

For Healthcare Professionals:

AN INTEGRATED CAREER AND COMPETENCY FRAMEWORK FOR ADULT DIABETES NURSING

Endorsed by:

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FOREWORD

Welcome to the 6th edition of the Integrated Career and Competency Framework for Adult Diabetes Nursing.

Diabetes nursing has progressed considerably since the first version of a set of competencies for nurses working in diabetes was published in 2005. This document has evolved and been adapted since then to reflect these changes to still remain a valid resource for nurses to plan a career pathway in diabetes nursing, as well as a tool to benchmark competence in whatever aspect or level a nurse is working in diabetes care.

We would like to thank the people listed below who reviewed the previous edition and recommended areas that needed updating and adding, and also to those who wrote the 5 new topics included in this edition.





Debbie Hicks, June James, Co-chairs, Trend Diabetes

The nursing community provides a vital and valuable contribution to the care of people at risk of developing type 2 diabetes, and those living with type 1 or type 2 diabetes- providing the support, education and advice that people need to manage their own health on a day-to-day basis. This 6th edition of the framework continues to provide all nurses and unregistered practitioners, no matter where they work, with clear guidance on the competencies needed to meet professional standards of practice.

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1. INTRODUCTION

Previous editions have described the development and evolution of this document from the first edition written by the now defunct UKDSN forum in 2005. More than 40 generalist and specialist nurses, and people living diabetes, were involved in creating the framework, with feedback provided by over 250 people working in diabetes care.

Much has changed in diabetes care since 2005, and so the Integrated Career and Competency Framework has evolved to keep abreast of these changes, to ensure that nurses keep up-to-date and work effectively to provide a high quality service for the diabetes population and the rest of the multi-disciplinary team they work with. Competence in your role can enhance job satisfaction but for the NHS, has huge implications for efficiency, cost-effectiveness, reduction in wasted resources, prevention of harm, and providing a favourable experience for the users of health services.

The management of diabetes is rapidly changing, with the advances in technologies to monitor glycaemic control, growth in new therapies and devices, and new ways of interacting with people with diabetes instead of traditional face to face consultations. Nurses are at the forefront in delivering diabetes care and so have had to adapt practice and learn new skills to encompass these changes. Much of the traditional diabetes specialist role has been taken up by practice nurses and unregistered practitioners, leaving the specialist nurse to focus on people with complex needs. The dissemination of diabetes care to a hierarchy of workers with varying skill levels makes economic sense in managing a burgeoning workload, but clear expectations of competence to be achieved is critical to ensure quality of care is not compromised.

Diabetes is an increasingly common, complex condition affecting all aspects of the individual's life, potentially resulting in costly and life-changing acute and long-term complications. With the dramatic increase in the diabetes population, in an environment where healthcare resources are not limitless, the development of self-management skills is essential to enable people to live well with the condition and reduce their risk of complications. Nurses are key to promoting self-management skills, either in one-to-one consultations or through the delivery of structured diabetes education and self-management programmes. From the individual with diabetes' perspective, the nurse is often the person who links many aspects of their diabetes care, signposting to other services to support selfmanagement as required, and explaining results and decisions made. Identification and assessment of competence is crucial to ensure nurses working with people living with diabetes are able to provide effective support.



The framework is a useful tool for identifying the educational needs of nurses and unregistered practitioners. No matter where an individual works, he or she will always be caring for people with diabetes. The document can be used both to recommend what level of competence is needed for a particular service when recruiting staff but also for workers to identify areas in which they need to develop to work effectively at a certain level. It can therefore be used to guide the progression of a career in diabetes nursing.

There are now 28 topic areas, ranging from the screening and early diagnosis of type 2 diabetes through to caring for someone with diabetes at the end of their life, with recommended competencies grouped at 5 levels:

- Unregistered practitioner
- 2. Competent nurse
- 3. Experienced or proficient nurse
- 4. Senior practitioner or expert nurse
- 5. Nurse consultant.

Users of the framework should identify their level of practice (or level to which they aspire), and the topics relevant to their area of practice. The framework now includes useful resources to signpost users to build knowledge, with a few examples of tools which could be used to assess someone's competence.

2. HOW TO USE THE FRAMEWORK

The framework can be used in a number of ways to develop and promote nurses' knowledge and skills. For example, to provide:

- · Help for individual nurses to plan their professional development in diabetes care.
- · Guidance for employers on assessing the competence required at various levels of diabetes nursing.
- · A reference for planning educational programmes.
- Information for commissioners to identify appropriate staff required to deliver diabetes services to meet local need.

The 5 defined competency levels make it possible for nurses delivering diabetes care to identify their level of practice. The framework gives them the ability to plan their careers in a more structured way (whether working in secondary care or the community) by using the topics relevant to their area of practice. It also supports their continuing professional development and training needs.

The Code: Professional standards of practice and behaviour for nurses and midwives (NMC 2018) recommends that as part of achieving all registration requirements, nurses should keep their knowledge and skills up to date. They should take part in appropriate and regular learning and professional development activities that aim to maintain and develop their competence and improve their performance. Also, as part of practising effectively, nurses should maintain the knowledge and skills needed for safe and effective practice, and provide honest, accurate and constructive feedback to colleagues.

The Framework can guide nurses to identify what appropriate learning is required and facilitate providing or receiving feedback through assessment of their (or that of others) competence by benchmarking against the relevant topics and level of practice.

The Integrated Career and Competency Framework is not about setting a series of task-orientated actions or practical activities for nurses to carry out. Rather, it describes the progression of knowledge and skills across the five competency levels and suggests how a nurse can build a career in diabetes care. It lists specific competencies for a suitably trained person to deliver diabetes care at a particular level and assumes general care is given competently.



3. SOME GUIDANCE ON HOW TO ASSESS COMPETENCY

Assessing and assuring competence in healthcare is essential with the increasing complexity of treatments and interventions available, for the prevention and management of risk, with the increasing cost of litigation, and for planning and developing new services to meet evolving need. It is also required to measure the efficacy of training and for identifying gaps in knowledge to inform training and personal development.

There is an increasing number of alternative providers of healthcare, and the comparison of provider performance (ability to deliver as well as cost) may lead to rejection of one provider for another. The financial constraints of the NHS in an environment of increasing demand emphasises the need to avoid waste through inefficiencies or litigation when mistakes are made, for example when providers are not delivering a competent service. Competence is also a core requirement for delivering high quality care to patients.

Why do nurses working in diabetes need to assess competence?

All nurses will need to provide evidence that they are safe and competent to practice. It is a requirement of the Knowledge and Skills Framework (NHS Employers, 2010) and to successfully pass through the relevant gateways identified in the Agenda for Change (NHS Employers 2017). Evidence of continuing professional development is also a requirement for the 3-yearly revalidation process for nurses to continue to be registered and practice (NMC 2019). The diversity of career pathways and the lack of a standard recognised diabetes specialist nursing qualification makes the demonstration of competence essential to ensure safe high-quality care and public confidence in the role. The recognition of competence at a personal level may also improve job satisfaction and self-confidence.

Who should assess competence?

Someone who has the knowledge and skills and experience of completing the task to be assessed, someone who is an expert, is appropriate to assess the competence of another. This may not necessarily be another nurse and it does not have to be someone senior to the person who is being assessed. When delegating a task (e.g. a district nurse delegating an aspect of care to a healthcare assistant), it is the responsibility of the delegator to ensure that the person is competent to complete the task.



When should competence be assessed?

Competence should be checked before someone takes on a new task or care. Unfortunately, internal factors, such as inertia or health issues, and external factors, such as inadequate staffing levels or lack of equipment or support, can all affect competency. Therefore, competency should be reviewed annually, with evidence collected in a portfolio for appraisal meetings and revalidation. There may be guidance provided by the employing Trust or organisation policies. It may be necessary to review competency earlier if there are concerns about the ability of an individual or as part of a serious event review.

Where?

This is usually undertaken in the place of work, during a placement or secondment, or in a college or place of training.

How to assess competence

Identify the topics that are relevant to the person's role and the level appropriate to their expected competency. An accurate description of the task is required, related to national guidelines, local policies or manufacturers' guidelines. Competency can be measured in a number of ways, such as by a quiz, questionnaire or verbal questioning to assess knowledge and understanding, observation of a task being completed, review of care plans, record keeping and other documents. The following table gives some examples related to descriptive words used in the Integrated Career and Competency Framework for Diabetes Nursing.

The outcome of the assessment should be a written account of those competencies which have been performed to the acceptable level expected of the individual according to their job role and responsibilities, as well as those competencies which have not been achieved. An action plan should be agreed by the assessor and the assessee as to how the failed competency can be met, then reassessed at an appropriate time in the future.

Assessments of con	npetence	
1. Interpret	Ask the person to examine and identify patterns or problems from a given range of results, for example, a blood glucose profile.	
2. Lead on	Ask for evidence of organising and chairing meetings, developing guidelines or disseminating knowledge to groups of others.	
3. Demonstrate/ perform	 Someone who is experienced and acknowledged as competent should observe the task being performed and assess if it has been completed properly (e.g. the correct use of a blood glucose meter as per the manufacturer's guidelines, as well as in compliance with local policy about safe disposal of sharps, infection control, etc.). Ask the person to describe what they would do in a particular situation or clinical scenario (e.g. how they would identify and treat hypoglycaemia). 	
4. Initiate	Example of prescribing new treatment, referral or intervention in the context of a case scenario.	
5. Provide expert advice	 Example of an insulin management plan developed by a DSN for district nurses to follow Example of a letter to a GP explaining the rationale for a prescribing decision and the ongoing care required. Publication of articles or national guidance or delivering presentations locally or nationally. 	
6. Teach	 Observation of delivering a structured education group or one-to-one session. Evaluation or post-training knowledge survey from a teaching session. 	
7. Explain, describe, state, list, understand, know, identify	Verbal questioning or written test.	
Useful resource	More information about competency assessment including a programme and tools for band 6 and band 7 newly appointed DSNs can be found at Welsh Academy for Nursing in Diabetes available at www.wand-wales.co.uk/clinical/competencies/	

4. THE NURSE CONSULTANT'S ROLE

At the time of revising the Framework, there were less than 30 diabetes nurse consultants, who were only employed in England and mainly in the South, particularly in London. Much of the role is strategic, facilitating the development of high quality, evidence-based practice across all areas of diabetes nursing, initiating research and evaluation, and supporting the education and competency of other healthcare professionals (RCN 2017).

As such, the competence statements are similar across all topics so to make room for the useful resources and assessment tool examples, the nurse consultant section has been removed from each topic page. The core statements are listed below:

As 4 Senior practitioner or expert nurse, and:

- · Work with stakeholders to develop and implement local guidelines, promoting evidence-based practice and cost-effectiveness.
- Lead on developing, auditing and reporting on patient-related experience and patient-related outcome measures, and be able to produce information on relevant outcomes of interventions, including contributing to national data collections and audits.
- · Initiate and lead research in identification and management of diabetes related to nursing through leadership and consultancy.
- Identify service shortfalls in diabetes and diabetes nursing and develop strategies with local commissioning bodies to address them.
- Identify the need for change, proactively generate practice innovations and lead new practice and service redesign solutions to better meet the needs of people with diabetes.
- · Lead on liaising with local and national public health networks and diabetes teams in the development of integrated care pathways.
- Influence national policy regarding relevant areas of diabetes nursing care.
- Work in collaboration with higher educational institutions and other education providers to meet the learning needs of other healthcare professionals.



