

# The RCGP Curriculum: Clinical Modules

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## ➤ 3.17 Care of People with Metabolic Problems

### Summary

- The prevalence of overweight and obesity, together with their associated complications including diabetes mellitus and non-alcoholic fatty liver disease (NAFLD), is increasing
- As a general practitioner (GP) you should have an understanding of how common endocrine or metabolic disorders such as diabetes mellitus, thyroid or reproductive disorders can present. You must also be aware of rarer and important disorders such as Addison's disease, which can be potentially life-threatening if missed
- Biochemical tests can be diagnostic and often necessary for monitoring metabolic and endocrine diseases, so it is important for GPs to know which tests are useful in a primary care setting and how to interpret these tests and understand their limitations
- GPs should appreciate the health and medical consequences of obesity including malnutrition, increased morbidity and reduced life expectancy, and have an understanding of the social, psychological and environmental factors underpinning obesity<sup>1</sup>
- GPs should understand the role of good diabetes management in prevention and/or postponement of associated morbidity and mortality
- All GPs should be competent in the recognition and primary care management of metabolic and endocrine emergencies

### Knowledge and skills guide

#### Core Competence: Fitness to practise

This concerns the development of professional values, behaviours and personal resilience and preparation for career-long development and revalidation. It includes having insight into when your own performance, conduct or health might put patients at risk, as well as taking action to protect patients.

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<sup>1</sup> Royal College of Physicians (RCP) for Foresight (Government Office for Science). *The Training of Health Professionals for the Prevention and Treatment of Overweight and Obesity* London: RCP, 2010, [www.rcplondon.ac.uk/sites/default/files/obesity-report-2010.pdf](http://www.rcplondon.ac.uk/sites/default/files/obesity-report-2010.pdf)

This means that as a GP you should:

- Recognise your central role as a primary care physician in managing diabetes mellitus and hypothyroidism

### **Core Competence: Maintaining an ethical approach**

This addresses the importance of practising ethically, with integrity and a respect for diversity.

This means that as a GP you should:

- Ensure that the patient's weight does not prejudice your decisions
- Ensure that the risks of complications from obesity or diabetes are not overstated in order to coerce a patient into complying with treatment

### **Core Competence: Communication and consultation**

This is about communication with patients, the use of recognised consultation techniques, establishing patient partnership, managing challenging consultations, third-party consulting and the use of interpreters.

This means that as a GP you should:

- Be aware that non-concordance is common for chronic metabolic conditions, e.g. diabetes, and respect the patient's autonomy when negotiating management
- Communicate with patients clearly and effectively about the risk of complications from obesity and diabetes mellitus
- Develop a flexible approach to health promotion which reflects that certain groups with obesity and diabetes mellitus require different approaches, e.g. children, adolescents and young adults (see also statement 3.04 Care of Children and Young People), pregnant women, ethnic minorities
- Negotiate a programme of weight-reduction sensitively with patients, giving appropriate health promotion advice regarding diet, exercise and pharmacological therapies
- Recognise the potential for abuse of thyroxine and propose strategies to reduce dosage

### **Core Competence: Data gathering and interpretation**

This is about interpreting the patient's narrative, clinical record and biographical data. It also concerns the use of investigations and examination findings, plus the adoption of a proficient approach to clinical examination and procedural skills.

This means that as a GP you should:

- Recognise that patients with metabolic problems are frequently asymptomatic or have non-specific symptoms and that diagnosis is often made by screening or recognising symptom complexes and arranging appropriate investigations
- Understand the need for early recognition and monitoring of complications in diabetes mellitus

### **Core Competence: Making decisions**

This is about having a conscious, structured approach to decision-making; within the consultation and in wider areas of practice.

This means that as a GP you should:

- Intervene urgently when patients present with a metabolic emergency, e.g. hypoglycaemia and hyperglycaemic conditions
- Demonstrate a logical, incremental approach to investigation and diagnosis of metabolic problems

### **Core Competence: Clinical management**

This concerns the recognition and management of common medical conditions encountered in generalist medical care. It includes safe prescribing and medicines management approaches.

