monitoring and Audit	11
Appendix 1	Optimising Outcomes Policy Guidance and Evidence	12
Appendix 2	List of Definitions	18
Appendix 3	Patient information leaflets	19
Appendix 4	References	21

1. INTRODUCTION

In July 2013, the UHB Board approved the Optimising Outcomes Policy statements relating to Smoking Cessation and Weight Management. The Policy was approved by the People, Performance and Delivery Committee (PPDC) on 29th October 2013 and the Policy became operational from 1st December 2013. Amendments to the Policy were made in the light of feedback received during early implementation and accepted by the PPDC on 13th May 2014. Policy reviews were conducted in 2016 and 2019, in accordance with UHB governance arrangements, when minor amendments were made to supporting information. These procedures support the amended version of the Policy.

2. GUIDANCE AND EVIDENCE

Guidance and Evidence is attached as Appendix 1.

3.AIM

The aim of this policy is to:

- Support best practice by ensuring the lifestyle risk factors of smoking and obesity are appropriately managed in surgical care pathways.
- Introduce a systematic approach to supporting patients to access smoking cessation and weight management, with the aim of reducing the risk of post-operative complications for the patient.
- Actively promote and support health and wellbeing.

4. OBJECTIVES

The objective of the Policy and the supporting procedures is to improve health by promoting action to limit smoking and obesity risks prior to, during and after surgery to protect and promote the health of the patient.

In order to achieve this, the following will be implemented:

- Provide effective communication processes to ensure compliance and adherence to the policy in Primary and Secondary Care.
- Provide effective communication processes to ensure the public are aware of the policy.
- Ensure Primary Care GPs offer referral to smoking cessation and/or weight management support for those patients who smoke and/or with a BMI of 40 or above that may require a surgical intervention.
- Ensure smoking cessation and weight management services are able to provide timely support for identified patients.

- Ensure that arrangements are in place for enforcing and monitoring of the policy particularly during early implementation. This will be monitored through data collected on outpatient COM (Clinical Outcomes Module).
- Ensure a 'second offer' of support is made at secondary care outpatient attendance if not already undertaken.
- Ensure full UHB commitment and reinforcement of support from all independent members, executive directors, senior clinicians and managers.
- Ensure appropriate information (including patient information leaflets) are available for staff and patients.

If a patient does not accept the offer of referral, or complete the support programme, the clinician responsible for the patient's care should determine whether surgery will go ahead based on an assessment of all relevant operative risk factors.

5. DEFINITIONS

A full list of definitions used in this policy are listed in Appendix 2.

6. ROLES AND RESPONSIBILITIES

6.1 The UHB Board

The UHB Board has agreed the policy statements, and the Quality, Safety and Experience Committee will be responsible for monitoring the policy on behalf of the UHB Board.

6.2 Chief Executive

As Accountable Officer the Chief Executive is ultimately accountable for the effective management of the UHB's business and in particular for ensuring that policies are adhered to.

6.3 Director of Public Health

The Director of Public Health is responsible for ensuring the appropriate policy with regard to optimising outcomes is in place on behalf of the Chief Executive of the UHB. The Director of Public Health advises and supports the commitment to this policy.

6.4 Directors and Clinical Board Directors

Directors and Clinical Board Directors have responsibility for compliance with the Optimising Outcomes Policy at Primary and Secondary Care level.

They should ensure that everyone in their Clinical Board/Directorates understands their responsibilities in ensuring compliance.

6.5 Clinical Governance Leads

Leads on Clinical Governance in each Directorate will ensure that presentations on the policy (including smoking cessation and weight management) feature at least annually in their audit sessions with reference to the Optimising Outcomes Policy.

6.6 Clinical Service Managers

Clinical Service Managers in relevant Clinical Boards have a responsibility to ensure that their staff are aware of the policy and patients are referred in compliance with the policy.

6.7 All Employees

All UHB employees and independent contractors commissioned by the UHB for its population have a responsibility to inform patients about the policy and to offer referral to relevant services prior to their surgery. They also have a responsibility to promote the health and wellbeing of our population.

7. APPLICATION OF THIS POLICY

7.1 Patient information

Patients will be informed about the policy by their GP in a Primary Care setting and also by a member of staff at their first outpatient appointment at hospital and provided with a patient information leaflet (Appendix 3).

7.2 Non-compliance

The commitment to enforcing this policy should not just be a formal statement but be evident in the day to day activities of the UHB, so that it is readily known and understood by all staff. Where managers become aware of deficiencies in adherence to the policy they are required to take action to address this.

Managers and staff are jointly responsible for ensuring that:

- Patients are aware of and understand this policy
- The policy is monitored in their own areas and contraventions are identified and managed.

