

For Healthcare Professionals:

# AN INTEGRATED CAREER AND COMPETENCY FRAMEWORK FOR ADULT DIABETES NURSING

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Endorsed by:

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**DiABETES UK**  
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# FOREWORD

Welcome to the 7th edition of the Integrated Career and Competency Framework for Adult Diabetes Nursing.

2005 saw the publication of the first version of competencies for nurses working in diabetes care. In the ensuing decades, subsequent editions of the framework have evolved to align with updates in diabetes care and contemporary nursing practice. With this in mind, it is essential to review and update the framework to provide a contemporary evidence-based resource for benchmarking skills and knowledge, aligned to defined contemporary levels of practice and proficiency. Additionally, this document provides a structured framework to plan career development in diabetes care.

With increasing prevalence, it is safe to say diabetes is everybody's business; the nursing community are essential in the provision of high-quality care and management of individuals at risk of or living with all types of diabetes, across varied healthcare settings. Person centred care is at the core of diabetes management, and practitioners working in diabetes care are central to this goal, providing support, education and advice.

This 7th edition is updated to reflect current guidelines for proficiencies across nursing practice alongside the changing composition of the healthcare workforce which encompasses a wide spectrum of clinical skills, from the student nurse to the nurse prescriber and those working in advanced clinical practice.

This framework continues to provide all nurses and unregistered practitioners, no matter where they work, with clear guidance on the proficiencies needed to meet professional standards of practice.

We would like to thank all those who reviewed the previous edition, making recommendations for this update and additions to the framework



**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.

**Simon O'Neill**  
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# 1. INTRODUCTION

More than 40 general and specialist nurses, alongside people living with diabetes were involved in creating the original framework with feedback gathered from over 250 practitioners working in diabetes care.

Since the first publication of this framework in 2005, diabetes care has been transformed, driven by the parity of esteem between the physiological impact of the condition alongside the emotional burden of living with diabetes day-to-day. This, alongside fast-paced technological advances for diabetes management requires registered and non-registered practitioners to remain up to date, working effectively with the wider multi-disciplinary team to provide high quality care for those living with, or at risk of diabetes.

This 7th edition is updated to reflect these changing demands to ensure those working in diabetes care remain up to date and proficient in the care they provide.

Proficiency not only brings job satisfaction, but enhances efficiency, safety, cost effectiveness, reduces resource utilisation, prevents harm, and provides a positive experience for NHS service users. Evolving skills across diabetes care now encompass knowledge of advanced technologies for glycaemic monitoring and therapy, alongside technology enhanced consultations, in addition to the more traditional requirements of diabetes care.

Roles across NHS care delivery continue to evolve, aligned to the NHS Workforce plan (2023) there is a focus on innovative ways of working, expanding enhanced and associate roles to offer modernised careers with a strong emphasis on core skills to care for individuals with complex needs.

Upskilling the workforce is a key consideration, offering enhanced and advanced nursing roles, growing the number of independent prescribers and senior clinical decision makers. Increasing associate and support roles

within nursing will help to support the delegation of basic diabetes care and widen opportunities for career development, ensuring a diverse and future-proofed workforce. Additionally, the role of student nurses in diabetes management is important to acknowledge as we grow our workforce, promoting the importance of diabetes care across student nursing programmes and clinical placements, ensuring meaningful learning opportunities.

The growth in diabetes incidence, changes to traditional nursing roles, alongside the increased complexity of care means it is appropriate to devolve some elements of diabetes management to unregistered practitioners or non-specialist nurses, allowing diabetes specialist nurses to focus on the more complex aspects of diabetes management, maximising use of their advanced clinical skills.



Diabetes is a condition like no other, demanding so much from the individual and requiring all practitioners providing diabetes care to be cognisant of the complexity and burden of diabetes, alongside the potential for costly acute and long-term complications. Nurses and associated roles are central players in the care processes of people living with diabetes. From providing a point of contact and signposting, supporting the development of self-management skills, providing structured education and support, to advanced management incorporating medication adjustments and management of advanced diabetes technologies; identification, alignment to, and assessment of proficiency is crucial. This ensures practitioners working with people living with diabetes are able to provide effective support and care is not compromised.

This framework is a useful tool for identifying the educational and training needs of registered nurses, student nurses and unregistered practitioners. This updated edition is aligned to the Nursing and Midwifery Council (NMC) platforms for standards of professional registration, standards for student nurses and nursing associates. Additionally, the framework encompasses the pillars of the advanced clinical practice roles with reference to advanced clinical skills, leadership and management, education and research engagement.

No matter where an individual works, they will always be caring for people with diabetes. This framework can be used both to recommend the required level of proficiency for a particular service when recruiting staff and enables practitioners 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 care.