5. COMPETENCY FRAMEWORK



1. SCREENING, PREVENTION AND EARLY DETECTION OF TYPE 2 DIABETES

For the prevention and	early detection of type 2	2 diabetes, you should be able to:
Unregistered practitioner	Describe the risk factRecognise and descrRecognise when it isExplain the important	nd symptoms of diabetes. tors for developing type 2 diabetes. ribe the differences between type 1 and type 2 diabetes. appropriate to undertake screening for type 2 diabetes. ce of prevention or delay in progression to type 2 diabetes. guidance on screening to identify type 2 diabetes.
2. Competent nurse	As 1, and:	
	2 diabetes (NHS Engl Identify individuals at gestational diabetes appropriate screening Provide advice to ind changes for the onway Keep a register and eprogression to type 2 Include people with reviews and retinopa Describe the care pa Demonstrate knowle Outline the long-tern	trisk of type 2 diabetes (e.g. long-term use of steroids and antipsychotic medication, previous and those from South Asian, Black, Caribbeanonward or African/American origin) and initiate g/diagnostic tests. lividuals at risk with regard to lifestyle changes, including exercise programmes and dietary ard referral for structured education for the prevention of type 2 diabetes. ensure appropriate follow-up/system of recall is in place for those at risk to identify the ediabetes. newly diagnosed type 2 diabetes to the practice diabetes register so they have access to annual
	Be aware of local policy and programmes regarding vascular screening and diabetes prevention.	
3. Experienced or proficient nurse	 As 2, and: Interpret test results and if diagnostic, make appropriate referrals. Educate other healthcare professionals and care workers with regard to the risks of developing type 2 diabetes. Participate in, and refer people to, programmes in conjunction with other agencies that address the role of lifestyle intervention in the prevention or delay in progression to type 2 diabetes. Participate in, and refer people to, screening programmes in conjunction with other agencies for the early detection of type 2 diabetes (e.g. care/residential homes). Be aware of the need to refer people with newly diagnosed diabetes to a structured education programme. Monitor and support junior staff to ensure they have the appropriate competence. Be aware of the impact that very low diets may have on diabetes progression (NHS England, 2021) 	
4. Senior practitioner	As 3, and:	
or expert nurse	professionals and car Contribute to the evic type 2 diabetes. Contribute to the evic high-risk groups. Participate in the dev	e on the benefits of screening programmes/procedures for high risk groups to healthcare re workers, those at risk of developing type 2 diabetes, and commissioners. dence base and implement evidence-based practice in relation to the prevention of dence base and implement evidence-based practice in relation to type 2 diabetes screening in relopment of local guidelines and programmes of education and care for the screening/detection of type 2 diabetes.
Suggested examples t		Useful resources:
		NICE 2012 Type 2 diabetes: prevention in people at high risk. Public Health Guidance (PH38) Updated 2017 available at www.nice.org.uk/Guidance/PH38 Validated diabetes risk assessment tools:

- 2 diabetes or Non-Diabetic Hyperglycaemia
- ✔ Describe the care pathway for someone identified with NDH, and the advice he or she should be given.

www.qdiabetes.org/

https://riskscore.diabetes.org.uk/start

E-learning:

A free e-learning module from PCDS on Non-diabetic hyperglycaemia and type 2 diabetes prevention Available at: www.diabetesonthenet.com/course/diabetes-prevention/details

2. NEWLY DIAGNOSED TYPE 1 DIABETES

To support the person with newly diagnosed type 1 diabetes, you should be able to: 1. Unregistered Understand the difference between type 1 and type 2 diabetes. Perform blood glucose and blood ketone monitoring and report findings to a registered nurse. practitioner Observe and report any concerns that might affect the ability of the person to self-care. Encourage the person to use their individualised and agreed care plan. 2. Competent nurse List the presenting signs and symptoms and diagnostic criteria for type 1 diabetes, and the requirement for urgent medical attention. Be aware that the individual should be under the care of a specialist diabetes team. Understand the need for regular insulin therapy and monitoring of blood glucose and ketones. Administer an insulin injection if prescribed. Advise on storage of insulin and safe disposal of sharps. Be aware that insulin requirements may vary significantly in the first few weeks after diagnosis. Assess the ability of the individual to self-care and work with them or their carer to optimise self-care skills, such as in injecting insulin, monitoring blood glucose and ketone levels and recognising and managing hypoglycaemia. Signpost to information and support to encourage informed decision-making about living with diabetes and managing life events (e.g. structured education). Advise when to seek urgent medical help, and provide with emergency contact details. Follow local/national guidelines in the management of diabetic ketoacidosis and severe hypoglycaemia. Ensure the person is aware of local peer support groups which are a vital support network. Understand the language used to discuss the diagnosis and care matters Ensure the individual is included on the diabetes register. Understand that the individual needs time to process the diagnosis - this will vary between individuals 3. Experienced or proficient nurse Assess the emotional state of the individual and provide tailored, structured education relating to self-care skills at an Advise on the requirements for insulin-users by the DVLA. Identify psychosocial barriers to self-care and refer on where necessary. Help the individual with type 1 diabetes to develop a holistic care plan including appropriate clinical targets and arrange follow-up support. Demonstrate understanding regarding the different insulin therapies, including timings of injections, profiles of action and duration, and correct administration technique. Ensure access to an appropriate monitoring system for glucose and ketones according to changing technology. Monitor and support junior staff to ensure they have appropriate competence. 4. Senior practitioner As 3, and: or expert nurse Provide information and support to encourage the person with diabetes to make informed choices about managing

- Provide information and support to encourage the person with diabetes to make informed choices about managing their diabetes, including: choice of treatment and follow-up; requirements and rationale for monitoring both blood glucose and ketones, and risk reduction of acute and long-term complications.
- Demonstrate in-depth knowledge regarding the use of different insulin therapies and advanced technology to support these individuals in the management of their diabetes.
- Demonstrate understanding and provide education supporting nutritional requirements, glycaemic effects of different foods, weight management and concepts of carbohydrate counting with support from dietetic colleagues.
- Provide education for other HCPs and care workers in diabetes self-care skills.
- Be a named contact for advice and support.

Suggested examples to assess competence in this area:

- Provide a description or anonymous care plan of an individual with newly diagnosed type 1 diabetes.
- Direct questioning about the care pathway for someone with newly diagnosed type 1 diabetes.
- Direct questioning about the onset, action and duration of a variety of insulin types.

Useful resources:

NICE NG17 Type 1 diabetes in adults: diagnosis and management (2016) available at www.nice.org.uk/quidance/ng17

Trend Diabetes (Updated 2021) Injection Technique Matters. Best practice guideline to support correct injection technique in diabetes care. Online: https://trenddiabetes.online/injection-technique-matters/

Language Matters, NHS England 2018 available at www.england.nhs.uk/wp-content/uploads/2018/06/language-matters.pdf

3. ESTABLISHED TYPE 1 DIABETES

To support the person with existing type 1 diabetes, you should be able to: 1. Unregistered Understand the difference between type 1 and type 2 diabetes. practitioner Perform glucose and ketone monitoring and report findings to a registered nurse. Understand that insulin should never be discontinued. Encourage the person to use their individualised and agreed care plan 2. Competent nurse Understand the need for regular insulin therapy and monitoring of blood glucose and ketones. Be aware that insulin requirements may need to change in response to a variety of circumstances (e.g. activity, intercurrent illness, steroid use). Assess the ability of the individual to self-care and enable them to continue managing their diabetes during a hospital stay, if appropriate. Assess understanding about recognising the symptoms of hypoglycaemia and use of appropriate treatments. Signpost to information and support to encourage informed decision-making about living with diabetes and managing life events (e.g. structured education programme 6 months or more after diagnosis). Ensure that you are aware of language used in consultation and how important it is congruent and accurate Ensure the person has an annual diabetes review, including retinopathy and foot screening. Be aware of local support groups which may be appropriate for the individual Follow local/national guidelines in the management of diabetic ketoacidosis and severe hypoglycaemia. 3. Experienced or As 2, and: proficient nurse Provide tailored, structured education relating to self-care skills such as insulin adjustment and management of intercurrent illness Recognise psychological wellbeing or lack of it and how this may impact on diabetes self-management Identify psychosocial barriers to self-care and refer on where necessary. Help the individual to develop an individualised holistic care plan, with agreed goals. Demonstrate understanding regarding the different insulin therapies, including timings of injections, profiles of action and duration, and correct administration technique. Monitor and support junior staff to ensure they have appropriate competence. 4. Senior practitioner or expert nurse Provide information and support to encourage the person with diabetes to make informed choices about managing their diabetes, including: choice of treatment and follow-up; requirements and rationale for monitoring both glucose and ketones; and risk reduction of acute and long-term complications. Discuss new technology options where Provide advice on family planning, pre-conception care and pregnancy for women of child-bearing age. Demonstrate in-depth knowledge regarding the use of different insulin therapies and advanced technology to support these individuals in the management of their diabetes (e.g. insulin pump therapy, smart meters, Continuous Glucose Monitoring). If a registered non-medical prescriber, prescribe medications including insulin and devices, within own competence and scope of practice. Demonstrate understanding and provide education supporting nutritional requirements, glycaemic effects of different foods, weight management and concepts of carbohydrate counting. With support from dietetic colleagues Provide education for other HCPs and care workers in the management of type 1 diabetes and promotion of self-care skills.

Suggested examples to assess competence in this area:

- Provide a description or anonymous care plan of an individual with established type 1 diabetes.
- Be observed participating in a structured education programme for people with type 1 diabetes.
- Direct questioning about the onset, action and duration of a variety of insulin types.

Useful resources:

NICE NG17 Type 1 diabetes in adults: diagnosis and management (2016) available at www.nice.org.uk/guidance/ng17

Trend Diabetes (Updated 2021) Injection Technique Matters. Best practice guideline to support correct injection technique in diabetes care. Online: https://trenddiabetes.online/injection-technique-matters/

Language Matters, NHS England 2018 available at www.england.nhs.uk/wp-content/uploads/2018/06/language-matters.pdf

4. PROMOTING SELF-CARE

allows sharing ideas and discussions

around clinical situations.

To support the person to self-care for their diabetes, you should be able to: 1. Unregistered Support the person to develop self-care skills with guidance from a registered nurse. practitioner Observe and report any concerns that might affect the ability of the person with diabetes to self-care. Encourage people to use their individualised and agreed care plans. 2. Competent nurse Assess the ability of the person with diabetes to self-care and work with them or their carer to optimise self-care skills. Signpost people to information and local support groups which may help and encourage them to engage in self-care and self-management. Explain the importance of structured education to enhance their self-care knowledge and ability. Encourage people to attend structured education programmes to enable informed decision-making about living with diabetes and managing life events. Support the person in setting realistic goals and in the achievement of those goals. Provide current evidence about diabetes treatments which may encourage people to make lifestyle changes 3. Experienced or As 2, and: proficient nurse Have an awareness of goal-setting tools and frameworks which can be used to support the individual to set realistic goals and help them to review and achieve these goals. Develop some motivational interviewing skills to support and encourage people to take ownership of their diabetes. Assess the individual with diabetes, and their carer if appropriate, and provide tailored, structured education and support to optimise self-care skills and promote informed decision-making about lifestyle choices. Provide information and support to encourage the individual to make informed choices about monitoring and controlling their diabetes, including choice of treatment and follow up, and risk reduction of acute and long-term complications. Recognise the psychosocial barriers to self-care and refer on where necessary. Facilitate the development of an individualised and agreed care plan. 4. Senior practitioner As 3, and: or expert nurse Demonstrate knowledge of theoretical frameworks and educational philosophies underpinning behaviour change. Demonstrate knowledge and understanding of bio-physical and psychosocial factors affecting self-management of Demonstrate knowledge and skills to facilitate behaviour modification. Develop and ensure delivery of educational materials, supportive networks and models of diabetes care that foster empowerment and lifelong learning about diabetes. Work with the person with diabetes to facilitate lifestyle adjustment in response to changes in their diabetes or circumstances Provide education for other healthcare professionals and care workers in diabetes self-care skills. Suggested examples to assess Useful resources: competence in this area: JBDS-IP (2012) Self-management of diabetes in hospital available at: ✓ Be observed in a clinic situation and use www.abcd.care/sites/abcd.care/files/resources/JBDS_IP_SelfManagement.pdf peer review tools which can then be used in Diabetes UK Diabetes self-management education available at discussion afterwards. www.diabetes.org.uk/professionals/resources/resources-to-improve-your-clinical-practice/ Be observed participating in a structured diabetes-self-management-education education programme. Provide examples of care plans and demonstrate how they can be used to help promote self-care and how they can be used with goal-setting tools. ✔ Participate in clinical supervision which