7.3 Referral to relevant services for patients

Smoking Cessation

NHS Smoking Cessation services are available to support patients to stop smoking;

- Help Me Quit community based smoking cessation services
Contact details; Freephone 0800 085 2219 or access the website www.helpmequit.wales

Help Me Quit (HMQ) offers free, friendly support for smokers who are ready to stop.

Before stopping, a trained specialist will help patients understand the reasons for stopping smoking. A quit date is planned and information about the different kinds of treatment available, such as Nicotine Replacement Therapy (NRT) and the newer stop-smoking aids that do not contain nicotine Bupropion (Zyban) and Varenicline (Champix) are discussed.

Weekly sessions are held across Cardiff and Vale of Glamorgan in local venues on mornings, afternoons and evenings. Those attending can continue to attend sessions even after the quit date to provide help and on-going motivation. Alternatively, stop smoking support can be offered via telephone support 0800 085 2219 or online by accessing www.helpmequit.wales

- Hospital in-house smoking cessation services

Contact details: Helen Poole, Smoking Cessation Counsellor
02920 743582 (University Hospital Wales, Cardiff)
helen.poole@wales.nhs.uk

A hospital in-house smoking cessation service exists for all staff and patients (and their families) accessing Cardiff and Vale UHB. The service can be accessed either by self-referral or referral 'in house' (such as from a Clinician/GP) within the UHB. The programme incorporates elements from various behavioural therapies to allow flexibility, tailoring support to each individual. The first month consists of an intensive phase of weekly advice and support sessions, which includes a discussion of the various kinds of treatment available, such as Nicotine Replacement Therapy (NRT) and the newer stop-smoking aids that do not contain nicotine Bupropion (Zyban) and Varenicline (Champix). The in-house service is also able to prescribe NRT patches/lozenges or Champix (signed by an appropriate consultant). Follow up sessions take place at 3, 6 and 12 months, with telephone support at 2, 5 and 9 months.

An Enhanced Level 3 Smoking Cessation Service for Community Pharmacists operates in specific locations across Cardiff and Vale UHB. A list of current providers can be found here:

<http://www.cardiffandvaleuhb.wales.nhs.uk/sitesplus/documents/1143/PHARMACIES%20PROVIDING%20SMOKING%20CESSATION%20SERVICE%20%28002%29.pdf>

Smokers wishing to quit can access the participating Pharmacy directly and are offered 1:1 weekly support in the Community Pharmacy and free NRT.

Alternatively, some GP Practices offer smoking cessation support either as a routine appointment or in a dedicated smoking cessation group or one to one meeting.

Weight Management

Weight management services are available to support patients to lose weight;

- Eating for Life – group intervention or one to one dietetic support

Contact details: GP e-referral to Community Dietetic Service.

Tel: 02920668089 Email: Dietitian.Reception.UHW@wales.nhs.uk

Patients can also self-refer by e-mailing dietitians.cav@wales.nhs.uk or via Tel: 02920668089

This is an 8 week weight management programme within a group setting. Each session is an hour and a half long with a mixture of men and women in the group. Over the 8 weeks patients will learn about:

- Portion control
- Their individual calorie requirements
- How to resist temptation and break habits
- How to set achievable goals
- How to manage lapses
- How to maintain long term change.

Monthly weight management support sessions are available on completion of the 8 week programme for up to a year.

One to one appointments are offered to people where a group education programme is not suitable.

Details of weight management service referral pathways can be found on cavweb

http://www.cardiffandvale.wales.nhs.uk/portal/page?_pageid=253,82794938,253_82794939&_dad=portal&_schema=PORTAL

- National Exercise Referral Scheme

Contact details: GP referral to National Exercise Referral Scheme

Tel (Cardiff): 02920 872924 Tel (Vale-Barry Leisure Centre): 01446 403000

This is a sixteen week programme of physical activity designed around the patient's specific needs based on an initial assessment and discussion with the

patient. Programmes are based in the Leisure centres of Cardiff and the Vale of Glamorgan. Under the scheme patients will have discounted rates to many of the leisure centre facilities.

Throughout the sixteen weeks, patients will be placed with the same instructor wherever possible and receive telephone as well as face to face support. After sixteen weeks the instructor will meet with the patient to measure progress and discuss how to maintain physical activity as a key part of day to day life.

Alternatively, patients can refer themselves to commercial weight management programmes, however this option will not be funded by the NHS.

8. TRAINING

Issues related to smoking cessation, weight management and public health will be included in the following:

- Cardiff and Vale UHB Induction
- Making Every Contact Count training (raising the issue of lifestyle behaviour change, including smoking and weight management, with a patient)
- Brief Intervention Smoking Cessation training.