There are now 29 topic areas within this framework, 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 6 revised levels:

Assessments of competence	
<b>1. Unregistered practitioner / care assistant</b>	Supports the multi-disciplinary healthcare team in the delivery of care, encompassing treatment, preventative care, health promotion and patient education.
<b>2. Pre-registration student nurse / student nurse associate</b>	Proactively takes responsibility for own learning within the healthcare setting under supervision, working towards proficiency to become an independent, reflective, safe and professional practitioner as per relevant NMC standards.
<b>3. Nursing Associate</b>	Bridges the gap between care assistants and registered nurses. An accountable registered professional supporting the work of registered nurses providing and monitoring care, working within the healthcare team. Promotes health and prevents ill health. Improves safety and quality of care. Contributes to integrated care. Practices as per relevant NMC standards.
<b>4. Proficient registered nurse</b>	An accountable registered professional who assesses needs and plans care. Providing, evaluating and coordinating care delivery. Leading and managing nursing care across the healthcare team. Improves safety and quality of care. Promotes health and prevents ill health. Practices as per relevant NMC standards.
<b>5. Experienced registered nurse</b>	In addition to proficient registered nurse: one year post qualification / preceptorship. >12 months experience in a specialist area. Working towards / has undertaken additional study / speciality specific training and / or education.
<b>6. Senior / advanced clinical practitioner*</b>  * Includes nurse consultant role	In addition to experienced registered nurse: expert practitioner with a high level of autonomy managing complex decision making. Encompasses pillars of advanced clinical practice; leadership and management, education and research engagement. Demonstrates core capabilities and area specific clinical competence. Manages clinical care in partnership with individuals' families and carers. Analyses and synthesises complex and uncertain problems with varying levels of risk across a range of settings, enabling innovative solutions to enhance peoples' experiences and improve outcomes, taking accountability for decisions made.

## Advanced Clinical Practitioners (ACP's)

Advanced clinical practitioners (ACPs) are healthcare professionals, educated to Master's level or equivalent, with the skills and knowledge to allow them to expand their scope of practice to better meet the needs of the people they care for. ACPs are deployed across all healthcare settings and work at a level of advanced clinical practice that pulls together the four ACP pillars of clinical practice, leadership and management, education and research.

A definition of ACP, its underpinning standards and governance, can be found in the Multi-professional framework for advanced clinical practice in England. The framework ensures there is national consistency in the level of practice across multi-professional roles that is clearly understood by the public, advanced clinical practitioners, their colleagues, education providers and employers. The roles undertaken by advanced clinical practitioners are determined by the needs of the employer and how they require the level of practice to be deployed within their setting. This may fit with nationally understood roles, such as those within emergency departments or very bespoke roles based upon the needs of a specific population. These roles are becoming more common than the role of Consultant Nurse across the country where currently there is less than 40 in England.

[www.hee.nhs.uk/sites/default/files/documents/multi-professionalframeworkforadvancedclinicalpracticeinengland.pdf](http://www.hee.nhs.uk/sites/default/files/documents/multi-professionalframeworkforadvancedclinicalpracticeinengland.pdf)

This table gives an outline of the differences between a Nursing Associate and a Registered Nurse

Nursing Associate - 6 platforms	Registered Nurse - 7 platforms
Be an accountable professional	Be an accountable professional
Promoting health and preventing ill health	Promoting health and preventing ill health
Provide and <b>monitor</b> care	Provide and <b>evaluate</b> care
Working in teams	<b>Leading and managing nursing care</b> and working in teams
Improving safety and quality of care	Improving safety and quality of care
<b>Contributing to</b> integrated care	<b>Coordinating</b> care
	<b>Assessing needs and planning care</b>

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 includes useful resources to sign-post users to build knowledge, with examples of tools which can be used to assess proficiency.

## References

- [www.heathcareers.nhs.uk/explore-roles/nursing/roles-nursing/nursing-associate](http://www.heathcareers.nhs.uk/explore-roles/nursing/roles-nursing/nursing-associate)
- [www.nmc.org.uk/standards/](http://www.nmc.org.uk/standards/)
- [www.nmc.org.uk/about-us/our-role/advanced-practice-review/our-proposals/](http://www.nmc.org.uk/about-us/our-role/advanced-practice-review/our-proposals/)
- [www.hee.nhs.uk/sites/default/files/documents/multi-professionalsframeworkforadvancedclinicalpracticeinengland.pdf](http://www.hee.nhs.uk/sites/default/files/documents/multi-professionalsframeworkforadvancedclinicalpracticeinengland.pdf)
- [www.nmc.org.uk/news/news-and-updates/blog-whats-a-nursing-associate/](http://www.nmc.org.uk/news/news-and-updates/blog-whats-a-nursing-associate/)