5. EMOTIONAL WELL-BEING

To support the emotional well-being of someone with diabetes, you should be able to: 1. Unregistered Demonstrate awareness that emotional health can impact the physical health of people living with diabetes. practitioner Have an understanding of the appropriate use of 'person first' language to encourage positive interactions with people living with diabetes. Support emotional well-being through the use of communication skills that demonstrate active listening and empathic verbal and non-verbal communication. 2. Competent nurse As 1. and: Demonstrate a good understanding of how to implement the principles and practices of person first language guidelines. Be able to describe the pyramid model of psychological need. Demonstrate an understanding of diabetes distress and how to use screening tools to identify distress in practice (e.g. The Diabetes Distress Screening Scale; The Problem Areas in Diabetes Scale). Have an understanding of the impact of culture and diversity, physical, intellectual, cognitive disability. Describe the 7 A's model for supporting individuals with their diabetes and emotional health (Aware, Ask, Assess, Advise, Assist, Assign, Arrange). Be aware of the main areas of emotional health and how to provide appropriate support - (facing life with diabetes, diabetes distress, diabetes specific fears such as fear of hypos, psychological barriers to insulin use, low mood and depression, anxiety and eating problems). 3. Experienced or As 2, and: proficient nurse Be able to train colleagues in the principles and practice of the person-first language and model these principles Demonstrate knowledge of the psychological impact of diabetes and facilitate referral to psychological support as required. Demonstrate they have adequate training (and supervision) to recognise emotional and psychological problems in people with diabetes and deliver an appropriate level of proactive support as part of ongoing diabetes care, including through the care planning process. Manage diabetes distress using the 7 A's model of supporting someone with distress in clinical practice (Aware, Ask, Assess, Advise, Assist, Assign, Arrange). 4. Senior practitioner As 3, and: or expert nurse Work in collaboration with other HCPs to model person-first language principles and ensure recommendations are being adopted at all touch points of care, including written communication and HCP/MDT meetings. Work with commissioners and HCP colleagues to ensure emotional and psychological support for people with diabetes of all ages is embedded in each step of the diabetes care pathway and is not limited to people with 'diagnosable/classifiable' psychological problems. Participate in the development of local guidelines for the detection, management and prevention of problems with emotional well-being. In collaboration with psychologist colleagues, develop programmes of education (for both HCPs and people living with diabetes), to promote the emotional well-being of the local population. Suggested examples to assess

competence in this area:

- Verbal questioning to assess knowledge and understanding.
- Observation of communication skills.
- Describe the main areas of emotional health and how they would approach these sensitively within their consultation.

DUK (2016) Position statement: Emotional and psychological support for people with diabetes. Diabetes Australia (2016) Diabetes and emotional health: A practical guide for healthcare professionals supporting adults with type 1 and type 2 diabetes.

NHS England (2018) Language Matters: Language and diabetes.

6. NUTRITION

sample of common foods.

To meet the person's individual nutritional needs, you should be able to: Unregistered Follow the individual's nutritional plan and report any related problems. Recognise foods and drinks high in carbohydrate and refined sugar. practitioner Measure and record waist circumference, height, weight and BMI. Recognise which diabetes medications may give rise to hypoglycaemia and advise the person with diabetes to seek prescriber advice before making lifestyle change if prescribed these medications. Report if meals are not eaten, especially carbohydrates, if the person is using insulin or taking sulphonylureas. 2. Competent nurse As 1, and: Calculate and interpret BMI against the healthy range. Understand which foods contain carbohydrate and how these may affect blood glucose levels differently. List the principles of a healthy, balanced diet, including low refined sugar, high fibre, low salt and low fat elements. State the key elements of recommended dietary patterns in type 2 diabetes (e.g. Mediterranean, Healthy Eating, Reduced Calorie and Low Carb) Recognise that there is no one-size-fits-all prescriptive approach to making food choices, and support an individualised approach. Identify people at risk of malnutrition and situations where healthy eating advice is inappropriate. Signpost people to evidence-based sources of information (e.g. Diabetes UK, British Dietetic Association). Provide written evidence-based information about diet. Refer to a dietitian where appropriate. 3. Experienced or As 2, and: proficient nurse Work in partnership with the individual and /or group with diabetes to identify realistic and achievable dietary changes to enable individuals to manage their blood glucose levels in the short and long term. List the dietary factors which affect cardiovascular risk. Be aware of local policy on the care of people undergoing enteral feeding and how different feeding regimens impact on blood glucose levels. Monitor and support junior staff to ensure they have appropriate competence. 4. Senior practitioner As 3, and: or expert nurse Perform an assessment of how lifestyle (i.e. diet and physical activity) and pharmacological agents impact on glycaemic control. Support the individual to make informed decisions about appropriate nutritional choices. Teach the person with diabetes and/or their carer, the principles of carbohydrate counting and medication dose adjustment where needed. Demonstrate knowledge and skills to facilitate behaviour change and have an understanding of the impact of health literacy on behaviour. Demonstrate knowledge of how to manage the specific needs of people with diabetes undergoing enteral feeding, following Bariatric surgery or End of Life. Suggested examples to assess Useful resources: competence in this area: Diabetes UK (2018) Evidence-based nutrition guidelines for the prevention and management Correctly classify a sample of food items into the appropriate food group and Diabetes and enteral feeding available at www.trenddiabetes.online/resources/ describe the effect each one could have on Carbs and Cals www.carbsandcals.com glycaemic control. Describe the underlying principles of carbohydrate counting and correctly identify the carbohydrate content of a

7. URINE GLUCOSE AND KETONE MONITORING

Participate in clinical supervision which allows sharing ideas and discussions

around clinical situations.

For the safe and effective use of urine glucose or ketone monitoring and associated equipment, you should be able to: 1. Unregistered Perform the urine test according to the manufacturers instructions and local guidelines. practitioner Perform the test unsupervised at the request of a registered nurse or as per care plan. Document and report the result according to local guidelines. 2. Competent nurse Interpret the test result and, if outside the expected range for the individual, make the appropriate referral. Teach the testing procedure to the person with diabetes or their carer. Identify situations where testing for urinary ketones is appropriate. Identify situations when blood ketone testing would be indicated. Recognise when an individual may need to be referred to specialist care for immediate treatment of diabetic ketoacidosis. 3. Experienced or As 2, and: proficient nurse Ensure people with diabetes are aware of when to test for urinary glucose or ketones. Ensure people with diabetes know what levels are acceptable or when to ask for help. If ketones present in the moderate or high range and unwell, refer urgently to emergency care for possible treatment of diabetic ketoacidosis Recognise when an individual may need to be referred to specialist care for immediate treatment to prevent diabetic ketoacidosis Use monitoring results to optimise treatment interventions according to evidence-based practice, and incorporate preferences of the person with diabetes. Ensure people with diabetes are aware of what to do when ill. Ensure people with diabetes know what action to take if vomiting should occur. Monitor and support junior staff to ensure they have appropriate competence. 4. Senior practitioner As 3, and: or expert nurse Demonstrate an awareness of when further diagnostic and surveillance tests such as HbA1c, random blood glucose, blood ketones, eGFR or blood gases would be indicated. Instigate further tests such as those above. Develop a specific pathway for monitoring of urine in diabetes care. If a non-medical prescriber, prescribe medications as required, within own competencies and scope of practice. Suggested examples to assess Useful resources: competence in this area: Type 1 diabetes: what to do when you are ill ✓ List situations when urinary glucose or Type 2 diabetes: what to do when you are ill ketones would be necessary. Available at www.trenddiabetes.online/resources/ ✓ Describe the advice you would give to someone with type 1 diabetes with moderate amount of ketones in their urine.

8. BLOOD GLUCOSE AND KETONE MONITORING

F	or the safe and effect	ive use of blood glucose and blood ketone monitoring and associated equipment, you should be able to:		
1.	Unregistered practitioner	 Perform the blood test according to manufacturer's instructions and local guidelines. Describe the normal range of glycaemia. Document and report any results which are outside the agreed target range to a registered nurse. Follow local policy for the safe disposal of sharps. Follow local quality assurance procedures. Recognise the signs and symptoms of hypoglycaemia and administer the appropriate amount of fast-acting glucose. 		
2.	Competent nurse	As 1, and:		
		 Teach the testing procedure to the person with diabetes and/or their carer. Identify and demonstrate an understanding of when it is appropriate to test for blood ketones Be able to advise on appropriate individualised glycaemic targets. Discuss appropriate frequency of glucose and ketone monitoring Interpret the results and report readings outside the individual's agreed target range to the appropriate person. Seek medical advice if blood ketones are 0.6 mmol/l or greater Seek urgent medical advice if blood ketones are 3.0 mmol/l or greater. Refer immediately to Emergency Care if individual is unwell 		
3.	Experienced or	As 2, and:		
	proficient nurse	 Interpret home blood glucose results, assess other parameters and take appropriate action including initiating further tests such as HbA1c or MSU. Interpret blood ketones, assess other parameters and take appropriate timely action. Teach people with diabetes or their carer to interpret test results and take appropriate action. Monitor and support junior staff to ensure they have appropriate competence. 		
4.	Senior practitioner	er As 3, and:		
	or expert nurse	 Use results to optimise treatment interventions according to evidence-based practice, taking into account the wishes of the person with diabetes Initiate continuous glucose monitoring if appropriate and available (NB: CGMS and flash glucose monitoring measures interstitial glucose) and interpret the results correctly. Develop specific local guidelines for use in different situations If a registered non-medical prescriber, prescribe medications as required, within own competence and scope of practice. 		
	uggested examples t			
	ompetence in this are	Type I diabetes. What to do when you are it		
44	Observation of perfo	orming the test correctly		

- ✓ Observation of performing the test correctly.
 ∴ Interpret a number of test results correctly.
- ✓ Interpret a number of test results correctly and state what action is required.
- Type 2 diabetes: what to do when you are ill
- Blood glucose monitoring guidelines: Consensus document

Available at www.trenddiabetes.online/resources/

9. SAFE USE OF GLUCOSE SENSOR TECHNOLOGY

and state what action is required.

For the safe and effec	ive use of interstitial glucose monitoring and associated equipment, you should be able to:	
Unregistered practitioner	 Perform the glucose test according to manufacturer's instructions and local guidelines. Describe the normal range of glucose for the individual. Document and report any results which are outside the agreed target range to a registered nurse. Follow local policy for the safe disposal of sharps. Follow local quality assurance procedures. Recognise the signs and symptoms of hypoglycaemia / hyperglycaemia and administer the appropriate amount of fast-acting glucose. 	
2. Competent nurse	As 1, and:	
	 Teach the application of the glucose sensor procedure to the person with diabetes and/or their carer where possible. Identify and demonstrate an understanding of when it is appropriate to test for glucose level. Be able to advise on appropriate individualised glycaemic targets. Discuss appropriate frequency of glucose monitoring. Interpret the results and report readings outside the individual's agreed target range to the appropriate person. Seek medical advice if glucose levels > 13mmols/mol check for blood ketones - see "Sick Day Rules" treatment. Seek urgent medical advice if blood ketones are 1.5mmol/l or greater. Refer immediately to Emergency Care if individual is unwell. 	
3. Experienced or	As 2, and:	
proficient nurse	 Interpret home glucose results, assess other parameters and take appropriate action including initiating further tests such as HbA1c. Interpret glucose data in relation to episodes of hypoglycaemia, hyperglycaemia and Time in Range (TIR), assess other parameters such as dietary intake, activity or intercurrent illness and take appropriate timely action. Teach people with diabetes and/or their carer to understand the glucose results and take appropriate action or to contact a healthcare professional if outside individual targets Monitor and support junior staff to ensure they have appropriate competence. 	
4. Senior practitioner		
or expert nurse	 Use results to optimise treatment interventions according to evidence-based practice, taking into account, the wishes of the person with diabetes Initiate Flash/continuous glucose monitoring if appropriate with discussion of person with diabetes or carer Develop specific local guidelines for use in different situations If a registered non-medical prescriber, prescribe sensors as required, within own competence and scope of practice. 	
Suggested examples		
competence in this ar✓ Observation of perform correctly.✓ Interpret a number	blood glucose monitoring guidelines. Consensus document Available at www.trenddiabetes.	