9. COMMUNICATION

9.1 Communication to staff

This policy will be communicated to staff via the internet, intranet, clinical portal and bulletins.

Leads on Clinical Governance in each Directorate will ensure that presentations feature at least annually in their audit sessions with reference to the Optimising Outcomes Policy.

All induction for relevant staff must refer to this policy.

9.2 Communication to Patients

Patients will be informed about the policy at the point of GP engagement and encouraged to access smoking cessation and/or weight management services prior to engagement with Secondary Care services. Patients will also be reminded about the policy at the first point of engagement with Secondary Care.

Patient information leaflets will be available containing advice as to how to access smoking cessation and/or weight management services.

Patients and visitors can access the full policy on the UHB Internet site.

9.3 Consultation

An Optimising Outcomes Policy group maintains oversight of implementation of the policy.

During development, the policy statements were raised at the following meetings:

- Public Health Steering Group
- Community Health Council
- Cardiff 3rd Sector Council Network
- Practising Public Health Organisation
- Tobacco Free Cardiff and Vale Group
- Vale 50+ Forum
- Directors of Public Health meetings
- Local Medical Committee

Support to the policy was also gained from:

- Tobacco Control Leads, Public Health Wales
- Obesity Leads, Public Health Wales
- Directors of Public Health

10. RESOURCES

10.1 Patient information leaflets

Patient information leaflets on smoking cessation and weight management are required to ensure patients can access information on the policy and what is required of them. These are available in English and Welsh and can be made available in other languages on request.

Clinician information sheets have also been devised for Primary Care and Secondary Care. Following implementation, a frequently asked questions sheet was written to address commonly raised operational issues.

10.2 Relevant support services

Smoking cessation and weight management services are outlined in section 10 above.

11. REFERENCES

Details of the documents referred to in the development of this Policy are shown in Appendix 4.

12. MONITORING AND AUDIT

12.1 The Optimising Outcomes Policy Group will monitor the progress of the policy via regular meetings.

12.2 The UHB's Quality, Safety and Experience Committee will annually conduct a formal review of the effectiveness of the Optimising Outcomes Policy and receive updates as required.

12.3 The following indicators will be used to monitor the effectiveness of the policy:

- The number of patients accessing smoking cessation support and weight management support will be monitored.

Optimising Outcomes Policy Guidance and Evidence

SITUATION

The NHS Wales Act 2006 places a target duty on the Welsh Health Minister, passed down to Health Boards by the Statutory Instruments that establish them, to promote the health of the people within the population it serves.

Healthcare professionals routinely manage clinical risks such as hypertension in people undergoing surgery. Lifestyle factors can increase clinical risk, with evidence suggesting that smoking cessation and weight loss (if obese) improve post-operative outcomes.

The Optimising Outcomes Policy introduces a systematic approach to supporting patients to access smoking cessation and weight management, with the aim of reducing the risk of post-operative complications for the patient.

BACKGROUND

Pre-operative Smoking Cessation

In the previous policy published in 2013 the following guidance and evidence existed to support the policy:

- People who smoke are more likely to have lung, heart and infectious complications; have reduced bone fusion after fracture and impaired wound healing; be admitted to an intensive care unit; have an increased risk of in-hospital mortality; and remain in hospital longer^{2, 3}.
- Patients can reduce their risk of a wide range of complications if they stop smoking eight weeks before elective surgery, with improved recovery and outcomes^{2, 3}, including reduced wound related, lung and heart complications; decreased wound healing time; reduced bone fusion time after fracture repair; reduced length of hospital stay; in the long term reduced risk of heart disease, cancer and premature death^{2, 3}.
- Specifically for Cardiff and Vale, modelling suggests the following potential savings per year⁴: Based on 9,371 elective admissions being current smokers, approximately 10-30% of people who smoke are likely to give up through a Pre-operative Smoking Cessation programme (as calculated by London Health Observatory⁴), this would result in approximately 754 – 1,574 quitters, resulting in 124 – 1,299 bed days saved and an estimated £41,941 - £437,650 saved per year.