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## 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 6 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 six 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 are 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, 2024) and to successfully pass through the relevant gateways identified in the Agenda for Change (NHS Employers 2024). 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 2024). 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 competence	
<b>1. Interpret</b>	<ul style="list-style-type: none"> <li>Ask the person to examine and identify patterns or problems from a given range of results, for example, a glucose profile.</li> </ul>
<b>2. Lead on</b>	<ul style="list-style-type: none"> <li>Ask for evidence of organising and chairing meetings, developing guidelines or disseminating knowledge to groups of others.</li> </ul>
<b>3. Demonstrate/perform</b>	<ul style="list-style-type: none"> <li>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 glucose meter as per the manufacturer's guidelines, as well as in compliance with local/national policy and best practice about safe disposal of sharps, infection control, etc.).</li> <li>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).</li> </ul>
<b>4. Initiate</b>	<ul style="list-style-type: none"> <li>Example of prescribing new treatment, referral or intervention in the context of a case scenario.</li> </ul>
<b>5. Provide expert advice</b>	<ul style="list-style-type: none"> <li>Example of an insulin management plan developed by a DSN for district nurses to follow</li> <li>Example of a letter to a GP explaining the rationale for a prescribing decision and the ongoing care required.</li> <li>Publication of articles or national guidance or delivering presentations locally or nationally.</li> </ul>
<b>6. Teach</b>	<ul style="list-style-type: none"> <li>Observation of delivering a structured education group or one-to-one session.</li> <li>Evaluation or post-training knowledge survey from a teaching session - provide examples of best practice guidance/sources of reliable and updated patient educational resources and examples of implementation.</li> </ul>
<b>7. Explain, describe, state, list, understand, know, identify</b>	<ul style="list-style-type: none"> <li>Verbal questioning or written test.</li> </ul>
<b>Useful resource</b>	<ul style="list-style-type: none"> <li>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 <a href="http://www.wand-wales.co.uk/clinical/competencies/">www.wand-wales.co.uk/clinical/competencies/</a></li> </ul>

## 4. THE NURSE CONSULTANT'S ROLE

At the time of revising the Framework, there were less than 30 diabetes nurse consultants, most of whom were employed in England with two employed in Wales. 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 level 6 Senior /Advanced clinical practitioner, 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

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

**For the prevention and early detection of type 2 diabetes, you should be able to:**

<p><b>1. Unregistered practitioner / care assistant</b>  <b>2. Pre-registration student nurse / student nurse associate</b>  <b>3. Nursing Associate</b></p>	<ul style="list-style-type: none"> <li>Describe the signs and symptoms of diabetes.</li> <li>Describe the risk factors for developing type 2 diabetes.</li> <li>Recognise and describe the differences between type 1 and type 2 diabetes.</li> <li>Recognise when it is appropriate to undertake screening for type 2 diabetes.</li> <li>Explain the importance of prevention or delay in progression to type 2 diabetes.</li> <li>Be aware of current guidance on screening to identify type 2 diabetes.</li> </ul>
<p><b>4. Proficient registered nurse</b></p>	<p>As 1,2,3, and:</p> <ul style="list-style-type: none"> <li>Sign-post people to information and support to encourage lifestyle changes to prevent or delay progression to type 2 diabetes (NHS England, 2020).</li> <li>Identify individuals at risk of type 2 diabetes (e.g. long-term use of steroids and antipsychotic medication, previous gestational diabetes and those from South Asian, Black, Caribbean or African/American origin and initiate appropriate screening/diagnostic tests.</li> <li>Provide advice to individuals at risk with regard to lifestyle changes, including exercise programmes and dietary changes for the onward referral for structured education for the prevention of type 2 diabetes.</li> <li>Keep a register and ensure appropriate follow-up/system of recall is in place for those at risk to identify the progression to type 2 diabetes.</li> <li>Include people with newly diagnosed type 2 diabetes to the practice diabetes register so they have access to annual reviews and retinopathy screening.</li> <li>Describe the care pathway for individuals with newly diagnosed type 2 diabetes.</li> <li>Demonstrate knowledge of the available tests for the diagnosis of type 2 diabetes and explain the results.</li> <li>Outline the long-term health consequences of type 2 diabetes.</li> <li>Describe the links between type 2 diabetes and other conditions (e.g. metabolic syndrome and cardiovascular disease).</li> <li>Be aware of local policy and programmes regarding vascular screening and diabetes prevention.</li> </ul>
<p><b>5. Experienced registered nurse</b></p>	<p>As 4, and:</p> <ul style="list-style-type: none"> <li>Interpret test results and if diagnostic, make appropriate referrals.</li> <li>Educate other healthcare professionals and care workers with regard to the risks of developing type 2 diabetes.</li> <li>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.</li> <li>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).</li> <li>Be aware of the need to refer people with newly diagnosed diabetes to a structured education programme.</li> <li>Monitor and support junior staff to ensure they have the appropriate competence.</li> <li>Be aware of the impact that low calorie diets may have on diabetes progression (NHS England, 2021)</li> </ul>
<p><b>6. Senior / advanced clinical practitioner*</b>  <small>* Includes nurse consultant role</small></p>	<p>As 5, and:</p> <ul style="list-style-type: none"> <li>Provide expert advice on the benefits of screening programmes/procedures for high risk groups to healthcare professionals and care workers, highlighting those at risk of developing type 2 diabetes to health commissioners.</li> <li>Contribute to the evidence base and implement evidence-based practice in relation to the prevention of type 2 diabetes.</li> <li>Contribute to the evidence base and implement evidence-based practice in relation to type 2 diabetes screening in high-risk groups.</li> <li>Participate in the development of local guidelines and programmes of education and care for the screening/prevention and early detection of type 2 diabetes.</li> </ul>

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

## Suggested examples to assess competence in this area:

- ✓ Interpret a sample of glucose results of people with a possible diagnosis of type 2 diabetes (pre-diabetes) or Non-Diabetic Hyperglycaemia (NDH).
- ✓ Describe the care pathway for someone identified with NDH, and the advice he or she should be given.