This means that as a GP you should:

- Manage appropriately primary contact with patients who have a metabolic problem
- Understand the role of particular groups of medication in the management of diabetes, e.g. anti-platelet drugs, ACE inhibitors, angiotensin-2 receptor antagonists, lipid-lowering therapies, GLP-1 agonists
- Understand the use and main limitations of tests commonly used in primary care to investigate and monitor metabolic or endocrine disease, e.g. fasting blood glucose, HbA1c, urinalysis for glucose and protein, urine albumin: creatinine ratio, 'near patient testing' (point of care testing) for capillary glucose, lipid profile and thyroid function tests, and uric acid tests
- Recognise the risk of co-morbid mental health problems in people with metabolic problems such as diabetes and obesity, and the effect of these on morbidity and mortality

### **Core Competence: Managing medical complexity**

This is about aspects of care beyond managing straightforward problems. It includes multi-professional management of co-morbidity and poly-pharmacy, as well as uncertainty and risk. It also covers appropriate referral, planning and organising complex care, promoting recovery and rehabilitation.

This means that as a GP you should:

- Recognise that patients with diabetes mellitus often have multiple co-morbidities such as neuropathy, nephropathy and cardiovascular disease, and consequently polypharmacy is common
- Develop strategies to simplify medication regimes and encourage concordance with treatment
- Advise patients appropriately regarding lifestyle interventions for obesity, diabetes mellitus, hyperlipidaemia and hyperuricaemia

### **Core Competence: Working with colleagues and in teams**

This is about working effectively with other professionals to ensure good patient care. It includes sharing information with colleagues, effective service navigation, use of team skill mix, applying leadership, management and team-working skills in real-life practice, and demonstrating flexibility with regard to career development.

This means that as a GP you should:

- Co-ordinate care with other primary care and secondary care professionals with diabetes as a focus
- Know the indications for referral to an endocrinologist, metabolic medicine specialist or nephrologist for investigation of suspected endocrine disease, management of complex metabolic problems, or diabetic renal complications respectively
- Understand the systems of care for metabolic conditions including the roles of primary and secondary care, shared-care arrangements, multidisciplinary teams and patient involvement

### **Core Competence: Maintaining performance, learning and teaching**

This area is about maintaining performance and effective CPD for oneself and others, self-directed adult learning, leading clinical care and service development, participating in commissioning, quality improvement and research activity.

This means that as a GP you should:

- Understand and implement the key national guidelines that influence healthcare provision for cardiovascular problems associated with metabolic problems such as diabetes, e.g. NICE guidelines, British Hypertension Society Joint Committee recommendations, national frameworks and quality markers
- Know the key research findings that influence management of metabolic problems, e.g. Diabetes Control and Complications Trial (DCCT), United Kingdom Prospective Diabetes Study (UKPDS), Action to Control Cardiovascular Risk in Diabetes Trial (ACCORD), and the ADVANCE trial in diabetes and cardiovascular disease (see also Learning Resources below)

### **Core Competence: Organisational management and leadership**

This is about the understanding of organisations and systems, the appropriate use of administration systems, effective record keeping and utilisation of IT for the benefit of patient care. It also includes structured care planning, using new technologies to access and deliver care and developing relevant business and financial management skills.

This means that as a GP you should:

- Utilise disease registers and data-recording templates effectively for opportunistic and planned monitoring of metabolic problems to ensure continuity of care between different healthcare providers
- Understand the key government policy documents and the way they influence healthcare provision for your patients with metabolic problems
- Case find for depression and manage appropriately

### **Core Competence: Practising holistically and promoting health**

This is about the physical, psychological, socioeconomic and cultural dimensions of health. It includes considering feelings as well as thoughts, encouraging health improvement, preventative medicine, self-management and care planning with patients and carers.

This means that as a GP you should:

- Recognise the psychosocial impact of diabetes mellitus and other long-term metabolic problems, e.g. the risk of depression, sexual dysfunction, restrictions on employment and driving for diabetes
- Recognise the stigma associated with obesity
- Empower patients to self-manage their condition, as far as is practicable

### **Core Competence: Community orientation**

This is about involvement in the health of the local population. It includes understanding the need to build community engagement and resilience, family and community-based interventions, as well as the global and multi-cultural aspects of delivering evidence-based, sustainable healthcare.