A literature search was conducted to update the evidence base for the OOPs policy review in 2016. Emerging evidence since adoption of the original policy included the following:

Smoking

- Current smokers are at an increased risk of a range of postoperative complications following a range of surgical procedures compared to non smokers (including abdominal, head/neck, breast, orthopaedic, plastic, thorax, transplantation and general surgeries)⁹. The systematic review and meta-analysis concluded that smokers have a:
 - 1.52 fold higher risk of general morbidity post operatively
 - 2.15 fold higher risk of wound complications
 - a 1.54 fold higher risk of general infections
 - a 1.73 fold higher risk of pulmonary complications
 - a 1.38 fold higher risk of neurological complications
 - and a 1.60 fold higher risk of admission to intensive care unit
- Smokers receiving general anaesthesia for major elective surgery have a 4.40 fold increased risk of peri-operative respiratory complications and a 1.86 fold increased risk of post-operative morbidity compared to non smokers¹⁰
- Smokers are 1.45 times more likely to experience respiratory events (pneumonia, unplanned intubation, or ventilator requirement) following major surgery and 1.65 times more likely to experience an arterial event (myocardial infarction or cerebrovascular accident)¹¹
- Current smokers are 2.21 times more likely to experience organ/space surgical site infections (SSI) and surgical wound complications in orthopaedic surgery with implants¹²
- Current smokers are 1.47 times more likely to have wound complications following primary total hip or knee athroplasty compared to non smokers¹³
- Current smokers are 2.37 times more likely to experience deep infection and 1.78 times more likely to need an implant revision after primary total hip athroplasty or total knee athroplasty compared to non smokers¹⁴
- Current smoking increases the risk of post-operative morbidity by 1.3 fold and mortality by 1.5 fold for all types of major colorectal surgery (elective major colorectal resection for colorectal cancer, diverticular disease, or inflammatory bowel disease)¹⁵
- Current women smokers are 1.16 times more likely to experience venous thromboembolism in the first 12 postoperative weeks than never-smokers¹⁶

- Current smokers are 2.41 times more likely than non-smokers to have post-operative pulmonary complications after coronary artery bypass grafting surgery¹⁷
- Smoking is associated with wound dehiscence after cesarean delivery (46.7% vs. 21.1%, smokers vs non-smokers)¹⁸
- Smoking is associated with increased wound complications and 30-day mortality after laparotomy (32% vs 23%, smokers vs non-smokers)¹⁹
- Current smokers are 1.28 times more likely to develop wound complications after an open cholecystectomy and 1.20 times more likely after a laparoscopic cholecystectomy compared to non smokers²⁰

Pre-operative Weight Management

Obesity is a recognised risk factor for a wide variety of peri-operative complications. Research highlights that obese patients are likely to experience:

- A nearly 12-fold increased risk of a post-operative complication after elective breast procedures²¹
- A 5-fold increased risk of surgical site infection (SSI)²²
- A two fold increased risk of SSI risk in orthopaedics²³
- An increased risk of SSI as much as sixty percent (60%) when undergoing major abdominal surgery²⁴
- A higher incidence of SSI (up to 45%) when undergoing elective colon and rectal surgery²⁴
- An increased risk of bleeding and infections after abdominal hysterectomy²⁵
- A 2.1 fold increased risk of any complication after elective spine surgery^{27 29} including:
 - a 1.2 - 3.11 fold higher risk of SSI^{28, 29, 30, 31, 32, 37}
 - a 1.21 fold increase in risk of SSI for every 5-unit increase in BMI³⁶
 - A 2 - 3.15 fold higher risk of venous thromboembolism^{28,31,32,33}
 - a 1.43 fold higher risk of revision²⁸
 - a 28.89 fold higher risk of blood loss during surgery^{28,29,30}
 - a 14.55 fold higher risk of longer surgical time^{28,30,37}
 - and 2.6 fold higher risk of mortality²⁸
- A 1.67 fold increased risk of superficial wound infection and a 1.52 fold increased risk of deep wound infection following orthopaedic trauma surgery³⁵

Research indicates that morbidly obese patients are likely to experience:

- A 1.6 – 1.84 fold increased risk of any complication following spinal surgery^{37 38} including:
 - a 2.5 – 3.22 fold increased risk of SSI^{32,37}
 - a 2.5 fold increased risk of venous thromboembolism³²
 - a 1.7-2.43 fold increased risk of urinary complications^{32,37}
 - a 15.3 fold increased risk of acute renal failure³²

- a 1.7 fold increased risk of sepsis^{32 34}
- a 2.18 fold higher risk of pulmonary complications³⁷
- a 2.3 fold higher risk of re-admission³⁸
- a 1.8 fold higher risk of return to the operating room³⁸
- A 2.51 fold increased risk of deep wound infection and a 2.29 fold increased risk of wound dehiscence following orthopaedic trauma surgery³⁵
- An increased risk of restrictive pulmonary syndrome, including decreased functional residual capacity (for morbidly obese patients)²⁶.