## Useful resources:

At risk of diabetes leaflet at [www.trenddiabetes.online/resources/](http://www.trenddiabetes.online/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](http://www.nice.org.uk/Guidance/PH38)

Validated diabetes risk assessment tools:

[www.qdiabetes.org/](http://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](http://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:

<p><b>1. Unregistered practitioner / care assistant</b></p> <p><b>2. Pre-registration student nurse / student nurse associate</b></p> <p><b>3. Nursing Associate</b></p>	<ul style="list-style-type: none"> <li>• Understand the difference between type 1 and type 2 diabetes.</li> <li>• Perform glucose and blood ketone monitoring and report findings to a registered nurse.</li> <li>• Observe and report any concerns that might affect the ability of the person to self-care.</li> <li>• Encourage the person to use their individualised and agreed care plan.</li> </ul>
<p><b>4. Proficient registered nurse</b></p>	<p>As 1,2,3 and:</p> <ul style="list-style-type: none"> <li>• List the presenting signs and symptoms and diagnostic criteria for type 1 diabetes, and the requirement for urgent medical attention.</li> <li>• Be aware that the individual should be under the care of a specialist diabetes team.</li> <li>• Understand the need for regular insulin therapy and monitoring of glucose and ketones.</li> <li>• Administer an insulin injection if prescribed.</li> <li>• Advise on storage of insulin and safe disposal of sharps.</li> <li>• Be aware that insulin requirements may vary significantly in the first few weeks after diagnosis.</li> <li>• 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 glucose and ketone levels and recognising and managing hypoglycaemia.</li> <li>• Signpost to information and support to encourage informed decision-making about living with diabetes and managing life events (e.g. structured education).</li> <li>• Advise when to seek urgent medical help, and provide with emergency contact details.</li> <li>• Follow local/national guidelines in the management of diabetic ketoacidosis and severe hypoglycaemia.</li> <li>• Ensure the person is aware of local peer support groups which are a vital support network.</li> <li>• Understand the language used to discuss the diagnosis and care matters</li> <li>• Ensure the individual is included on the diabetes register.</li> <li>• Understand that the individual needs time to process the diagnosis – this will vary between individuals</li> </ul>
<p><b>5. Experienced registered nurse</b></p>	<p>As 4, and:</p> <ul style="list-style-type: none"> <li>• Assess the emotional state of the individual and provide tailored, structured education relating to self-care skills at an appropriate pace.</li> <li>• Advise on the requirements for insulin-users by the DVLA.</li> <li>• Identify psychosocial barriers to self-care and refer on where necessary.</li> <li>• Help the individual with type 1 diabetes to develop a holistic care plan including appropriate clinical targets and arrange follow-up support.</li> <li>• Demonstrate understanding regarding the different insulin therapies, including timings of injections, profiles of action and duration, and correct administration technique.</li> <li>• Ensure access to an appropriate monitoring system for glucose and ketones according to changing technology.</li> <li>• Monitor and support junior staff to ensure they have appropriate competence.</li> </ul>
<p><b>6. Senior / advanced clinical practitioner*</b></p> <p>* Includes nurse consultant role</p>	<p>As 5, and:</p> <ul style="list-style-type: none"> <li>• 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.</li> <li>• Demonstrate in-depth knowledge regarding the use of different insulin therapies and advanced technology to support these individuals in the management of their diabetes.</li> <li>• 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.</li> <li>• Provide education for other HCPs and care workers in diabetes self-care skills.</li> <li>• Be a named contact for advice and support.</li> </ul>

## 2. NEWLY DIAGNOSED TYPE 1 DIABETES

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### 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 (2023) available at [www.nice.org.uk/guidance/ng17](http://www.nice.org.uk/guidance/ng17)

Trend Diabetes (Updated 2023) 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 2023 available at [www.england.nhs.uk/languagematters](http://www.england.nhs.uk/languagematters)

### 3. ESTABLISHED TYPE 1 DIABETES

To support the person with existing type 1 diabetes, you should be able to:

<p><b>1. Unregistered practitioner / care assistant</b></p> <p><b>2. Pre-registration student nurse / student nurse associate</b></p> <p><b>3. Nursing Associate</b></p>	<ul style="list-style-type: none"> <li>• Understand the difference between type 1 and type 2 diabetes.</li> <li>• Perform glucose and ketone monitoring and report findings to a registered nurse.</li> <li>• Understand that insulin should never be discontinued.</li> <li>• Encourage the person to use their individualised and agreed care plan</li> </ul>
<p><b>4. Proficient registered nurse</b></p>	<p>As 1,2,3 and:</p> <ul style="list-style-type: none"> <li>• Understand the need for regular insulin therapy and monitoring of glucose and ketones.</li> <li>• Be aware that insulin requirements may need to change in response to a variety of circumstances (e.g. activity, intercurrent illness, steroid use).</li> <li>• Assess the ability of the individual to self-care and enable them to continue managing their diabetes during a hospital stay, if appropriate.</li> <li>• Assess understanding about recognising the symptoms of hypoglycaemia and use of appropriate treatments.</li> <li>• 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).</li> <li>• Ensure that you are aware of language used in consultation and how important it is congruent and accurate</li> <li>• Ensure the person has an annual diabetes review, including retinopathy and foot screening.</li> <li>• Be aware of local support groups which may be appropriate for the individual</li> <li>• Follow local/national guidelines in the management of diabetic ketoacidosis and severe hypoglycaemia.</li> </ul>
<p><b>5. Experienced registered nurse</b></p>	<p>As 4, and:</p> <ul style="list-style-type: none"> <li>• Provide tailored, structured education relating to self-care skills such as insulin adjustment and management of inter-current illness.</li> <li>• Recognise psychological wellbeing or lack of it and how this may impact on diabetes self-management</li> <li>• Identify psychosocial barriers to self-care and refer on where necessary.</li> <li>• Help the individual to develop an individualised holistic care plan, with agreed goals.</li> <li>• Demonstrate understanding regarding the different insulin therapies, including timings of injections, profiles of action and duration, and correct administration technique.</li> <li>• Monitor and support junior staff to ensure they have appropriate competence.</li> </ul>
<p><b>6. Senior / advanced clinical practitioner*</b></p> <p>* Includes nurse consultant role</p>	<p>As 5, and:</p> <ul style="list-style-type: none"> <li>• 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 appropriate</li> <li>• Provide advice on family planning, pre-conception care and pregnancy for women of child-bearing age.</li> <li>• 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).</li> <li>• If a registered non-medical prescriber, prescribe medications including insulin and devices, within own competence and scope of practice.</li> <li>• 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</li> <li>• Provide education for other HCPs and care workers in the management of type 1 diabetes and promotion of self-care skills.</li> </ul>

### 3. ESTABLISHED TYPE 1 DIABETES

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**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 (2023) available at [www.nice.org.uk/guidance/ng17](http://www.nice.org.uk/guidance/ng17)

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

Trend Diabetes leaflet for "Planning for a baby when you have diabetes" available at: [www.trenddiabetes.online/resources/](http://www.trenddiabetes.online/resources/)

Trend Diabetes (Updated 2023) 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 2023 available at [www.england.nhs.uk/languagematters](http://www.england.nhs.uk/languagematters)

## 4. PROMOTING SELF-CARE

To support the person to self-care for their diabetes, you should be able to:

<p><b>1. Unregistered practitioner / care assistant</b>  <b>2. Pre-registration student nurse / student nurse associate</b>  <b>3. Nursing Associate</b></p>	<ul style="list-style-type: none"> <li>• Support the person to develop self-care skills with guidance from a registered nurse.</li> <li>• Observe and report any concerns that might affect the ability of the person with diabetes to self-care.</li> <li>• Encourage people to use their individualised and agreed care plans.</li> </ul>
<p><b>4. Proficient registered nurse</b></p>	<p>As 1,2,3 and:</p> <ul style="list-style-type: none"> <li>• Assess the ability of the person with diabetes to self-care and work with them or their carer to optimise self-care skills.</li> <li>• Signpost people to information and local support groups which may help and encourage them to engage in self-care and self-management.</li> <li>• Explain the importance of structured education to enhance their self-care knowledge and ability.</li> <li>• Encourage people to attend structured education programmes to enable informed decision-making about living with diabetes and managing life events.</li> <li>• Support the person in setting realistic goals and in the achievement of those goals.</li> <li>• Provide current evidence about diabetes treatments which may encourage people to make lifestyle changes</li> </ul>
<p><b>5. Experienced registered nurse</b></p>	<p>As 4, and:</p> <ul style="list-style-type: none"> <li>• 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.</li> <li>• Develop some motivational interviewing skills to support and encourage people to take ownership of their diabetes.</li> <li>• 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.</li> <li>• 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.</li> <li>• Recognise the psychosocial barriers to self-care and refer on where necessary.</li> <li>• Facilitate the development of an individualised and agreed care plan.</li> </ul>
<p><b>6. Senior / advanced clinical practitioner*</b>  <small>* Includes nurse consultant role</small></p>	<p>As 5, and:</p> <ul style="list-style-type: none"> <li>• Demonstrate knowledge of theoretical frameworks and educational philosophies underpinning behaviour change.</li> <li>• Demonstrate knowledge and understanding of bio-physical and psychosocial factors affecting self-management of long-term conditions.</li> <li>• Demonstrate knowledge and skills to facilitate behaviour modification.</li> <li>• Develop and ensure delivery of educational materials, supportive networks and models of diabetes care that foster empowerment and lifelong learning about diabetes.</li> <li>• Work with the person with diabetes to facilitate lifestyle adjustment in response to changes in their diabetes or circumstances.</li> <li>• Provide education for other healthcare professionals and care workers in diabetes self-care skills.</li> </ul>

## 4. PROMOTING SELF-CARE

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### Suggested examples to assess competence in this area:

- ✓ Be observed in a clinic situation and use peer review tools which can then be used in discussion afterwards.
- ✓ Be observed participating in a structured 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 allows sharing ideas and discussions around clinical situations.