10. ORAL THERAPIES

For the safe administration and use of oral antihyperglycaemic medication, you should be able to: Unregistered Demonstrate an understanding of the progressive nature of type 2 diabetes and the need for treatment intensification practitioner over time Describe the effect of commonly used antihyperglycaemic agents on blood glucose levels. Describe the side effects of commonly used antihyperglycaemic agents. List the signs of hypoglycaemia and be able to administer appropriate treatment. 2. Competent nurse Demonstrate knowledge of the range of oral antihyperglycaemic agents currently available and their mode of action. Demonstrate knowledge of therapeutic doses and recommended timing of doses. Administer or supervise the administration of prescribed medication, and document accurately. Explain to the person with diabetes the risks and benefits of taking, or not taking, a medicine. List which oral antihyperglycaemic agents carry a risk of hypoglycaemia. Describe how the efficacy of oral therapies is measured. 3. Experienced or As 2, and: proficient nurse Describe indications for the initiation of different classes of oral antihyperglycaemic agents. Demonstrate understanding of the various factors which impact on the action of antihyperglycaemic agents. Assess the impact of multiple pathologies, co-morbidities, existing medications such as steroids, contraindications and awareness of cautions including eGFR and renal function on management options. Demonstrate understanding around the potential for adverse effects and how to avoid, recognise, report, minimise and manage them. Apply the principles of evidence-based practice including cost-effectiveness. Demonstrate up-to-date knowledge of, and work within, national and local guidelines (e.g. NICE, SIGN, ADA/EASD). Evaluate treatment outcomes in a timely fashion, recognising when changes are required (such as escalation, reduction, addition or cessation of therapy according to the needs of the individual). Monitor and support junior staff to ensure they have the appropriate competence. 4. Senior practitioner or expert nurse Explain the rationale behind, and the potential risks and benefits of different therapies. Facilitate and support structured evidence-based education relating to antihyperglycaemic agents for individuals or aroups Demonstrate awareness and understanding of published research in new oral therapies. If a registered non-medical prescriber, prescribe medication as required within own competencies and scope of practice. Adjust oral treatment according to individual circumstances, following local policies or individual clinical management plans. Audit outcomes of care against accepted national and/or local standards.

Suggested examples to assess competence in this area:

- Provide examples of anonymous management plans demonstrating appropriate use of medications.
- Direct questioning about actions, doses, and common side effects of a sample of oral antihyperglycaemic agents from different classes.

Useful resources:

NICE (2015) Type 2 Diabetes in Adults: Management. Clinical Guideline 28. Last updated Dec 2020. Available at: www.nice.org.uk/Guidance/NG28

SIGN (2017) SIGN 154: Pharmacological management of glycaemic control in people with type 2 diabetes. SIGN, Edinburgh. Available at: https://www.sign.ac.uk/media/1090/sign154.pdf

ADA/EASD Consensus 2018, updated 2020 https://care.diabetesjournals.org/content/diacare/44/Supplement_1/S111.full.pdf

E-learning:

A free e-learning module from PCDS on Type 2 diabetes: Non-insulin therapies Available at: www.diabetesonthenet.com/course/type-2-diabetes-non-insulin-therapies/details

11. INJECTABLE THERAPIES

For the safe administration of insulin and GLP-1 receptor agonists, you should be able to: 1. Unregistered Describe the effect of insulin and GLP-1 receptor agonists on blood glucose levels. practitioner

- Show an understanding of the on-going nature of the therapy.
- Be aware of the normal blood glucose range and the individual's target.
- Administer insulin injections using a safety-engineered device, where supported by local policy.
- Administer GLP-1 receptor agonist injections using a safety-engineered device, where supported by local policy.
- Report identified problems appropriately.
- Follow local sharps disposal policy.
- Be aware of the UK Safety Directive on prevention of sharp injuries in the hospital, healthcare sector and in downstream workers
- Be involved in locally implemented Insulin Administration Delegation Initiative if appropriate

2. Competent nurse

- Demonstrate a basic knowledge of insulin types/regimens and GLP-1 receptor agonists (e.g. action, side effects) and administration devices used locally.
- Demonstrate a high level of competency in the safe administration of insulin and GLP-1 receptor agonists including:
 - Timings of insulin/GLP-1 receptor agonist administration
 - Correct choice of needle type and length for the individual
 - Appropriate use of a lifted skin fold where necessary
 - Correct method for injection site rotation and recording of sites
 - Storage of insulin
- Single use of needles and safe sharps disposal
- Examine injection procedure and sites at least annually for detection of lipohypertrophy, and be able to give appropriate advice for resolving poor injection sites.
- Be aware of common insulin and management errors and "Never events".
- Describe the correct reporting system for injectable therapy errors.
- Provide evidence of participation in insulin safety training.
- Describe circumstances in which insulin use might be initiated or altered, and know how to make appropriate referral.

3. Experienced or proficient nurse

As 2, and:

- Demonstrate a broad knowledge of different insulin types (e.g. action profiles and use in regimens).
- Demonstrate a broad knowledge of different GLP-1 receptor agonists (e.g. type, action profile, side effects).
- Provide necessary education relating to commencement of injection therapy.
- Initiate insulin or GLP-1 receptor agonist therapy where clinically appropriate.
- Assess individual's self-management skills and educational needs, and meet these needs or make appropriate referral.
- Support and encourage self-management wherever appropriate.
- Recognise when insulin therapy needs to be adjusted or changed, and refer appropriately.
- Recognise the potential psychological impact of insulin or GLP-1 receptor agonist therapies and offer support as required.
- Recognise signs of needle fear and offer strategies to help manage this.
- Educate HCPs in safe administration of insulin and GLP-1 receptor agonists.
- Monitor and support junior staff to ensure they have appropriate competence.

4. Senior practitioner or expert nurse

- Demonstrate expert knowledge of insulin and GLP-1 receptor agonist therapies, and act as a resource for people with diabetes, carers and other HCPs.
- Initiate insulin pump therapy.
- Deliver structured group education to people with diabetes and significant others.
- Empower and support the individual to achieve an individualised level of self-management and an agreed glycaemic target.
- Participate in the development of evidence-based local guidelines and policies.
- Investigate all incidents involving injectable therapies, report to the relevant agencies, and develop an action plan to prevent recurrence.
- If a registered non-medical prescriber, prescribe medications and devices as required within own competence and scope of practice.
- Adjust insulin treatment according to individual circumstances as appropriate, following local policies and individual clinical management plans.
- Be aware of emerging research relating to injection technique and be able to implement outcomes into daily practice.

Suggested examples to assess competence in this area:

- ✓ Observation of administration of insulin injection.
- ✔ Provide examples of anonymous care plans demonstrating correct interpretation of blood glucose data and adjustment of insulin.
- Successful completion of insulin safety e-learning and assessment

Useful resources:

- Keeping safe with insulin therapy.
- Injection Technique Matters resources.
- Insulin Administration Delegation Resources

Available at www.trenddiabetes.online/resources/

E-learning:

Getting it Right: Insulin safety e-learning https://trenddiabetes.online/portfolio/insulin-safetygetting-it-right-e-leaning-module/ available via www.skillsforhealth.org.uk

12. CONTINUOUS SUBCUTANEOUS INSULIN INFUSION (CSII)

pump failure).

To support the person	using continuous subcuta	aneous insulin infusion, you should be able to:
Unregistered practitioner	Understand that some	e people with type 1 diabetes use insulin pumps instead of insulin injections.
 Competent nurse Experienced or 	 Know how to treat hyp Know what to do in the Demonstrate an unde team for review and tr Follow local/ national 	eness of insulin pumps when in contact with the individuals using this therapy. boglycaemia in someone using an insulin pump. e case of insulin pump failure. rstanding of the impact of intercurrent illness and the urgent need for escalation to specialist eatment if individual is unwell. guidance if admitted to acute sector for care. h diabetes to self-care when in the hospital setting.
proficient nurse	 List the criteria for use Demonstrate an unde Ensure the individual ketone levels. 	of insulin pump therapy. rstanding of the difference in insulin delivery and benefits/risks associated with this therapy. has access to the most appropriate device for monitoring blood glucose and blood unior staff to ensure they have appropriate competence.
Senior practitioner or expert nurse		
Suggested examples to assess competence in this area: ✓ Observation of insulin pump therapy practice in the clinical environment (e.g. pump review clinic, initiating pump therapy). ✓ Direct questioning about the mechanism/action of a variety of insulin pumps.		Diabetes Technology Network (DTN) (2018) BEST PRACTICE GUIDE: Continuous subcutaneous insulin infusion (CSII) A clinical guide for adult diabetes services. Available at: www.abcd.care/sites/abcd.care/files/BP_DTN_v13%20FINAL.pdf Diabetes Technology Network (DTN) (2018) CLINICAL GUIDELINE: Guidelines for managing: continuous subcutaneous insulin infusion (CSII, or 'insulin pump') therapy in hospitalised patients. Available at: www.abcd.care/sites/abcd.care/files/CSII_DTN_FINAL%20210218.pdf
and their follow-up		NICE TA 151 Continuous subcutaneous insulin infusion for the treatment of diabetes mellitus 2008) Technology appraisal guidance [TA151]. Available at: www.nice.org.uk/guidance/ta151/chapter/1-Guidance

13. HYPOGLYCAEMIA

For the identification and treatment of hypoglycaemia, you should be able to: 1. Unregistered State the normal blood glucose range and describe the level at which it would be appropriate to treat as hypoglycaemia. practitioner List the signs and symptoms of hypoglycaemia, and describe what is defined as mild and what is defined as severe. Recognise that some people may not recognise symptoms of hypoglycaemia (e.g. older people, those with a long duration of diabetes, and those who have experienced frequent episodes of hypoglycaemia). Demonstrate competent use of blood glucose monitoring equipment to confirm hypoglycaemia. Know how to access and give appropriate treatment for hypoglycaemia. Ensure appropriate hypoglycaemia treatments are accessible and within the expiry date. Document and report the hypoglycaemia event to a registered nurse. If the individual is unresponsive, ensure their airway is clear and call emergency services. 2. Competent nurse Recognise and list appropriate treatment for mild and severe hypoglycaemia. Assess level of Hypo Awareness using a validated tool (e.g. GOLD score). Describe what should be done if hypoglycaemia is not resolved and blood glucose levels remain low. Ensure episodes of hypoglycaemia are followed up appropriately. Identify which medications have a risk of hypoglycaemia and explain how this may be minimised. Describe the possible causes of hypoglycaemia and any factors which can increase risk (e.g. alcohol consumption, unplanned physical activity, poor injection sites, altered dietary intake and other medications). Check the injection technique and sites of injections in those individuals using insulin therapy according to Describe methods of hypoglycaemia avoidance and explain how these can be implemented to reduce future risk. Demonstrate knowledge of the current driving regulations for people with diabetes and how they relate to hypoglycaemia. Be aware of the recommended blood glucose targets for type 1 and type 2 diabetes and in pregnancy. Be aware when tight glycaemic control is not recommended (e.g. in the frail or older person, or those in end-of-life care). 3. Experienced or As 2, and: proficient nurse Identify individuals at high risk of hypoglycaemia, advise and adjust glucose-lowering therapy accordingly (e.g. those with HbA1c below target). Provide advice regarding driving regulations and hypoglycaemia, according to current DVLA guidelines. Describe hypoglycaemia unawareness and its possible causes including frequent episodes of hypoglycaemia. Interpret blood glucose levels and HbA1c results to identify unrecognised hypoglycaemia. Discuss possible alternative therapies that carry a lower risk of hypoglycaemia and added impact on CV and CKD risk. Discuss the use of technologies demonstrated to reduce risk associated with hypoglycaemic unawareness? Work with individuals to prevent recurrent episodes of hypoglycaemia. Advise on adjustment of oral therapies and insulin dose where appropriate. Participate in educating other HCPs, people with diabetes, and carers of people with diabetes in the identification, causes, prevention and appropriate treatment of hypoglycaemia.