It is understood that around 50 percent of patients who are obese have a poor outcome following joint replacement surgery compared to less than ten percent of patients with a healthy Body Mass Index (BMI) for the following reasons:

- A significantly higher risk of a range of short-term complications⁷
- A less likely outcome of surgery improving symptoms⁸
- A higher risk of the implant failing, requiring further surgery⁸
- A higher incidence of weight gain following joint replacement surgery⁷.

This weight management pre-operative intervention should be seen as a basic component of evidence based commissioning for elective surgery.

In 2017, two rapid evidence reviews were conducted by Cedar to explore the effects of smoking³⁹ and obesity⁴⁰ on primary hip or knee replacement. The conclusions were as follows:

Smoking

Although some studies did not show an association between smoking and poorer outcomes, there seems to be some evidence that smoking is an independent risk factor for poorer outcomes in patients undergoing total hip or knee arthroplasty. Based on current evidence, patients who smoke appear to be at increased risk of both local and systemic complications and have an increased risk of implant failure and revision compared with patients who do not smoke.

Obesity

Hip Arthroplasty

There is evidence that patients who are obese or morbidly obese have an increased risk of complications following primary hip replacement surgery including major complications such as deep infection, dislocation, osteolysis and/or aseptic loosening and minor complications such as superficial infection, wound healing and/or haematoma.

The evidence indicates that obese patients have a higher risk of dislocations.

The evidence suggests that although obese and morbidly obese patients have significantly lower pre-operative and post-operative patient reported outcome scores compared with non-obese patients, the difference in the change of scores from pre to post op follow-up is not significant at 2 year follow-up suggesting that the magnitude of benefit for obese and morbidly obese patients is similar to that of non-obese patients. One study however did report a significantly lower patient reported outcome score in obese and morbidly obese patients at 5 year follow-up compared with non-obese patients suggesting that it is possible that although obese and morbidly obese patients benefit from surgery initially, this benefit is not maintained in the longer term. It is not possible to say whether the lower score at 5 years is the result of increased BMI and primary hip surgery however; there are other factors which impact on a patient's score.

Knee Arthroplasty

There is evidence to suggest that patients who are obese or morbidly obese have an increased risk of both superficial infection and deep wound infection following primary knee replacement, however there is some uncertainty around the robustness of the results relating to deep infection and it is possible that the risk of deep infection does not differ between obese and non obese patients. Patients who are obese appear to have a greater risk of undergoing a revision procedure for any reason when compared with non-obese patients.

Obese patients do not appear to have a greater risk of intra-operative complications such as intra-operative fracture, tendon/ligament rupture or nerve damage compared with non-obese patients and there also appears to be no difference in the risk of post-operative deep vein thrombosis.

Patients who are obese or morbidly obese record lower patient reported outcome scores preoperatively compared with patients who are not obese and the evidence suggests that patient reported outcome scores in obese and morbidly obese patients are lower at 6 and 12 months post-operatively. However information was not provided on the change in patient reported outcomes from pre-operative scores to post-operative scores, so it cannot be assumed that the obese/morbidly obese patient group did not achieve an improvement in functional outcomes compared with their pre-operative scores of a magnitude similar to non-obese patients.

No additional literature searches were completed as part of the 2019 policy review. However, it is important to note that both smoking cessation and weight management feature in [national guidance](#) for effective pre-operative care published by the Royal College of Anaesthetists⁴¹.

ASSESSMENT

The introduction of an Optimising Outcomes Policy to address smoking and weight management in pre-operative patients enables a systematic approach

to addressing lifestyle risk factors. They will enable appropriate support to be given to patients with the aim of ensuring that they experience an optimal post-operative outcome.

Appendix 2

LIST OF DEFINITIONS

BMI	Body Mass Index
CHC	Community Health Council
Completed programme	A completed programme is defined as a patient having attended the following number of sessions for each programme: 4 out of 6 smoking cessation sessions 5 out of 8 Eating for Life sessions (or equivalent individual sessions) 10 out of 16 Exercise Referral sessions
EqIA	Equality Impact Assessment
Listed	For the purposes of the Optimising Outcomes Policy, listing is defined as 'given a date to come in for surgery'. This means the patient can be added to the waiting list for an elective procedure in the normal way and the waiting time clock will continue.
LMC	Local Medical Committee
'Practising public health organisation'	An organisation that actively demonstrates promotes and implements health promoting behaviour as an example of best practice.
Smoking Cessation Services	Includes NHS community and hospital based Smoking Cessation Service
UHB	University Health Board
UHW	University Hospital of Wales, Cardiff
Weight Management Services	Includes Dietetic Services and National Exercise Referral Scheme

Patient information leaflets

Weight management leaflet:

National Exercise Referral Scheme



This is a 16 week programme of physical activity designed around your specific needs. You will have an initial fitness assessment where these will be discussed. The programme will be based the Cardiff and Vale of Glamorgan Leisure Centres.