This means that as a GP you should:

- Recognise that environmental and genetic factors affect the prevalence of metabolic problems, e.g. diabetes mellitus is more prevalent in the UK in patients of Asian and Afro-Caribbean origin, hyperuricaemia is more common in prosperous areas and is associated with obesity, diabetes, hypertension and dyslipidaemia
- Recognise that public health interventions are likely to have the largest impact on obesity and diabetes mellitus, and be able to signpost patients to such programmes where possible, e.g. exercise on prescription

- Know the exemptions from prescription charges for patients with metabolic conditions
- Understand how obesity and overweight can impact directly and indirectly on a wide variety of disease areas and thus why there is a need to consider obesity in the commissioning of a wide range of health services

## Case discussion

Mrs Jones is 46 years old and has struggled with her weight for many years. Despite numerous diets, she has never managed to achieve sustained weight loss and is obese with a BMI of 36. She has a history of hypertension and hyperlipidaemia, and type 2 diabetes mellitus was diagnosed three years ago. Annual checks have identified background retinopathy but no evidence of nephropathy or neuropathy. Six months ago she was started on insulin by the diabetes specialist team as her glycaemic control was poor on maximal oral hypoglycaemic therapy and she was due to undergo a cholecystectomy. Unfortunately, her glycaemic control has deteriorated further since starting insulin. Her HbA1c has increased from 91 mmol/mol Hb (DCCT 10.5%)<sup>2</sup> six months ago to 102 mmol/mol Hb (DCCT 11.5%). The practice nurse has been unable to check this result against the patient's home monitoring record because Mrs Jones has not been testing her blood glucose levels but monitoring her urine glucose instead. When her urine test is negative she has been omitting her insulin dose. You note that her blood pressure, cholesterol and triglycerides are elevated and that her weight has increased by a further 3 kg over the last six months.

As her GP, you are aware that Mrs Jones is divorced and is a single parent to her two young children. She also looks after her elderly parents and holds down a full-time job at a local bank. You are concerned that she is not prioritising her health and is not coping with insulin injections. She admits that she has not been prioritising her diabetes, she resents being on insulin and has also been forgetting to take her oral medications. On exploration of her health beliefs, she expresses her fear of having a hypoglycaemic episode. She has been eating larger amounts of carbohydrate regularly to run high blood glucose levels as she had one 'hypo' several months ago which frightened her. She has stopped driving since then and this is making life more stressful. Following discussion with Mrs Jones and the diabetes consultant, an urgent review with the diabetes clinical team is arranged.

The result of this multidisciplinary team (MDT) work is that more time is spent teaching her how to test and manage her blood glucose. She is informed of targets to aim for and a concordant agreement is reached regarding the number of blood glucose measurements and the number of insulin injections per day. Her obesity is discussed sensitively. It becomes clear that she has developed a number of eating behaviours that have contributed to her weight gain. She agrees to enrol on a structured education programme for type 2 diabetes and to be referred to the psychology service for support to change her eating behaviours. GLP-1 agonist therapy is initiated to assist weight loss and insulin is down-titrated. To support her making long-term significant changes to her lifestyle you signpost her to sources of information on local facilities for exercise and weight management.

Six months later, she has lost 12kg and is reaching glycaemic, lipid and blood pressure targets. She remains on the GLP-1 agonist and no longer requires insulin.

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<sup>2</sup> Diabetes Control and Complications Trial (DCCT) aligned units for HbA1c – see also Examples of Relevant Texts and Research below

## Reflective questions

To help you understand how the GP curriculum can be applied to this case, ask yourself the following questions:

Core Competence	Reflective Questions
<p><b>Fitness to practise</b> This concerns the development of professional values, behaviours and personal resilience and preparation for career-long development and revalidation. It includes having insight into when your own performance, conduct or health might put patients at risk, as well as taking action to protect patients.</p>	<p>What are my own feelings about overweight and obesity? How might my attitude, as well as societal attitudes, influence my care of patients who are overweight?</p> <p>What are the social implications of obesity?</p>
<p><b>Maintaining an ethical approach</b> This addresses the importance of practising ethically, with integrity and a respect for diversity.</p>	<p>As Mrs Jones' GP, what is my legal responsibility in relation to her fitness to drive with diabetes? What is the GMC's advice? (see also case illustrations in 3.16 Care of People with Eye Problems and 3.18 Care of People with Neurological Problems and Web Resources below)</p>
<p><b>Communication and consultation</b> This is about communication with patients, the use of recognised consultation techniques, establishing patient partnerships, managing challenging consultations, third-party consulting and the use of interpreters.</p>	<p>Have I explored Mrs Jones' ideas, concerns and expectations?</p> <p>Does this case demonstrate respect for Mrs Jones' autonomy?</p>
<p><b>Data gathering and interpretation</b> This is about interpreting the patient's narrative, clinical record and biographical data. It also concerns the use of investigations and examination findings, plus the adoption of a proficient approach to clinical examination and procedural skills.</p>	<p>What potential emergencies may arise in this situation?</p> <p>How would I recognise a diabetic emergency?</p> <p>What other factors may affect the validity of the HbA1c value?</p>
<p><b>Making decisions</b> This is about having a conscious, structured approach to decision-making; within the consultation and in wider areas of practice.</p>	<p>How confident am I to add medications in the care of diabetic patients?</p>
<p><b>Clinical management</b> This concerns the recognition and management of common medical conditions encountered in generalist medical care. It includes safe prescribing and medicines management approaches.</p>	<p>How can I demonstrate my ability to act as a team leader and a team member in this case?</p>
<p><b>Managing medical complexity</b> This is about aspects of care beyond managing straightforward problems. It includes multi-professional management of co-morbidity and poly-pharmacy, as well as uncertainty and risk. It also covers</p>	<p>How would I explain to Mrs Jones the importance of managing her blood glucose, blood pressure, lipids and weight?</p>

appropriate referral, planning and organising complex care, promoting recovery and rehabilitation.	
<p><b>Working with colleagues and in teams</b></p> <p>This is about working effectively with other professionals to ensure good patient care. It includes sharing information with colleagues, effective service navigation, use of team skill mix, applying leadership, management and team-working skills in real-life practice, and demonstrating flexibility with regard to career development.</p>	<p>How are the diabetics managed in my practice? Who follows them up? What are the shared care protocols?</p> <p>How do I liaise with the diabetes specialist nurse and the local diabetologist?</p>
<p><b>Maintaining performance, learning and teaching</b></p> <p>This is about maintaining performance and effective CPD for oneself and others. This includes self-directed adult learning, leading clinical care and service development, participating in commissioning*, quality improvement and research activity.</p>	<p>What is the evidence base for current glycaemic, lipid and blood pressure targets in diabetes?</p>
<p><b>Organisational management and leadership</b></p> <p>This is about the understanding of organisations and systems, the appropriate use of administration systems, effective record keeping and utilisation of IT for the benefit of patient care. It also includes structured care planning, using new technologies to access and deliver care and developing relevant business and financial management skills.</p>	<p>How would I audit the diabetic care in my practice? What standard and criteria would I use and why?</p>
<p><b>Practising holistically and promoting health</b></p> <p>This is about the physical, psychological, socioeconomic and cultural dimensions of health. It includes considering feelings as well as thoughts, encouraging health improvement, preventative medicine, self-management and care planning with patients and carers.</p>	<p>How does an awareness of social and psychological factors help the management of this patient?</p>
<p><b>Community orientation</b></p> <p>This is about involvement in the health of the local population. It includes understanding the need to build community engagement and resilience, family and community-based interventions, as well as the global and multi-cultural aspects of delivering evidence-based, sustainable healthcare.</p>	<p>What is the local strategic approach to tackling overweight and obesity in my area, including non-NHS partners?</p>

## How to learn this area of practice

### Work-based learning

#### In primary care

As a GP specialty trainee, primary care is the best place for you to learn how to manage common metabolic problems such as diabetes because it is where the vast majority of patients present and are managed. There is no substitute for clinical experience, supported by your GP trainer and experienced members of the primary healthcare team.