4. Senior practitioner As 3, and: or expert nurse

- Educate people with diabetes, their carers and other HCPs on the impact that hypoglycaemia has on the individual (e.g. in relation to their occupation, safety to drive, as a barrier to intensification of treatment, and psychological impact).
- Provide expert advice and ongoing review for individuals with complex hypoglycaemic issues.
- Identify and teach appropriate strategies for prevention of hypoglycaemia during and after exercise and under special circumstances (e.g. during periods of fasting).
- Act as an expert resource for information on hypoglycaemia for other HCPs.

Monitor and support junior staff to ensure they have appropriate competence.

Work in collaboration with A&E staff and emergency service leads to identify and support people frequently presenting with severe hypoglycaemia to proactively develop pathways for appropriate management of hypoglycaemia

Suggested examples to assess competence in this area:

- ✓ List the adrenergic and glycopaenic signs and symptoms of hypoglycaemia.
- ✓ Identify suitable treatments for hypoglycaemia from a range of foods and drinks.
- ✓ Provide examples of anonymous care plans developed for individuals with recurrent hypoglycaemia or hypoglycaemia unawareness, to demonstrate effective management and advice was given.

Useful resources:

Mild/moderate and severe - JBDS: https://abcd.care/sites/abcd.care/files/site_uploads/ JBDS_HypoGuideline_4th_edition_FINAL.pdf

- Why do I sometimes feel shaky, dizzy and sweaty? (leaflet about hypoglycaemia)
- Hypoglycaemia in adults in the community: recognition, management and prevention (for healthcare professionals)
- Diabetes: safe driving and the DVLA

Available at www.trenddiabetes.online/resources/

14. HYPERGLYCAEMIA

For the identification and treatment of hyperglycaemia, you should be able to: 1. Unregistered State the blood glucose range of someone with and without diabetes. State the target blood glucose levels for an individual with diabetes and appropriate frequency of glucose practitioner monitoring required. List the signs and symptoms of hyperglycaemia. Recognise that some people may be asymptomatic of hyperglycaemia (e.g. older people). Perform blood glucose and blood/urine ketone tests according to local guidelines, correctly document results and report those out of the acceptable range. 2. Competent nurse List the causes of hyperglycaemia, including non-adherence with medication, glucocorticosteroids and intercurrent illness. Recognise the appropriate treatment needed for the different levels of hyperglycaemia in type 1 and type 2 diabetes. Support self-management where possible. Describe how to manage hyperglycaemia, ketonaemia/ketonuria to minimise the risk of progression to diabetic ketoacidodis (DKA) or hyperosmolar hyperglycaemic state (HHS) in accordance with national and local policies. Describe the referral pathway for DKA and HHS management. 3. Experienced or As 2, and: proficient nurse Recognise appropriate glycaemic treatment targets for specific groups (e.g. pregnant women, older people, those with significant co-morbidities, the frail and those at end of life). Determine possible cause of hyperglycaemia, such as unrecognised infection or other pathologies such as pancreatitis. Work in partnership with the person with diabetes and/or their carer to agree treatment goals. Participate in educating people with diabetes, carers and other HCPs in the management of illness and identification, treatment and prevention of hyperglycaemia. Monitor and support junior staff to ensure they have the appropriate competence. 4. Senior practitioner As 3, and: or expert nurse Provide expertise in the development of management plans for people with complex hyperglycaemia. Support and advise people with diabetes using treatments that can cause hyperglycaemia (e.g. steroids). Liaise with A&E teams and paramedic emergency service leads to identify people frequently presenting with episodes of DKA or HHS. Act as a resource for information on hyperglycaemia management for other HCPs. Identify complex cases for MDT discussion / wider team learning Suggested examples to assess competence in this area: JBDS-IP (2012) Management of Hyperosmolar Hyperglycaemic State (HHS) in adults with diabetes Provide examples of anonymous case available at www.abcd.care/sites/abcd.care/files/resources/JBDS_IP_HHS_Adults.pdf histories and clinical management plans

- Provide examples of anonymous case histories and clinical management plans to demonstrate the identification, cause and management of various hyperglycaemic conditions.
- Discussion using fictional case scenarios to demonstrate understanding of correct management.

JBDS-IP (2012) Management of Hyperosmolar Hyperglycaemic State (HHS) in adults with diabetes available at www.abcd.care/sites/abcd.care/files/resources/JBDS_IP_HHS_Adults.pdf

JBDS Inpatient Care Group: The Management of Diabetic Ketoacidosis in Adults (2013) available at www.diabetes.org.uk/resources-s3/2017-09/Management-of-DKA-241013.pdf

JBDS-IP (2018) Intravenous insulin prescribing and fluid protocol for diabetic ketoacidosis (DKA) available at https://abcd.care/sites/abcd.care/files/resources/2018_addition_DKA_IPC_Pathway.pdf

15. INTERCURRENT ILLNESS

To manage intercurrent illness, you should be able to: Unregistered Identify common signs of intercurrent illness and report to a registered nurse. Be aware of the impact of intercurrent illness on glycaemic control. practitioner Document and report any clinical findings outside the expected range. 2. Competent nurse Take a comprehensive assessment and personal history. Initiate appropriate preliminary investigations (e.g. blood glucose and ketone measurements). Recognise when to seek urgent medical advice, refer and/or when to admit to hospital (e.g. DKA, HHS, ketonaemia/ ketonuria in pregnancy, dehydration and vomiting). Facilitate and administer prescribed baseline treatment. Give advice regarding continuation of treatments for diabetes during intercurrent illness, and provide written information. Support self-management as soon as is possible (e.g. self-injecting and self-monitoring including ketone monitoring). Instruct and ensure the person with diabetes is aware of when to seek medical advice. 3. Experienced or proficient nurse Interpret test results and initiate appropriate action. Support the person with diabetes or their carer in managing diabetes during intercurrent illness. Recognise when treatment may need adjusting. Give advice about sick-day diabetes management, including ketone testing where appropriate, and provide appropriate literature for people with diabetes and/or carers. Educate people with diabetes, carers and other HCPs about sick-day management. Monitor and support junior staff to ensure they have the appropriate competence. 4. Senior practitioner or expert nurse Provide expert advice for people with complex issues and multiple pathologies. Make treatment adjustments according to individual circumstances, following local policies or individual clinical management plans. Contribute to the evidence base and implement evidence-based practice in relation to the management of intercurrent illness in people with diabetes. Educate other HCPs about the effects and consequences of intercurrent illness on people with diabetes. Initiate/participate in quality improvement and the development of guidelines. Suggested examples to assess Useful resources: competence in this area:

- Describe the advice to be given to someone who has type 1 diabetes and has diarrhoea and nausea.
- Describe the advice to be given to someone with type 2 diabetes treated with metformin and SGLT-2 inhibitor who has diarrhoea and nausea.

Diabetes at the Front Door https://abcd.care/sites/abcd.care/files/site_uploads/JBDS_Diabetes_Front_Door_amended_FINAL_27032020.pdf

Trend Diabetes leaflets for "What to do when you are ill" for people with type 1 and type 2 diabetes available at www.trenddiabetes.online/resources/

JBDS Inpatient Care Group: The Management of Diabetic Ketoacidosis in Adults (2013) available at www.diabetes.org.uk/resources-s3/2017-09/Management-of-DKA-241013.pdf

16. MANAGING DIABETES IN HOSPITAL (GENERAL ADMISSION)

To support management of diabetes during a hospital admission, you should be able to: 1. Unregistered Perform ward blood glucose meters quality-control tests according to hospital policy. Perform blood glucose and blood/urine ketone tests according to manufacturer's instructions. practitioner Inform a registered nurse of any observed change in the condition of a person with diabetes. Be aware of the importance of regular meals and snacks, especially for those using insulin or sulphonylureas. Participate in foot checks and in the prevention of pressure sores including foot ulceration. 2. Competent nurse As 1, and: Assess current concordance with treatment and glycaemic control. Ensure care for a person with diabetes in hospital is given in relation to pressure relief, appropriate nutrition and fluids, and accurate monitoring of glycaemic control. Perform administration of prescribed medication. Be aware of national and local guidance and training requirements on insulin safety. Know the importance of administering insulin in relation to meals and the provision of snacks as appropriate. Be familiar with the person with diabetes treatment regimen and device/delivery system Recognise the impact that glucocorticosteroids have on blood glucose levels. Be aware of different oral and injectable therapies and regimens. Demonstrate knowledge of the management of blood glucose during corticosteroid treatment Establish, maintain and discontinue prescribed insulin infusion regimens according to local policy and individual need. Recognise the different indications for use of a variable-rate or fixed-rate insulin infusion. Recognise diabetes-related emergencies (e.g. DKA, HHS or hypoglycaemia) and be aware of the importance of timely treatment according to local guidelines. Demonstrate awareness of the importance of daily foot checks in those with poor mobility, renal impairment, and the frail and bedbound Know the appropriate referral system to the diabetes specialist team and refer where appropriate. Enable a safe and effective discharge plan for the person with diabetes following liaison with relevant agencies 3. Experienced or As 2, and: proficient nurse Recognise appropriate glycaemic treatment targets for special groups (e.g. older people, those with significant comorbidities, the frail, and those at end of life). Have an understanding of treatment pathways to manage steroid-induced hyperglycaemia. Be aware of the impact of enteral feeding and food supplements, monitor and report blood glucose levels outside Demonstrate knowledge of the management of diabetes medications prior to investigations and procedures. Assess and where appropriate, enable a person with diabetes to self-manage their diabetes during a hospital stay, according to local policy. Promote ward link nurse initiatives and enhance knowledge by continuing professional development and disseminate knowledge to other HCPs. Monitor and support junior staff to ensure they have the appropriate competence. Demonstrate knowledge of national guidelines for the care of people with diabetes admitted to hospital. Participate in research and audit, for the care of people with diabetes in hospital. 4. Senior practitioner or expert nurse Support the person with diabetes to maintain and re-establish diabetes self-management. Demonstrate knowledge of all current diabetes treatments. Provide expert advice on the care of people with complex diabetes or uncommon regimens. If a registered non-medical prescriber, prescribe medications as required within own competencies and scope of practice. Initiate/participate in the development of local guidance for the care of people with diabetes in hospital. Suggested examples to assess Useful resources: competence in this area: JBDS-IP Discharge planning for adult inpatients with diabetes (2017) available at www.abcd.care/ ✓ Discussion of fictional case scenarios of sites/abcd.care/files/resources/JBDS_Discharge_Planning_amendment_RCN_2017.pdf various hospital situations (e.g. person JBDS-IP Management of Hyperglycaemia and Steroid (Glucocorticoid) Therapy (2014) available with diabetes commenced on high-dose at www.abcd.care/sites/abcd.care/files/resources/JBDS_IP_Steroids.pdf steroids, person changing from oral JBDS-IP Glycaemic management of the inpatient enteral feeding of stroke patients medication to twice daily insulin regimen) with diabetes (2018) available at to demonstrate knowledge of correct www.abcd.care/sites/abcd.care/files/resources/JBDS_Enteral_feeding_FINAL.pdf management. Diabetes at the Front Door https://abcd.care/sites/abcd.care/files/site_uploads/JBDS_ ✓ Direct questioning about action profile

Diabetes_Front_Door_amended_FINAL_27032020.pdf

and common side effects of a variety of

Provide examples of anonymous

diabetes treatments.

discharge plans.