Under the scheme you will have discounted rates to many of the leisure centre facilities.

Throughout the 16 weeks you will be with the same instructor wherever possible. You will receive telephone as well as face to face support.

After 16 weeks your instructor will meet with you to measure progress and discuss how to keep physical activity a key part of your day to day life. Each session will cost £2.00 to attend.

If you choose this option your Healthcare Professional will make a referral. You will then be contacted by the National Exercise Referral Scheme and offered a place on the next available programme. You will also be given an Evidence of Completion Form. When you have completed the programme this will need to be signed by the course leader and taken to your next clinic appointment. The course leader will also write to your Health Care Professional to let them know you have completed the course.

Contact details:
Tel: 01570 872524 (Cardiff)
Tel: 01446 403000 (Vale – Barry Leisure Centre)

Commercial Weight Management

A third option, if you choose, is to refer yourself to a commercial weight management programme. This option will not be funded by the NHS.

Why wait to lose weight?



You have been recommended to attend a weight management programme to offer you the opportunity of reducing your body weight prior to your surgery.

Reducing your body weight can reduce the risk of complications both during your surgery and whilst you recover after your operation.

The three available options are explained in this leaflet. Each will provide you with help, education, and support to lose weight and monitor your progress.



What can you do?

Exercise and healthy eating are known to be the most important factors in aiming for a healthy weight.

Attendance at one of these programmes gives you a unique opportunity to manage and help improve your weight and lifestyle. Committing to the Eating for Life Programme, National Exercise Referral Scheme or a Commercial Weight Management Programme will allow you to develop the knowledge and skills to be able to work towards achieving a healthy weight. Both exercise and healthy eating are important in achieving and maintaining a healthy weight so you can access both Eating for Life and National Exercise Referral Scheme if you wish.

You are the most important part of the programme.

What are the risks of being overweight?

Being overweight when having surgery carries increased risks. People who are overweight have a greater risk of complications such as:

- Infection and bleeding
- Blood clots
- Breathing problems

The surgery may also be less successful.

The good news...
Losing weight before surgery has many benefits, including:

- Improved blood pressure
- Reduced risks during surgery
- Improved general health.

Eating for Life

This is an 8 week weight management programme within a group setting. Each session is an hour and a half long with a mixture of men and women in the group.

Over the 8 weeks you will learn about:

- portion control
- your individual calorie requirements
- how to resist temptation and break habits
- how to set achievable goals
- how to manage lapses
- **and most importantly** how to maintain long term change.

Monthly weight management support sessions are available on completion of the 8 week programme.

If you choose this option, you will be contacted by the Community Dietetic Service inviting you to discuss your needs. You will be offered a place on the next available 'Eating for Life Programme'. You may be offered a 1:1 appointment if you decide a group setting is not suitable.

The course leader will write to your Health Care Professional to let them know you have completed the course.

Contact details
Tel: 02920 568089
Email: Dietitian.Reception.UHW@wales.nhs.uk

Smoking cessation patient leaflet:

Smoke Free Hospitals

Cardiff and Vale University Health Board (UHB) is committed to the health and wellbeing of its staff, patients and visitors.

Please be aware that Cardiff and Vale University Health Board is a smoke free organisation. Smoking is not permitted in any Cardiff and Vale UHB hospital or grounds.

A No Smoking and Waste Enforcement Officer [patrols](#) hospital grounds and will challenge people who are smoking. Dropping litter, including cigarette ends, will incur a Fixed Penalty Notice of £90.00.





Information for Patients

If you are due to have surgery, the sooner you stop smoking before your operation the better.

Stopping smoking before your operation has many benefits, including reducing your risk of a wide range of complications and improving your recovery and outcomes.

Support to Stop Smoking

We know how hard it can be to give up smoking, but when [you're](#) ready to stop you don't have to go it alone.

There is lots of free support available if you would like to stop smoking for your operation as a [short term](#) goal, or if you are thinking of stopping smoking for good. Research has shown you are four times more likely to quit with a support programme than in any other way. You can access services [for free](#), as described on the next page.



Support to Stop Smoking

The NHS provides a free service to help you stop smoking. **‘Help Me Quit’** is the single point of access for all NHS stop smoking services in Wales making it easy for you to choose the best NHS stop smoking support in your local area.

You can choose whether to access support in your local community, at your hospital or over the telephone. It is up to you to decide which service you prefer to access. All services provide the same level of [support which](#) includes:

- Individual or group support
- One session per week for several weeks
- Delivered by trained advisors
- Support to plan and prepare to quit
- Setting a quit date
- On-going support to quit
- Information about nicotine replacement therapies.