Particular areas of learning include risk factor management, 'motivational interviewing'<sup>3</sup> to help people change health behaviours, acute and emergency management of metabolic problems as they present in primary care, and chronic disease management including surveillance for and early diagnosis of complications.

Some GP practices offer level 2 services in diabetes or obesity. Other arrangements may include intermediate diabetes care clinics. You will find it beneficial to attend some sessions.

#### In secondary care

Secondary care is the best place for you to learn about patients with uncommon but important metabolic or endocrine conditions such as Addison's disease and hypopituitarism, as well as about patients with complex needs or with complications of the more common metabolic conditions.

Some GP training programmes include placements of varying duration with diabetes or endocrinology specialists, giving trainees exposure to patients with serious diabetes or endocrine problems in the acute setting. Most specialist care is, however, provided in outpatient clinic settings and you should take the opportunity to attend specialist diabetes, endocrine and obesity clinics when working in other hospital posts. You should also consider attending specialist clinics during your general practice placements.

Particular areas of learning include how to recognise metabolic or endocrine disorders that may be life-threatening if missed, which groups or types of patients are best followed up by a specialist team and when patients who are usually managed in primary care should be referred to a specialist team, including the timing and route of such referrals.

### Self-directed learning

An e-learning programme for practitioners in the NHS and local authorities working in weight management has been developed by the Department of Health obesity team in partnership with the Department of Health e-learning for Healthcare ([www.e-lfh.org.uk](http://www.e-lfh.org.uk)).

As part of the e-GP programme ([www.e-GP.org](http://www.e-GP.org)) the RCGP offers two curriculum-based e-learning modules on metabolic problems (Diabetes; Endocrine and Metabolic Problems). There are also

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<sup>3</sup> Motivational interviewing (MI) is an evidence-based technique for producing behavioural change by helping patients explore and resolve ambivalence towards change. It uses a patient-centred, supportive and goal-directed approach which is collaborative rather than 'coercive' (see also Examples of Relevant Texts and Research below)

sessions on obesity in adults and children (in the Promoting Health & Preventing Disease module and the Children and Young People module). These are interactive and reflective e-learning sessions that enhance GP training and support preparation for appraisal and revalidation.

### Learning with other healthcare professionals

The achievement of good outcomes in the care of chronic metabolic conditions such as diabetes or obesity requires well-organised and co-ordinated services that draw on the knowledge and skills of health and social care professionals across primary and secondary care. As a specialty trainee it is important for you to attend nurse-led diabetes annual review assessments in practice and gain an understanding of the follow-up of diabetic patients in primary care. It is also important to understand the role of district nurses in the management of diabetic leg ulcers. You should also take the opportunity to sit in with colleagues such as specialist diabetes or obesity nurses, dieticians and psychologists in a secondary or intermediate care setting to learn from and appreciate the contribution of these professional groups.

### Formal learning

Some higher-education institutions provide postgraduate certificate courses in diabetes and metabolic problems. The Intercollegiate Group on Human Nutrition is a group of the Academy of Medical Royal Colleges whose main objective is to provide courses and education on nutrition primarily for medical practitioners. For example, the Intercollegiate Course on Human Nutrition is suitable for general practitioners wishing to develop a special interest in nutrition ([www.aomrc.org.uk/intercollegiate-group-on-nutrition/icgn-courses.html](http://www.aomrc.org.uk/intercollegiate-group-on-nutrition/icgn-courses.html)).