17. MANAGING DIABETES DURING AND AFTER SURGERY

To support the managadmission, you should	ement of diabetes before, during and after surgery, in addition to the competencies outlined in general hospital be able to:	
Unregistered practitioner	Be aware of policies relating to fasting in people with diabetes undergoing surgical or investigative procedures.	
2. Competent nurse	As 1, and:	
	 Advise on diabetes care surrounding pre- and peri-operative procedures. Be aware of the optimal pre-surgery HbA1c target. Demonstrate knowledge of the indications for use of a variable-rate insulin infusion. Set up, manage and discontinue a variable-rate insulin infusion, and know to continue long-acting insulin where appropriate (e.g. type 1 diabetes). Identify current medication (both oral and injectable) and develop an individualised care plan, taking into account fasting requirements. Follow guidelines regarding appropriate nutrition, monitoring glycaemic control, and administration of diabetes medication. Know when to refer to dietetics for nutritional review. Be aware of national recommendations, standards and guidelines for the care of people with diabetes undergoing surgery or investigation. As 2, and: Assess and, where appropriate, enable a person with diabetes to self-manage their diabetes during an inpatient stay, according to local policy. Safely discontinue a variable rate insulin infusion. Assess and respond to problems relating to the care of people with diabetes undergoing surgery. Participate in the development and maintenance of local guidance for the care of people with diabetes undergoing surgical procedures. Educate other HCPs in the care of people with diabetes undergoing surgery. Monitor and support junior staff to ensure they have the appropriate competence. As 3, and: Provide expert advice for people with diabetes with complex management problems or uncommon regimens undergoing surgery or investigation. If a registered non-medical prescriber, prescribe medications as required within own competencies and scope of practice. Participate in national initiatives to improve the quality of inpatient care for people with diabetes undergoing surgical procedures or investigations. 	
3. Experienced or proficient nurse		
Senior practitioner or expert nurse		
Suggested examples t		
common routine su ✓ Review of anonymo someone with type a common emerger ✓ Talk through how a	us care plan for 1 diabetes undergoing a regical procedure. us care plan for 2 diabetes undergoing a classification of the planting for adult inpatients with diabetes (2017) available at https://abcd.care/sites/abcd.care/files/resources/JBDS_Discharge_Planning_amendment_ RCN_2017.pdf	

18. PRE-CONCEPTION CARE

To support a woman w	ith diabetes preparing for pregnancy, you should be able to:	
Unregistered practitioner	Demonstrate awareness of the need for pre-conception care.	
2. Competent nurse	 As 1, and: Be aware of the latest national guidelines. Explain to the woman the need for pre-conception care and signpost to local information and group sessions if available. Identify medicines contraindicated in pregnancy and seek medical review. Be aware of the need for the prescription of folic acid 5mg. Know how to recognise and treat hypoglycaemia appropriately. Initiate blood glucose monitoring in women with type 2 diabetes and know the appropriate target range. Advise the appropriate frequency and timing of blood glucose monitoring in women with type 1 diabetes, and know the target range. Demonstrate knowledge of the appropriate referral system including to the specialist diabetes team. 	
3. Experienced or proficient nurse	As 2, and: Demonstrate knowledge of latest care recommendations for the pre-conception management of diabetes. Provide education and support to the woman to achieve pre-conception blood glucose targets. Act as a named contact person for women with diabetes contemplating pregnancy. Participate in audit of healthcare outcomes. Monitor and support junior staff to ensure they have appropriate competence.	
4. Senior practitioner or expert nurse	 As 3, and: Demonstrate in-depth knowledge of pathophysiology of diabetes complications in pregnancy. Have an in-depth knowledge of national and local guidelines relating to diabetes pre-pregnancy care. Develop and implement management plans. Plan, implement and deliver education programmes about diabetes pregnancy care for other HCPs. If a registered non-medical prescriber, prescribe medications as required within own competencies and scope of practice. Participate in the development of guidelines and protocols. 	
Suggested examples tompetence in this are ✓ Provide a list of medicontraindicated in provide alternatives ✓ Describe the advice with type 1 diabetes a pregnancy. ✓ Describe the advice with type 2 diabetes and lipid-lowering medicates.	NICE NG3: Diabetes in pregnancy: management from preconception to the post-natal period (Updated 2020) available at www.nice.org.uk/guidance/ng3 To give to a woman taking antihypertensive	

19. ANTENATAL AND POSTNATAL CARE

To support a woman with impaired glucose tolerance, gestational diabetes and pre-existing diabetes during and after pregnancy, you should be able to: Carry out duties designated by a registered nurse for the care of a pregnant woman with diabetes, including routine 1. Unregistered practitioner screening and accurate documentation. 2. Competent nurse As 1. and: Be aware of the latest diabetes and pregnancy national guidelines.

- Identify pregnant women at risk of developing gestational diabetes and follow local screening guidelines
- Demonstrate awareness of the risks and monitoring involved in the pregnancy of a woman with existing diabetes or diagnosed with in those diagnosed with gestational diabetes.
- Identify pregnant women with diabetes and make immediate referral to specialist team.
- Be aware of the need for 5mg folic acid daily before conception and during the first trimester.
- Identify pregnant women at risk of developing gestational diabetes and follow local screening guidelines.
- Identify medicines contraindicated in pregnancy and make appropriate referrals.
- Demonstrate an understanding of, and be involved in, the implementation of individual management plans and
- Be aware of DVLA guidelines regarding women already using insulin and those with gestational diabetes requiring insulin.
- Demonstrate an awareness of the importance of having a post-natal blood glucose test or 3 month HbA1c (and thereafter according to local policy) post-pregnancy if gestational or IGT diagnosed during pregnancy.
- Describe the risk of developing gestational diabetes in future pregnancies and type 2 diabetes in women with a history of gestational diabetes and be able to give lifestyle advice to reduce this risk.

3. Experienced or proficient nurse

- Describe the care recommendations for the management of diabetes in pregnancy, including the pathway for foetal
- participate in the initiation and self-management advice required for continuous glucose monitoring systems.
- Provide appropriate education about gestational diabetes and its management to women diagnosed with the condition.
- Demonstrate an awareness of psychosocial impact of diabetes in pregnancy or a new diagnosis of gestational diabetes.
- Provide emotional support and motivational strategies.
- Demonstrate knowledge of the management of blood glucose during corticosteroid treatment
- Demonstrate knowledge of peri-operative care required for surgical intervention during pregnancy e.g. Caesarean Section
- Demonstrate knowledge of the implications of falling insulin requirements in the 3rd trimester and action needed.
- Demonstrate an awareness of the effects of pre-term steroids in women with diabetes and local managent protocols/guidance.
- Provide contact numbers for emergency situations and rapid advice.
- Monitor and support junior staff to ensure they have appropriate competence.

4. Senior practitioner As 3, and: or expert nurse

- Recognise the situations which would lead to urgent referral and need for admission during pregnancy (e.g.symptoms of pregnancy induced hypertension, euglycaemic DKA, severe hypoglycaemia).
- Demonstrate an in-depth knowledge and understanding of both pre-existing and gestational diabetes during pregnancy.
- Ensure effective communication systems are in place to inform general practice of the diagnosis of gestational diabetes in their women with diabetes
- Develop with the pregnant women and implement individual management plans.
- Participate in the development of management protocols.
- Advise on medications, dosage and regimens during and after pregnancy, including the need for significant reduction of insulin post-delivery.
- If a registered non-medical prescriber, prescribe medications as required, within own competencies and scope of practice.
- Plan, implement and deliver education programmes about diabetes pregnancy for other HCPs.
- Advise on management of diabetes if steroid use is necessary during pregnancy.
- Be a named contact for the pregnant woman, or a new mother with diabetes.
- Participate in research and audit.

Suggested examples to assess competence in this area:

- ✔ Provide anonymous management plans of pregnant women with type 1, type 2 and gestational diabetes to demonstrate correct advice was given.
- Describe the general insulin requirements prior, during and post-delivery in a woman with type 1 diabetes.

Useful resources:

NICE NG3: Diabetes in pregnancy: management from preconception to the post-natal period (Updated 2020) available at www.nice.org.uk/guidance/ng3

JBDS-IP Management of glycaemic control in pregnant women with diabetes on obstetric wards and delivery units (2017) available at http://www.diabetologists-abcd.org.uk/JBDS/ JBDS_Pregnancy_201017.pdf

20. CARDIOVASCULAR DISEASE (CVD)

To care for people with established CVD or associated risk factors (including hypertension and dyslipidaemia), you should be able to: Demonstrate awareness of the risk factors for CVD and describe simple lifestyle measures such as diet, exercise and 1. Unregistered practitioner smoking cessation, and their impact in terms of reducing CVD risk. Undertake monitoring and assessment as requested. Perform blood pressure measurement in accordance with national hypertension guidelines. Demonstrate awareness of the normal parameters for blood pressure measurements. Be able to refer to appropriate guidance for home blood pressure monitoring & to provide education to undertake self-monitoring of blood pressure and ensure that abnormal measures are brought to the attention of an appropriate team member 2. Competent nurse As 1, and: Be aware that all people with diabetes are at risk of developing CVD. Be aware of the normal parameters for Blood Pressure and Lipid ranges including adjusted parameters in the presence of microvascular disease Describe the difference between primary and secondary cardiovascular prevention. Be capable of undertaking a comprehensive CVD risk assessment using an accepted risk calculation tool and recognise when it is not appropriate to use such a tool. Interpret and act on test results appropriately. Support people with diabetes to better understand how their medications work, how to take them, to recognise potential side effects and know when and how to report them. Know how to refer to smoking cessation services and other lifestyle support. 3. Experienced or As 2, and: proficient nurse Demonstrate knowledge of the appropriate level of recall to support continuity of care Order appropriate blood tests and specialist investigations and refer for appropriate specialist intervention. Initiate and develop personalised care plans and set goals with the person with diabetes to reduce CVD risk. Demonstrate knowledge and skills that support behaviour change. Manage and co-ordinate individual patient care and education programmes. Be aware of policies relating to the prevention and management of CVD and participate in the development of local guidelines and protocols. Participate in the development of a service-wide programme of care designed to manage established CVD according to local and national guidelines Monitor and support junior staff to ensure they have appropriate competence. 4. Senior practitioner As 3, and: or expert nurse Participate in developing evidence-based practice guidelines and protocols. Describe the link between diabetes and CVD. Develop a service-wide programme of care designed to manage established CVD according to local and national guidelines. If a registered non medical prescriber: Demonstrate an appreciation of the fine balance of the risks and benefits of

hypertension and cardiac specialist nurses. Suggested examples to assess

competence in this area:

- ✔ Provide examples of anonymous care plans demonstrating effective advice and management for people with established CVD.
- Direct questioning about normal ranges for CVD investigations.

of practice.

Observation of practice in a clinical environment.

Useful resources:

Validated CV risk calculation tools:

Access the 10-year CV Risk QRisk3 calculator at: www.grisk.org/three/

prescribing for established CVD and Diabetes; working within own competence and scope of practice If a registered non-medical prescriber, prescribe medications as required within own competencies and scope

Develop integrated care pathways with multi-disciplinary teams and liaise with MDT members including

Access the JBS3 Lifetime CV Risk calculator at: www.jbs3risk.co.uk/pages/risk_calculator.htm Guidelines

JBS3 Board (2014) Joint British Societies' consensus recommendations for the prevention of cardiovascular disease (JBS3) Heart 100 (Suppl 2): ii1-ii67

NICE CG181 (2016) www.nice.org.uk/guidance/CG181

National Institute for Health and Clinical Excellence (2011) Hypertension Clinical Guideline 127: Clinical management of primary hypertension in adults

ABCD joint position statements, June 2020 cvd risk optimisation

ABCD CaReMe T2DM & CVD 2020

NICE NG136 Hypertension in Adults: Diagnosis and management https://www.nice.org.uk/ quidance/ng136

Diggle J, How to diagnose and treat hypertension in type 2 diabetes Diabetes & Primary Care Vol 23 No 2 2021

E-learning:

A free e-learning module from PCDS on Cardiovascular outcomes trials in type 2 diabetes; What can we learn from them and what is their impact on the delivery of patient care? Available at: www.diabetesonthenet.com/course/cardiovascular-outcomes-trials-in-type-2-diabetes-what-can-we-learn-from-them-and-what-is-their-impact-on-the-delivery-ofpatient-care/details

21. NEUROPATHY

(e.g. gastroparesis, foot ulceration, erectile dysfunction) to demonstrate effective

advice and management.