You can get support to quit [by](#):

Calling 0800 085 2219

Visiting www.helpmequit.wales

Texting HMQ to 80818 to get a call back

Hospital Smoking Cessation Service (Hospital based support)

Telephone: 02920 743582 (1st floor)
02920 715420 (1st floor)

Email: hsen.P201@wales.nhs.uk

Alternatively, some GP Practices offer smoking cessation support, ask your GP if they are part of the Cardiff and Vale University Health Board (UHB) approved providers.

Smoking and Surgery

Smoking and surgery carries increased risks.

During the operation, people who smoke

- are more likely to need a higher dose of anaesthesia than people who do not smoke
- have decreased blood oxygenation, leading to decreased oxygen delivery to tissues
- [are](#) more likely to suffer complications.

Post-operation, people who smoke

- are more likely to suffer complications
- have an increased risk of chest infections and breathing problems
- have an increased risk of blood clots in legs or lungs
- have a higher risk of lung and heart complications
- have a higher risk of infection
- have slower healing of wounds
- are more likely to be admitted to an intensive care unit
- have an increased risk of dying in hospital
- [are](#) more likely to have a longer hospital stay.
- [are](#) more likely to have a longer hospital stay.

Health Benefits of Stopping Smoking

Stopping smoking before your operation will have many health benefits. These include:

- a [reduced](#) risk of complications
- a [shorter](#) stay in hospital
- [faster](#) recovery
- less chance of infection
- [improved](#) circulation.

There are also [long term](#) benefits of quitting smoking such as reduced risk of lung cancer and heart disease.

Appendix 4

REFERENCES

1. Welsh Government. (2013). *Welsh Health Survey 2011 and 2012: Local Authority / Local Health Board results*. Cardiff: Welsh Government.
2. Phillips, C. J., and Bloodworth, A. (2009). *Cost of smoking in Wales: Report presented by Action on Smoking and Health, British Heart Foundation at the Smoking Conference Wales 2009*. Swansea: Swansea University.
3. Furlong C. (2005). Pre-operative smoking cessation: A model to estimate short term health gain and reductions in length of stay. London Health Observatory.
4. Lester, C. (2009). *Pre-operative Smoking Cessation: A rapid literature review 2005 – February 2009*. National Public Health Service for Wales.
5. Bowles, C. (2007). *The preventable health burden of smoking and the short-term benefits of preoperative smoking cessation in Wales. A report by the London Health Observatory for the Welsh Assembly*. London Health Observatory.
6. DeMaria EJ, Carmody BJ. (2005) *Perioperative management of special populations: obesity*. [Review] [31 refs]. *Surgical Clinics of North America* 2005;85 (6): 1283-1289
7. *The impact of pre-operative obesity on weight change and outcome in total knee replacement. A prospective study of 529 consecutive patients*. *Journal of Bone and Joint Surgery - British Volume*, Vol 92-B, Issue 4, 513-520.
8. Jared R.H. Foran, Michael A. Mont, Gracia Etienne, Lynne C. Jones and David S. Hungerford (2004) *The Outcome of Total Knee Arthroplasty in Obese Patients* *J Bone Joint Surg Am*. 2004;86:1609-1
9. Gronkjaer M et al. (2014) **Preoperative smoking status and postoperative complications: a systematic review and meta-analysis**. *Ann.Surg.* 259 (1):pp.52-71.
10. Lee A et al. (2015) **Risk of perioperative respiratory complications and postoperative morbidity in a cohort of adults exposed to passive smoking**. *Ann.Surg.* 261 (2):pp.297-303.
11. Musallam KM et al. (2013) **Smoking and the risk of mortality and vascular and respiratory events in patients undergoing major surgery**. *JAMA Surg.* 148 (8):pp.755-762.
12. Durand F et al. (2013) **Smoking is a risk factor of organ/space surgical site infection in orthopaedic surgery with implant materials**. *International Orthopaedics* 37 (4):pp.723-727.
13. Duchman KR et al. (2015) **The effect of smoking on short-term complications following total hip and knee arthroplasty**. *J.Bone Joint Surg.Am.* 97 (13):pp.1049-1058.
14. Singh JA et al. (2015) **Current tobacco use is associated with higher rates of implant revision and deep infection after total hip or knee arthroplasty: a prospective cohort study**. *BMC.Med.* 13:pp.283