## Useful learning resources

### Books and publications

- Diabetes Control and Complications Trial (DCCT) Research Group. The effect of intensive diabetes treatment on the development and progression of long-term complications in insulin-dependent diabetes mellitus. The Diabetes Control and Complications Trial *New England Journal of Medicine* 1993; 329: 977–86
- United Kingdom Prospective Diabetes Study – UKPDS 33. Intensive blood glucose control with sulphonylureas or insulin compared with conventional treatment and risk of complications in patients with type 2 diabetes *Lancet* 1998; 352: 837–53
- United Kingdom Prospective Diabetes Study – UKPDS 34. Effect of intensive blood-glucose control with metformin on complications in overweight patients with type 2 diabetes *Lancet* 1998; 352: 854–65
- United Kingdom Prospective Diabetes Study – UKPDS 38. Tight blood pressure control and risk of macrovascular and microvascular complications in type 2 diabetes *British Medical Journal* 1998; 317: 703–13
- The ACCORD study group. Effect of intensive glucose lowering in type 2 diabetes *New England Journal of Medicine* 2008; 358: 2545–59
- The ACCORD study group. Effect of intensive blood pressure control in type 2 diabetes *New England Journal of Medicine* 2010; 362: 1563–74
- The ACCORD Study Group. Long-term effects of intensive glucose lowering on cardiovascular outcomes. *New England Journal of Medicine* 2011 Mar 3; 364(9):818-28  
[www.ncbi.nlm.nih.gov/pubmed/21366473](http://www.ncbi.nlm.nih.gov/pubmed/21366473)
- The ADVANCE collaborative group. Intensive blood glucose control and vascular outcomes in patients with type 2 diabetes *New England Journal of Medicine* 2008; 358: 2560–72

- The Look AHEAD Research Group, Cardiovascular effects of intensive lifestyle intervention in type 2 diabetes *New England Journal of Medicine* 2013 Jul 11; 369(2):145-54  
[www.ncbi.nlm.nih.gov/pubmed/23796131](http://www.ncbi.nlm.nih.gov/pubmed/23796131)
- Arguedas JA, Leiva V, Wright JM. Blood pressure targets for hypertension in people with diabetes mellitus *Cochrane Database Systematic Review* 2013 Oct 30;10:CD008277. doi: 10.1002/14651858.CD008277.pub2 [www.ncbi.nlm.nih.gov/pubmed/24170669](http://www.ncbi.nlm.nih.gov/pubmed/24170669)
- British Medical Association and Royal Pharmaceutical Society of Great Britain. *The British National Formulary* London: BMJ Books, updated annually
- Gadsby R. *Diabetes and Endocrine Disorders in Primary Care* London: RCGP Publications, 2009
- Gandy JW, Madden A, Holdsworth M. *The Oxford Handbook of Nutrition and Dietetics*. Oxford. Oxford University Press, 2011
- Gloy VL, Bhatt DL, Kashyap SR et al. Bariatric surgery versus non-surgical treatment for obesity: a systematic review and meta-analysis of randomised controlled trials *British Medical Journal* 2013 Oct 22; 347:f5934 [www.ncbi.nlm.nih.gov/pubmed/24149519](http://www.ncbi.nlm.nih.gov/pubmed/24149519)
- Holt T and Kumer S. *ABC of Diabetes* London: BMJ Books, 2010
- Miller WR and Rollnick S. *Motivational Interviewing: preparing people for change* New York, NY: Guilford Press; 2002
- Poskitt E and Edmonds L. *Management of Childhood Obesity* Cambridge: Cambridge University Press, 2008
- Saltar N and Lean M. *ABC of Obesity* London: BMJ Books, 2007
- Turner H and Wass J. *The Oxford Handbook of Endocrinology and Diabetes* Oxford: Oxford University Press, 2009

## Web resources

### Association for the Study of Obesity (ASO)

The UK's foremost charitable organisation dedicated to the understanding and treatment of obesity.  
[www.aso.org.uk](http://www.aso.org.uk)

### Diabetes in Scotland

*The Scottish Diabetes Framework* published in April 2002 sets out the first steps of a 10-year programme to address the problem of diabetes. This website provides a record of what has been achieved as well as a means of sharing information and ideas about the challenges and opportunities ahead. [www.diabetesinscotland.org.uk/Publications.aspx](http://www.diabetesinscotland.org.uk/Publications.aspx)

### Diabetes UK

The leading charity working for people with diabetes, funding research, campaigning and helping people to live with the condition. [www.diabetes.org.uk](http://www.diabetes.org.uk)

### Driver and Vehicle Licensing Agency (DVLA)

DVLA guidelines for doctors regarding driving licences for patients with medical disorders.  
[www.dft.gov.uk/dvla//medical.aspx](http://www.dft.gov.uk/dvla//medical.aspx)

### International Diabetes Federation

A non-governmental organisation working with the World Health Organisation (WHO) and the Pan American Health Organisation (PAHO) to promote diabetes care, prevention and research into a cure. [www.idf.org](http://www.idf.org)

## **International Association for the study of obesity (IASO)**

The International Association for the Study of Obesity (IASO) is an umbrella organisation for 53 national obesity associations, representing 55 countries.