To care for people with, or at risk of developing neuropathy, you should be able to: 1. Unregistered Demonstrate awareness that all people with diabetes are at risk of developing neuropathy. Understand what neuropathy is and how a person with diabetes might describe it. practitioner Demonstrate the procedure of basic diabetes foot screening in line with national guidance and/or local protocols, and record screening results in the individual's record. Provide basic foot care advice. Report changes in pain, sensitivity, skin integrity, colour or temperature to a registered nurse or doctor. Measure standing and lying blood pressure using an appropriate device. 2. Competent nurse Recognise the need for annual diabetes foot screening, and determine risk status and refer as appropriate. Demonstrate awareness of the different presentations of neuropathy and how to reduce risk. Describe measures to prevent tissue damage in people with diabetes. Recognise that neuropathy can present as loss or reduction in sensation, or it can be hypersensitive with pain. Be aware of erectile and sexual dysfunction as a neuropathic process, and refer where appropriate. 3. Experienced or proficient nurse List the effects of neuropathy on various organs in the body (e.g. gastroparesis, postural hypotension). Screen for the different types of neuropathy, including sexual dysfunction in both men and women. Identify possible neuropathy and make the appropriate referral to confirm diagnosis. Identify risk factors in the development of neuropathy. Identify factors that may affect neuropathy (e.g. poor glycaemic control, rapid improvement in HbA1c). Monitor and support junior staff to ensure they have appropriate competence. 4. Senior practitioner As 3, and: or expert nurse Demonstrate detailed knowledge of the diagnosis, treatments and management of neuropathy. Conduct a holistic assessment of the person with diabetes for neuropathic risk and ability to self-care. Carry out an in-depth neurovascular assessment. Advise and support people with diabetes and their carer about neuropathy and its management. Provide or refer for psychological support as required. If a registered non-medical prescriber, prescribe medications as required within own competencies and scope of practice Educate other HCPs on the prevention, screening for and progression of neuropathy. Participate in research and the development and implementation of evidence-based guidelines. Support or contribute to specialist diabetes clinics (e.g. pain management, erectile dysfunction). Suggested examples to assess Useful resources: competence in this area: NICE NG19 Diabetes foot problems: prevention and management (2016) available at ✓ Observation of performing a www.nice.org.uk/guidance/ng19 comprehensive foot assessment. NICE CG173 Neuropathic pain in adults: pharmacological management in non-specialist settings List the common neuropathic conditions (2013, updated 2018) available at www.nice.org.uk/guidance/cg173 with their signs and symptoms, and recommended treatments. Provide examples of anonymous care plans of people with various types of neuropathy

22. FOOT CARE

foot assessment.

Describe the foot care advice to be given to someone with a neuropathic ulcer.

To support someone with diabetes to reduce their risk, or manage, foot complications, you should be able to: 1. Unregistered Describe the importance of foot screening as part of the diabetes annual review. practitioner Provide basic foot care advice and signpost to information. Demonstrate how to assess for peripheral sensory neuropathy using appropriate tools (e.g. 10g monofilament). Palpate pedal pulses (dorsal pedis and posterior tibial). Identify common foot deformities (e.g. bunions, hammer toes). Identify skin pathologies (e.g. calluses, ulcers, corns, bacterial/fungal infection) and report to a registered nurse. 2. Competent nurse Be aware of local and NICE guidelines related to the management of the "at risk" foot. Describe the screening and examination guidance for the diabetic foot. Understand the importance of the Diabetes Foot-care Pathway. List the different categories of the "at risk" foot and the recommended interventions. Describe the advice, education and management that should be provided to prevent the development of foot problems in the moderate to high individual. Recognise the signs of the acute diabetic foot problem and how to refer appropriately. 3. Experienced or As 2, and: proficient nurse Describe the pathophysiology leading to foot problems in people with diabetes including poor glycaemic control which will delay the healing process. Describe the screening, prevention and management of foot problems in people with diabetes. Convey the results of the diabetic foot assessment and the associated level of risk to the person with diabetes. Describe the presentation of ischaemic, neuropathic and neuro-ischaemic complications of the diabetic foot. List the key interventions for individuals identified with infection and ulceration. Demonstrate the ability to assess for peripheral arterial disease (e.g. by assessing capillary refill time, assessing temperature gradient, the use of a Doppler). Monitor and support junior staff to ensure they have appropriate competence. 4. Senior practitioner As 3, and: or expert nurse Review blood glucose levels and offer treatment adjustment to allow for better healing of wounds/ulcers Plan appropriate strategies to assist people to adopt behaviours that reduce and prevent foot problems. List the treatment and management options available for the management of painful peripheral neuropathy, and describe their actions and side effects. Describe the recommended investigations and treatment for foot infections and ulceration in relation to the current evidence base. Describe the presentation of Charcot arthropathy, and the recommended investigations and treatment. If a registered non-medical prescriber, prescribe medication as required within own competencies and scope Audit outcomes of care against accepted national and/or local standards. Suggested examples to assess Useful resources: competence in this area: Diabetes UK (2017) Putting feet first. Annual review for everyone with diabetes over 12 years old. Observation of performing a NICE NG19 Diabetes foot problems: prevention and management (Updated Oct 2019) available foot assessment. at www.nice.org.uk/guidance/ng19 Describe the levels of "at risk". ✔ Describe the basic foot care advice to be given to someone with a current low risk

23. CHRONIC KIDNEY DISEASE

To support people with, or at risk of, chronic kidney disease, you should be able to: 1. Unregistered Demonstrate an awareness that all people with diabetes are at risk of developing chronic kidney disease. Perform blood/urine tests as directed. practitioner Be aware of the need to control Blood Pressure for people with chronic Kidney disease Be aware of the need for regular foot check and eye screening in all people with chronic kidney disease. Demonstrate competence in using a validated foot screening tool Be able to undertake diabetic foot screening categorising risk and record results on the medical notes. Report any abnormal findings to a registered nurse or GP 2. Competent nurse Demonstrate awareness of renal complications and prevention. List the annual screening tests to detect CKD. Organise or perform urinary albumin/creatinine screening (ACR), blood pressure measurement and blood tests according to local and national protocols and guidelines. Demonstrate awareness of the 5 different stages of chronic kidney disease. Be aware of Local and National referral criteria for nephrology (i.e. rate of decline in renal function) Be aware that individuals with advanced CKD need referral to specialist care 3. Experienced or proficient nurse Review test results, and if outside the expected range, refer appropriately and plan follow-up. Educate people with diabetes or their carer in prevention and importance of screening for chronic kidney disease. Demonstrate awareness of the impact that declining renal function may have on glycaemic control. Be aware of the medications that may increase the risk of Acute Kidney Injury Be aware that even medicines in the same class eg. SGLT2 inhibitors have different licensing depending on renal function Ensure that the person prescribed such medication receives clear sick day management advice. Demonstrate an awareness of diabetes medications contraindicated in moderate or severe renal disease, and the impact chronic kidney disease has on the excretion of some medications, particularly sulphonylureas and insulin therapies. Be aware of other diabetes complications that may occur, or put at high risk, in individuals with severely impaired renal function (e.g. severe eye disease, cardiovascular disease and diabetic foot disease). Demonstrate awareness of the impact that renal replacement therapy may have on glycaemic control, including the additional risk of hypoglycaemia and potential need for reductions in diabetes medication. Know when to refer to dietetics for advice on diabetes and renal diets. Be aware of fluid restrictions required in people with advanced kidney disease. Participate in guideline development and audit. Educate HCPs regarding prevention, screening and progression of CKD. Monitor and support junior staff to ensure they have the appropriate competence. 4. Senior practitioner As 3, and: or expert nurse Be aware of relevant national policies related to diabetes and CKD. Demonstrate a broad knowledge of renal treatments, including all renal replacement therapy and transplantation, and their impact on glycaemic control. Demonstrate knowledge of how immunosuppression treatment, including steroids, may affect glycaemic control. Review medications and ensure appropriate adjustments are made. If a registered non-medical prescriber, prescribe medications as required within own competencies and scope of practice. Know when to refer to specialist renal or diabetes teams. Participate in research, audit and the development and dissemination of evidence-based protocols and guidelines. Participate in the development and monitoring of integrated care pathways.

Suggested examples to assess competence in this area:

- Direct questioning about renal guidelines/ licence for a number of common antihyperglycaemic agents.
- Provide examples of anonymous care plans to demonstrate effective management of people at different levels of CKD.

Useful resources:

- Diabetes and your kidneys (for people living with diabetes)
- Appropriate use of SGLT2 inhibitors in type 2 diabetes: Right person, right medication, right time
- Type 2 Diabetes and Diabetic Kidney Disease
- Type 2 diabetes and chronic kidney disease
- · Prescribing guidance in people with renal impairment

Available at www.trenddiabetes.online/resources/

NICE CG182 Chronic kidney disease in adults: assessment and management (2015) available at www.nice.org.uk/quidance/cg182

GPNotebook education: Prescribing for people living with T2DM and Renal Impairment. www. diabetesonthenet.com

Executive summary of the KDIGO 2021 Clinical Practice Guideline for the Management of Blood Pressure in Chronic Kidney Disease https://kdigo.org/wp-content/uploads/2016/10/KDIGO_BP_Exec_Summary_final.pdf

24. RETINOPATHY

To care for people with, or at risk of, retinopathy, you should be able to: 1. Unregistered Demonstrate awareness that all people with diabetes are at risk of developing retinopathy. practitioner Demonstrate an awareness that people with diabetes are at higher risk of other eye complications. Support people with diabetes with impaired vision. Encourage people with diabetes to attend all retinal screening appointments. Encourage people with diabetes to attend regular optometry appointments. 2. Competent nurse Recognise the need for regular retinal screening. Recognise the need for regular optometry appointments Demonstrate awareness of retinal complications and how these can be prevented and delayed. Participate in retinal screening or laser clinics. Ensure all people with diabetes are on the diabetic retinopathy screening register. 3. Experienced or As 2. and: proficient nurse Educate the person with diabetes, and their carer, about preventing the development and delaying the progression of, and the importance of screening for retinopathy. Participate in education programmes for HCPs. Refer people with reduced vision to eye clinic liaison officers for access to vision aids. Recognise the importance of checking for urine microalbuminuria, and glycaemic, blood pressure and cholesterol management in preventing and/or progressing diabetic retinopathy. Ensure retinal screening is informed if someone with diabetes becomes pregnant so that they can be placed on the pregnancy pathway. 4. Senior practitioner As 3, and: or expert nurse Participate in research and disseminate evidence-based practice. Write and review local protocols and guidelines in line with national guidelines. Review medication and ensure appropriate changes are made. Provide or refer for psychological support as required. Plan, implement and deliver education programmes for HCPs and new retinal screeners. Participate in the development and monitoring of integrated care pathways. Keep updated with new therapies available for people with diabetic macular oedema and proliferative diabetic retinopathy. Suggested examples to assess Useful resources: competence in this area: The RNIB (Royal National Institute for the Blind) provides a range of equipment to help people with diabetes related visual impairment. Some aids include eye-shields, flexible lighting desk ✔ Provide an example of an anonymous care plan for someone with advanced lamps, talking clocks, magnifiers and bumpons (a tactile aid)- suitable for marking medications retinopathy to illustrate the appropriate and settings on washing machines support provided. Talking meters to help with blood glucose monitoring are also available on prescriptions namely the CareSens N Voice Talking Meter from Spirit Health Care and GlucoRx Nexus Voice Meter