### Useful resources:

JBDS-IP (2023) Self-management of diabetes in hospital available at: [https://abcd.care/sites/default/files/site\\_uploads/JBDS\\_Guidelines\\_Current/JBDS\\_04\\_Self\\_Management\\_Guideline\\_with\\_QR\\_code\\_February\\_2023.pdf](https://abcd.care/sites/default/files/site_uploads/JBDS_Guidelines_Current/JBDS_04_Self_Management_Guideline_with_QR_code_February_2023.pdf)

Diabetes UK Diabetes self-management education available at [www.diabetes.org.uk/professionals/resources/resources-to-improve-your-clinical-practice/diabetes-self-management-education](http://www.diabetes.org.uk/professionals/resources/resources-to-improve-your-clinical-practice/diabetes-self-management-education)

## 5. EMOTIONAL WELL-BEING

To support the emotional well-being of someone with diabetes, you should be able to:

<p><b>1. Unregistered practitioner / care assistant</b>  <b>2. Pre-registration student nurse / student nurse associate</b>  <b>3. Nursing Associate</b></p>	<ul style="list-style-type: none"> <li>• Demonstrate awareness that emotional health can impact the physical health of people living with diabetes.</li> <li>• Have an understanding of the appropriate use of 'person first' language to encourage positive interactions with people living with diabetes.</li> <li>• Support emotional well-being through the use of communication skills that demonstrate active listening and empathic verbal and non-verbal communication.</li> </ul>
<p><b>4. Proficient registered nurse</b></p>	<p>As 1,2,3 and:</p> <ul style="list-style-type: none"> <li>• Demonstrate a good understanding of how to implement the principles and practices of person first language guidelines.</li> <li>• Be able to describe the pyramid model of psychological need.</li> <li>• 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).</li> <li>• Have an understanding of the impact of culture and diversity, physical, intellectual, cognitive disability.</li> <li>• Describe the 7 A's model for supporting individuals with their diabetes and emotional health (Aware, Ask, Assess, Advise, Assist, Assign, Arrange).</li> <li>• 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).</li> </ul>
<p><b>5. Experienced registered nurse</b></p>	<p>As 4, and:</p> <ul style="list-style-type: none"> <li>• Be able to train colleagues in the principles and practice of the person-first language and model these principles in practice.</li> <li>• Demonstrate knowledge of the psychological impact of diabetes and facilitate referral to psychological support as required.</li> <li>• 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.</li> <li>• Manage diabetes distress using the 7 A's model of supporting someone with distress in clinical practice (Aware, Ask, Assess, Advise, Assist, Assign, Arrange).</li> </ul>
<p><b>6. Senior / advanced clinical practitioner*</b>  <small>* Includes nurse consultant role</small></p>	<p>As 5, and:</p> <ul style="list-style-type: none"> <li>• 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.</li> <li>• 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.</li> <li>• Participate in the development of local guidelines for the detection, management and prevention of problems with emotional well-being.</li> <li>• 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.</li> </ul>

### 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.

### Useful resources:

- Diabetes and emotional well-being  
Available at [www.trenddiabetes.online/resources/](http://www.trenddiabetes.online/resources/)
- DUK (2019) Position statement: Emotional and psychological support for people with diabetes:  
[https://www.diabetes.org.uk/resources-s3/2019-03/0506%20Diabetes%20UK%20Australian%20Handbook\\_P4\\_FINAL\\_1.pdf](https://www.diabetes.org.uk/resources-s3/2019-03/0506%20Diabetes%20UK%20Australian%20Handbook_P4_FINAL_1.pdf)
- Diabetes Australia (2016) Diabetes and emotional health: A practical guide for healthcare professionals supporting adults with type 1 and type 2 diabetes.
- Language Matters, NHS England 2023 available at [www.england.nhs.uk/languagematters](http://www.england.nhs.uk/languagematters)