SCOPE (Specialist Certification in Obesity Professional Education) is IASO's official obesity education programme, designed for all health professionals and is comprised of 5 different workstreams including e-learning and live training courses. [www.iaso.org/scope/about-scope/](http://www.iaso.org/scope/about-scope/)

## **Malnutrition Task Force**

A number of guides on implementing nutritional care in hospital and community settings, as well as some brief summary information for commissioners are available on this website

[www.malnutritiontaskforce.org.uk](http://www.malnutritiontaskforce.org.uk)

## **National Service Framework for Diabetes: standards (Department of Health, England, 2001)**

[www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH\\_4002951](http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4002951)

## **Diabetes National Service Framework (Wales)**

The Diabetes NSF standards were published in England in December 2001 and have been adapted for use in Wales. The Diabetes NSF Standards (Wales) were published on 29 April 2002. The Delivery Strategy was launched in Wales in Spring 2003. The website provides information on key documents.

[www.wales.nhs.uk/sites3/home.cfm?orgid=440](http://www.wales.nhs.uk/sites3/home.cfm?orgid=440)

## **National Institute for Health and Care Excellence – NICE Guidelines: Clinical Guidance (CG) and Public Health Guidance (PH)**

- Behaviour change at population, community and individual levels( PH 6), 2007
- Cardiovascular risk assessment and the modification of blood lipids for the primary and secondary prevention of cardiovascular disease (CG 67), 2008
- Identification and management of familial hypercholesterolaemia (CG 71), 2008
- Obesity: the prevention, identification, assessment and management of overweight and obesity in adults and children (CG 43), 2006
- Preventing type 2 diabetes – population and community interventions in high-risk groups and the general population (PH 35), 2011
- Type 2 diabetes: prevention and management of foot problems (CG 10), 2004
- Nutrition support in adults (CG32)
- Type 2 diabetes: the management of type 2 diabetes (CG 66), 2008
- Type 2 diabetes: newer agents (CG 87). 2009
- Weight management before, during and after pregnancy (PH 27), 2010
- QS6 Diabetes in adults quality standard, 2011
- Obesity - working with local communities (PH42) 2012Managing overweight and obesity among children and young people (PH47) 2013
- Acute kidney injury: Prevention, detection and management of acute kidney injury up to the point of renal replacement therapy (CG169)

[www.nice.org.uk](http://www.nice.org.uk)

### **National Obesity Forum**

An independent organisation set up to raise awareness of the emerging epidemic of obesity and its impact on both individuals and the NHS. Resources are designed to help prevent and treat obesity in adults. [www.nationalobesityforum.org.uk](http://www.nationalobesityforum.org.uk)

### **Obesity Learning Centre**

A website developed by the National Heart Forum with the support of the Department of Health and Department of Education to support people who work either directly or indirectly in promoting a healthy weight and tackling obesity. [www.ncdlinks.org/olc](http://www.ncdlinks.org/olc)

### **Primary Care Diabetes Society**

This group represents all healthcare professionals involved with primary care diabetes, not only general practitioners and practice nurses but also GPSIs (GPs with a Special Interest) and clinical assistants. It has built a database of key opinion leaders working in primary care as well as forged close links with leading bodies in diabetes. [www.pcdsociety.org](http://www.pcdsociety.org)

### **Royal College of General Practitioners**

e-GP includes two curriculum-based e-learning modules on metabolic problems (Diabetes; Endocrine and Metabolic Problems), a number of sessions on obesity in adults and children, and a session on the examination of a patient with symptoms of an overactive thyroid [www.e-GP.org](http://www.e-GP.org)

RCGP Nutrition resource

This provides essential information under four separate topics obesity, malnutrition and nutritional deficiency, food allergy and eating disorders. [www.rcgp.org.uk/clinical-and-research/clinical-resources/nutrition.aspx](http://www.rcgp.org.uk/clinical-and-research/clinical-resources/nutrition.aspx)