25. MENTAL HEALTH

To care for someone with diabetes and poor mental health, you should be able to: Unregistered Have an awareness of how poor mental health, such as depression, anxiety and schizophrenia affects people practitioner with diabetes Report any potential changes in the person's normal mental health (e.g. mood changes, changes in medications adherence, changes in appearance, anxiety) to a registered nurse or doctor. 2. Competent nurse Conduct a mental health assessment using a recognised depression tool. Raise the issue of current mental health/addiction problems sensitively during individual consultations. Demonstrate awareness that some mental health medications can have a detrimental effect on glycaemic and lipid control. Support the person with diabetes and poor mental health in obtaining the appropriate investigations in a timely manner. Ensure people with diabetes and mental health problems understand the importance of how to take their diabetes medication, recognising common side-effects and how to report them. 3. Experienced or As 2, and: proficient nurse Assess those people with mental health problems and how antipsychotic medication impacts on the risk of developing type 2 diabetes and their diabetes management. Demonstrate knowledge of the psychological impact of diabetes and facilitate referral to psychological support or mental health services, as required. Demonstrate a basic understanding of the mental health issues commonly seen and how they and the medications used may affect diabetes control (e.g. anxiety and depression, schizophrenia, bipolar disorder, dementia, obsessivecompulsive disorder, eating disorders, addiction and dependence). Refer or ensure an appropriate mental health practitioner is involved in the person's care if they are demonstrating poor mental health. Manage and coordinate individual patient care and education requirements. Recognise the implications of poor mental health on lifestyle choices and support the person with small, self determined, achievable changes. If a registered prescriber, prescribe medications as required within own competence and scope of practice. Monitor and support junior staff to ensure they have appropriate competence. 4. Senior practitioner As 3, and: or expert nurse Provide support and expert advice to other HCPs on the management of diabetes in people with complex mental health problems. Work in collaboration with other non-diabetes HCPs, such as GPs and community psychiatric nurses in planning diabetes care plans for people with diabetes and poor mental health. Have an in-depth understanding of additional complex issues of poor mental health (e.g. supporting someone in the manic phase of their bipolar disorder; supporting someone with diabetes and an eating disorder; the association of drug misuse and the impact this has on the glycaemic control; the high prevalence of smoking in those with poor mental health, and the impact this has on the CHD risk factors). Suggested examples to assess Useful resources: competence in this area: Trend Diabetes leaflets for "Alcohol, smoking and illicit drugs: what you need to know if you have

- Provide examples of anonymous care plans demonstrating appropriate advice and management for adults with a variety of mental health issues.
- ✓ List the effects on glycaemic control of a sample of misused substances.

Trend Diabetes leaflets for "Alcohol, smoking and illicit drugs: what you need to know if you have diabetes" available at www.trenddiabetes.online/resources/

JBDS-IP: The management of diabetes and adults and children in inpatient settings (2017) available at https://www.diabetes.org.uk/resources-s3/2017-10/Management%20of%20 diabetes%20in%20adults%20and%20children%20with%20psychiatric%20disorders%20in%20 inpatient%20settings-August-2017.pdf

26. RESIDENTIAL AND NURSING HOMES

 Outline the specific care needed for someone with type 1 diabetes, and type 2

diabetes.

To care for someone with diabetes living in a residential or nursing home, you should be able to: 1. Unregistered Understand the normal glycaemic range and report readings outside this range to the appropriate person. practitioner Demonstrate how to perform the basic components of an annual review and report abnormal findings. Perform blood and urine glucose and ketone monitoring according to the manufacturers' instructions. Demonstrate how to perform a basic foot examination and report adverse findings. Recognise the risk of, as well as the signs and symptoms of hyperglycaemia. Recognise the risk of, as well as the signs, symptoms and treatment for hypoglycaemia. Recognise the importance of access and timing of meals in relation to diabetes medication. Describe what to do if food is refused. Administer insulin safely if trained to do so. Recognise and follow local policy for the disposal of sharps. 2. Competent nurse Identify and review the specifics of diabetes management in each individual's care plan, including nutritional status. Have a good working knowledge of, and follow national policies and procedures relating to the management of older or frail people with diabetes. Have a broad understanding of diabetes medications, timings in relation to meals, and common side effects. Ensure residents take their medication. Be aware of side-effects and know how to treat and report these. Know when to refer for GP assessment or specialist care. Understand the requirement for influenza and pneumonia vaccination. Organise access to retinopathy screening. Have a working knowledge of other agencies (e.g. community health staff, dietetic and podiatry services, social services and voluntary agencies), and how to refer to them. Support and regularly review unregistered practitioners who have been trained to monitor blood glucose and administer insulin. 3. Experienced or proficient nurse Identify people with diabetes who are at a high risk of poor glycaemic, lipid and blood pressure control. Manage and coordinate individual patient care plans. Deliver HCP education programmes depending on the needs of residential staff. Have knowledge of how to monitor intercurrent illness in relation to glycaemic control, and when to seek specialist advice. Report frequent episodes of hypoglycaemia and hyperglycaemia to the GP for a joint review. Monitor and support junior staff to ensure they have appropriate competence. 4. Senior practitioner As 3, and: or expert nurse Provide expert advice on the care of people with diabetes in residential and nursing homes. Demonstrate expert knowledge of diabetes medications and prescribe, if qualified as a non-medical prescriber, within one's own competence and scope of practice. Liaise with services across organisation and professional boundaries. Participate in guideline or protocol development. Initiate and/or participate in audit and research. Develop appropriate commissioned education programmes in collaboration with care home staff. Suggested examples to assess Useful resources: competence in this area: Diabetes and Dementia HCP document and leaflet at www.trenddiabetes.online/resources/ ✔ Provide the education programme content Type 2 diabetes mellitus in older people: a brief statement of key principles of modern day for residential and nursing home staff. management including the assessment of frailty. A national collaborative stakeholder initiative ✔ Provide examples of anonymous care plans https://doi.org/10.1111/dme.13644 for residents with type 1 and type 2 diabetes to demonstrate effective management.

27. PRISON AND SECURE UNITS

To support someone with diabetes residing in a prison, you should be able to:

1. Unregistered practitioner

- Follow local policy regarding care of resident with diabetes in secured units.
- Understand the need for access to, and appropriate timing of, meals in relation to diabetes medication.
- Perform blood glucose and ketone testing according to manufacturers' instructions.
- Understand the normal glycaemic range for the individual and report readings outside this range to the appropriate person.
- Describe the signs and symptoms of hyperglycaemia.
- Describe the signs and symptoms and appropriate treatment for hypoglycaemia.
- Describe what to do if food is refused
- Follow local policy regarding sharps disposal.
- Know how to recognise depression, anxiety and other mental illness in people with diabetes.

2. Competent nurse

- Have a good knowledge of policies and procedures relating to the management of diabetes within the custodial environment.
- At reception, assess someone with diabetes in terms of their current knowledge of diabetes, previous access to diabetes care, and comprehension of their individual treatment goals.
- Identify residents with diabetes who are at high risk of poor glycaemic, lipid and blood pressure control. Offer lifestyle advice and develop an appropriate action plan.
- Identify residentss who are at high risk of hypoglycaemia or who lack hypoglycaemia awareness, and ensure that safeguarding is in place.
- Have a broad understanding of diabetes medications and common side effects.
- Have an in-depth knowledge of prison policies relating to use of prescription medicines and sharps disposal.
- Demonstrate knowledge of implications that "not-in-possession medications" may have on glycaemic control and diabetes management.
- Be able to describe the action required for the treatment of hypoglycaemia.
- Be able to describe the action required for the treatment of hyperglycaemia and intercurrent illness.
- Demonstrate knowledge of the impact of substance and alcohol misuse on glycaemic control.
- Know when to refer for medical assessment or specialist care (e.g. pregnancy, type 1 diabetes).
- Have a working knowledge of other agencies (e.g. community health staff, dietetic, ophthalmology and podiatry services) and how to refer to them.

3. Experienced or proficient nurse

- Manage and co-ordinate individual diabetes care and education programmes.
- Work with residents with diabetes who have difficulties with medication concordance and encourage selfmanagement with an agreed care plan if appropriate.
- Ensure residents understand how to take their medication, are aware of the side effects, and how to report them.
- Be aware of the need for regular review of diabetes complications and risk factors.
- Know how to monitor intercurrent illness and when to seek specialist advice.
- Plan for on-going diabetes care following release.
- Ensure that specialist advice is sort for an individual who has a Hba1c >84 and/or is at risk of DKA
- Monitor and support junior staff to ensure they have appropriate competence.
- Participate in audit and shared learning.

4. Senior practitioner As 3, and: or expert nurse

- Provide expert advice on the care of residents with diabetes.
- Demonstrate expert knowledge of diabetes medications and prescribe, if qualified as a non-medical prescriber, within one's own competence and scope of practice.
- Develop systems that will allow CGM monitoring where appropriate
- Develop appropriate commissioned education programmes in collaboration with the prison staff. This maybe virtual or face to face depending on the institution.
- Provide education to prison healthcare staff to raise awareness of diabetes, its management and its short and longterm complications.
- Liaise with prison and specialist services across organisational and professional boundaries.
- Participate in guideline and protocol development.
- Initiate/participate in audit and research

Suggested examples to assess competence in this area:

- ✔ Provide examples of anonymous case histories and care plans to demonstrate appropriate management of offenders with type 1 and type 2 diabetes.
- ✓ Direct questioning about the signs and symptoms and treatment of hypoglycaemia.
- Outline the specific care needed for someone with diabetes and how they may differ depending on type.

Useful resources:

https://www.gov.uk/guidance/healthcare-for-offenders

Trend Diabetes leaflets for "Alcohol, smoking and illicit drugs: what you need to know if you have diabetes" available at www.trenddiabetes.online/resources/

JBDS-IP: The management of diabetes and adults and children in inpatient settings (2017) available at https://www.diabetes.org.uk/resources-s3/2017-10/Management%20of%20 diabetes%20in%20adults%20and%20children%20with%20psychiatric%20disorders%20in%20 inpatient%20settings-August-2017.pdfs

28. END OF LIFE CARE

To care for someone with diabetes at the end of their life, you should be able to: Undertake blood glucose monitoring as agreed between the individual and diabetes team. 1. Unregistered practitioner Document blood glucose results and report those that are outside the agreed target range to a registered nurse. Be aware of policies relating to end-of-life care and diabetes. List the signs and symptoms that may indicate hypoglycaemia or hyperglycaemia. Be aware of the need to avoid dehydration on people in the last weeks and days of life 2. Competent nurse As 1, and: Be able to discuss document relating to advance directives, Emergency health care planning and ReSPECT forms Assess the person's needs and ensure they are pain-free, adequately hydrated and symptom-free from their diabetes. Be aware that palliative care may vary in time, and diabetes control needs to be assessed on an individual and daily Demonstrate knowledge of appropriate blood glucose targets (e.g. 6 - 15mmol/L) to avoid hypoglycaemia and symptomatic hyperglycaemia. Be aware that glucocorticoid steroids may cause diabetes, which may require insulin treatment. Steroids can also worsen glycaemic control with pre-existing diabetes. Be aware that the aim of diabetes treatment in the last few days of life is to prevent discomfort or hospitalisation from hypoglycaemia, hyperglycaemia, DKA or HHS. Be aware that people with type 1 diabetes must remain on insulin therapy during the last few days of life, but they may need a change in insulin type and regimen depending on their eating pattern. Recognise that people with type 2 diabetes may not need treatment for diabetes in the last few days of life. Be aware that, where possible, diabetes treatment plans and medication changes must be discussed with the individual and significant others. Be aware of the 4 stages (A-D Gold Standard Framework) for considering the use of glucose lowering therapies. 3. Experienced or proficient nurse Initiate and develop personalised care plans in collaboration with the person with diabetes and significant others, including Advanced Care Planning. Describe indications for the initiation or discontinuation of blood alucose-lowering agents. Advise on the necessity and frequency of blood glucose monitoring, in agreement with the individual and significant Recognise when treatment needs to be adjusted. Monitor and support junior staff to ensure they have appropriate competence. 4. Senior practitioner As 3, and: or expert nurse Plan, implement and deliver education programmes about diabetes and palliative care for other HCPs. If a registered non-medical prescriber, adjust and prescribe medication related to diabetes, as required, within own competence and scope of practice. Participate in the development of guidelines and protocols related to diabetes and palliative care. Suggested examples to assess Useful resources: competence in this area: End of Life diabetes care: clinical care recommendations. 4rd edition available at www. Provide examples of anonymous care plans trenddiabetes.online/resources/ demonstrating appropriate advice and https://www.goldstandardsframework.org.uk/advance-care-planning management of diabetes given to people https://www.rcn.org.uk/clinical-topics/end-of-life-care/advance-care-planning with a few months of life to a few days.

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