## 6. NUTRITION

### To meet the person's individual nutritional needs, you should be able to:

<p><b>1. Unregistered practitioner / care assistant</b></p> <p><b>2. Pre-registration student nurse / student nurse associate</b></p> <p><b>3. Nursing Associate</b></p>	<ul style="list-style-type: none"> <li>Follow the individual's nutritional plan and report any related problems.</li> <li>Recognise foods and drinks high in carbohydrate and refined sugar.</li> <li>Measure and record waist circumference, height, weight and BMI.</li> <li>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.</li> <li>Report if meals are not eaten, especially carbohydrates, if the person is using insulin or taking sulphonylureas.</li> </ul>
<p><b>4. Proficient registered nurse</b></p>	<p>As 1,2,3 and:</p> <ul style="list-style-type: none"> <li>Calculate and interpret BMI against the healthy range.</li> <li>Understand which foods contain carbohydrate and how these may affect glucose levels differently.</li> <li>List the principles of a healthy, balanced diet, including low refined sugar, high fibre, low salt and low fat elements.</li> <li>State the key elements of recommended dietary patterns in type 2 diabetes (e.g. Mediterranean, Healthy Eating, Reduced Calorie and Low Carb)</li> <li>Recognise that there is no one-size-fits-all prescriptive approach to making food choices, and support an individualised approach.</li> <li>Identify people at risk of malnutrition and situations where healthy eating advice is inappropriate.</li> <li>Signpost people to evidence-based sources of information (e.g. Diabetes UK, British Dietetic Association).</li> <li>Provide written evidence-based information about diet.</li> <li>Refer to a dietitian where appropriate.</li> </ul>
<p><b>5. Experienced registered nurse</b></p>	<p>As 4, and:</p> <ul style="list-style-type: none"> <li>Work in partnership with the individual and /or group with diabetes to identify realistic and achievable dietary changes to enable individuals to manage their glucose levels in the short and long term.</li> <li>List the dietary factors which affect cardiovascular risk.</li> <li>Be aware of local policy on the care of people undergoing enteral feeding and how different feeding regimens impact on glucose levels.</li> <li>Monitor and support junior staff to ensure they have appropriate competence.</li> </ul>
<p><b>6. Senior / advanced clinical practitioner*</b></p> <p>* Includes nurse consultant role</p>	<p>As 5, and:</p> <ul style="list-style-type: none"> <li>Perform an assessment of how lifestyle (i.e. diet and physical activity) and pharmacological agents impact on glycaemic control.</li> <li>Support the individual to make informed decisions about appropriate nutritional choices.</li> <li>Teach the person with diabetes and/or their carer, the principles of carbohydrate counting and medication dose adjustment where needed.</li> <li>Demonstrate knowledge and skills to facilitate behaviour change and have an understanding of the impact of health literacy on behaviour.</li> <li>Demonstrate knowledge of how to manage the specific needs of people with diabetes undergoing enteral feeding, following Oral or Bariatric surgery, or End of Life.</li> </ul>

#### Suggested examples to assess competence in this area:

- ✓ Correctly classify a sample of food items into the appropriate food group and describe the effect each one could have on glycaemic control.
- ✓ Describe the underlying principles of carbohydrate counting and correctly identify the carbohydrate content of a sample of common foods.

#### Useful resources:

Diabetes UK (2018) Evidence-based nutrition guidelines for the prevention and management of diabetes  
 Diabetes and enteral feeding available at [www.trenddiabetes.online/resources/](http://www.trenddiabetes.online/resources/)  
 Carbs and Cals [www.carbsandcals.com](http://www.carbsandcals.com)

## 7. URINE GLUCOSE AND KETONE MONITORING

**For the safe and effective use of urine glucose or ketone monitoring and associated equipment, you should be able to:**

<p><b>1. Unregistered practitioner / care assistant</b>  <b>2. Pre-registration student nurse / student nurse associate</b>  <b>3. Nursing Associate</b></p>	<ul style="list-style-type: none"> <li>• Perform the urine test according to the manufacturers instructions and local guidelines.</li> <li>• Perform the test unsupervised at the request of a registered nurse or as per care plan.</li> <li>• Document urine test for glucose or ketones or both and report the result according to local guidelines.</li> </ul>
<p><b>4. Proficient registered nurse</b></p>	<p>As 1,2,3 and:</p> <ul style="list-style-type: none"> <li>• Interpret the test result and, if outside the expected range for the individual, make the appropriate referral.</li> <li>• Teach the testing procedure to the person with diabetes or their carer.</li> <li>• Identify situations where testing for urinary ketones is appropriate.</li> <li>• Identify situations when blood ketone testing would be indicated.</li> <li>• Recognise when an individual may need to be referred to specialist care for immediate treatment of diabetic ketoacidosis.</li> </ul>
<p><b>5. Experienced registered nurse</b></p>	<p>As 4, and:</p> <ul style="list-style-type: none"> <li>• Ensure people with diabetes are aware of when to test for blood or urinary ketones.</li> <li>• Ensure people with diabetes know what levels are acceptable or when to ask for help.</li> <li>• If ketones present in the moderate or high range and unwell, refer urgently to emergency care for possible treatment of diabetic ketoacidosis</li> <li>• Recognise when an individual may need to be referred to specialist care for immediate treatment to prevent diabetic ketoacidosis</li> <li>• Use monitoring results to optimise treatment interventions according to evidence-based practice, and incorporate preferences of the person with diabetes.</li> <li>• Ensure people with diabetes are aware of what to do when ill.</li> <li>• Ensure people with diabetes know what action to take if vomiting should occur.</li> <li>• Monitor and support junior staff to ensure they have appropriate competence.</li> </ul>
<p><b>6. Senior / advanced clinical practitioner*</b>  <small>* Includes nurse consultant role</small></p>	<p>As 5, and:</p> <ul style="list-style-type: none"> <li>• Demonstrate an awareness of when further diagnostic and surveillance tests such as HbA1c, random glucose, blood ketones, eGFR or blood gases would be indicated.</li> <li>• Instigate further tests such as those above.</li> <li>• Develop a specific pathway for monitoring of urine in diabetes care.</li> <li>• If a non-medical prescriber, prescribe medications as required, within own competencies and scope of practice.</li> </ul>

**Suggested examples to assess competence in this area:**

- ✓ List situations when urinary glucose or ketones would be necessary.
- ✓ Describe the advice you would give to someone with type 1 diabetes with moderate amount of ketones in their blood or urine.
- ✓ Participate in clinical supervision which allows sharing ideas and discussions around clinical situations.