15. Sharma A et al. (2013) **Tobacco smoking and postoperative outcomes after colorectal surgery.** *Ann.Surg.* 258 (2):pp.296-300.
16. Sweetland S et al. (2013) **Smoking, surgery, and venous thromboembolism risk in women: United Kingdom cohort study.** *Circulation* 127 (12):pp.1276-1282.
17. Ji Q et al. (2015) **Impact of smoking on early clinical outcomes in patients undergoing coronary artery bypass grafting surgery.** *J.CardiThorac.Surg.* 10:pp.16
18. Avila C et al. (2012) **Association of smoking with wound complications after cesarean delivery.** *J.Matern.Fetal Neonatal Med.* 25 (8):pp.1250-1253.
19. Dahl RM et al. (2014) **The association of perioperative dexamethasone, smoking and alcohol abuse with wound complications after laparotomy.**
20. Selvarajah S et al. (2014) **Cholecystectomy and wound complications: smoking worsens risk.** *J Surg Res.* 192 (1):pp.41-49.
21. Chen CL et al (2011). *The impact of obesity on breast surgery complications.* *Plast Reconstr Surg* 2011;128 (5): 395e-402e
22. Waisbren E et al (2010). *Percent body fat and prediction of surgical site infection.* *J Am Coll Surg* 2010; 210(4):381-9.
23. Yuan K, Chen HL. (2013) **Obesity and surgical site infections risk in orthopedics: a meta-analysis.** *International Journal Of Surgery* 11 (5):pp.383-388.
24. Hourigan JS (2011). *Impact of obesity on surgical site infection in colon and rectal surgery.* *Clin Colon Rectal Surg* 2011;24 (4): 283-290
25. Osler M et al. (2011). *Body mass and risk of complications after hysterectomy on benign indications.* *Human Reproduction* 2011; 26: 1512-1518.
26. Hans GA et al. (2009) *Postoperative respiratory problems in morbidly obese patients.* [Review] [32 refs]. *Acta Anaesthesiologica Belgica* 2009;60 (3): 169-175
27. Gaudelli C, Thomas K. (2012). *Obesity and early reoperation rate after elective lumbar spine surgery: a population-based study.* *Evid Based Spine Care J* 2012; 3(2):11-6.
28. Jiang J et al. (2014) **Does obesity affect the surgical outcome and complication rates of spinal surgery? A meta-analysis.** [Review]. *Clin Orthop Relat Res* 472 (3):pp.968-975.
29. Garza-Ramos R et al. (2015) **The impact of obesity on short- and long-term outcomes after lumbar fusion.** *Spine* 40 (1):pp.56-61.
30. Cao J et al. (2016) **Impact of obesity on lumbar spinal surgery outcomes.** *J.Clin Neurosci:pp.*
31. Jackson JL, Devine JG. (2016) *The effects of obesity on spine surgery: A systematic review of the literature.* *Global Spine J:* DOI: 10.1055/s-0035-1570750.
32. Marquez-Lara A et al. (2014) **Body mass index as a predictor of complications and mortality after lumbar spine surgery.** *Spine (Phila Pa 1976.)* 39 (10):pp.798-804.

33. Elgafy H et al. (2012) *Challenges of spine surgery in obese patients*. [Review]. *American Journal of Orthopedics* 2012;41 (3): E46-E50
34. Knutsson B, Michaelsson K, Sanden B. (2013) **Obesity is associated with inferior results after surgery for lumbar spinal stenosis: a study of 2633 patients from the Swedish spine register**. *Spine (Phila Pa 1976.)* 38 (5):pp.435-441.
35. Whiting PS et al. (2016) **Body mass index predicts perioperative complications following orthopaedic trauma surgery: an ACS-NSQIP analysis**. *Eur.J.Trauma Emerg.Surg.*:pp.
36. Abdallah DY, Jadaan MM, McCabe JP. (2013) **Body mass index and risk of surgical site infection following spine surgery: a meta-analysis**. [Review]. *Eur Spine J* 22 (12):pp.2800-2809.
37. Buerba RA et al. (2014) **Obese Class III patients at significantly greater risk of multiple complications after lumbar surgery: an analysis of 10,387 patients in the ACS NSQIP database**. *Spine J.* 14
38. Seicean A et al. (2014) **Impact of increased body mass index on outcomes of elective spinal surgery**. *Spine* 39 (18):pp.1520-1530.
39. O'Connell S, Morgan H, Carolan-Rees G, 'Rapid Evidence Review: Primary Hip or Knee Replacement and Smoking' *Cedar: March 2017*
40. O'Connell S, Morgan H, Carolan-Rees G, 'Rapid Evidence Review: Primary Hip or Knee Replacement and Obesity' *Cedar: April 2017*
41. Royal College of Anaesthetists *Fitter Better Sooner* (webpage). Available at <https://www.rcoa.ac.uk/fitterbettersooner> ;Last accessed 15/10/19