**Useful resources:**

- Type 1 diabetes: what to do when you are ill
  - Type 2 diabetes: what to do when you are ill
- Available at [www.trenddiabetes.online/resources/](http://www.trenddiabetes.online/resources/)

## 8. BLOOD GLUCOSE AND KETONE MONITORING

**For the safe and effective use of blood glucose and blood ketone monitoring and associated equipment, you should be able to:**

<p><b>1. Unregistered practitioner / care assistant</b></p> <p><b>2. Pre-registration student nurse / student nurse associate</b></p> <p><b>3. Nursing Associate</b></p>	<ul style="list-style-type: none"> <li>• Perform the blood test according to manufacturer's instructions and local guidelines.</li> <li>• Describe the normal range of glycaemia.</li> <li>• Document and report any results which are outside the agreed target range to a registered nurse.</li> <li>• Follow local policy for the safe disposal of sharps.</li> <li>• Follow local quality assurance procedures.</li> <li>• Recognise the signs and symptoms of hypoglycaemia and administer the appropriate amount of fast-acting glucose.</li> </ul>
<p><b>4. Proficient registered nurse</b></p>	<p>As 1,2,3 and:</p> <ul style="list-style-type: none"> <li>• Teach the testing procedure to the person with diabetes and/or their carer.</li> <li>• Identify and demonstrate an understanding of when it is appropriate to test for blood ketones</li> <li>• Be able to advise on appropriate individualised glycaemic targets.</li> <li>• Discuss appropriate frequency of glucose and ketone monitoring</li> <li>• Interpret the results and report readings outside the individual's agreed target range to the appropriate person.</li> <li>• Seek medical advice if blood ketones are 0.6 mmol/L or greater</li> <li>• Seek urgent medical advice if blood ketones are 3.0 mmol/L or greater. Refer immediately to Emergency Care if individual is unwell</li> </ul>
<p><b>5. Experienced registered nurse</b></p>	<p>As 4, and:</p> <ul style="list-style-type: none"> <li>• Interpret home glucose results, assess other parameters and take appropriate action including initiating further tests such as HbA1c or MSU.</li> <li>• Interpret blood ketones, assess other parameters and take appropriate timely action.</li> <li>• Teach people with diabetes or their carer to interpret test results and take appropriate action.</li> <li>• Monitor and support junior staff to ensure they have appropriate competence.</li> </ul>
<p><b>6. Senior / advanced clinical practitioner*</b></p> <p>* Includes nurse consultant role</p>	<p>As 5, and:</p> <ul style="list-style-type: none"> <li>• Use results to optimise treatment interventions according to evidence-based practice, taking into account the wishes of the person with diabetes</li> <li>• Initiate continuous glucose monitoring if appropriate and available (NB: CGMS and flash glucose monitoring measures interstitial glucose) and interpret the results correctly.</li> <li>• Develop specific local guidelines for use in different situations</li> <li>• If a registered non-medical prescriber, prescribe medications as required, within own competence and scope of practice.</li> </ul>
<p><b>Suggested examples to assess competence in this area:</b></p> <ul style="list-style-type: none"> <li>✓ Observation of performing the test correctly.</li> <li>✓ Interpret a number of test results correctly and state what action is required.</li> </ul>	<p><b>Useful resources:</b></p> <ul style="list-style-type: none"> <li>• Type 1 diabetes: what to do when you are ill</li> <li>• Type 2 diabetes: what to do when you are ill</li> <li>• Glucose monitoring guidelines: Consensus document</li> </ul> <p>Available at <a href="http://www.trenddiabetes.online/resources/">www.trenddiabetes.online/resources/</a></p>

## 9. SAFE USE OF GLUCOSE SENSOR TECHNOLOGY

For the safe and effective use of interstitial glucose monitoring and associated equipment, you should be able to:

<p><b>1. Unregistered practitioner / care assistant</b></p> <p><b>2. Pre-registration student nurse / student nurse associate</b></p> <p><b>3. Nursing Associate</b></p>	<ul style="list-style-type: none"> <li>Perform the glucose test according to manufacturer's instructions and local guidelines.</li> <li>Describe the normal range of glucose for the individual.</li> <li>Document and report any results which are outside the agreed target range to a registered nurse.</li> <li>Follow local policy for the safe disposal of sharps.</li> <li>Follow local quality assurance procedures.</li> <li>Recognise the signs and symptoms of hypoglycaemia / hyperglycaemia and administer appropriate treatment according to local policy.</li> </ul>
<p><b>4. Proficient registered nurse</b></p>	<p>As 1,2,3 and:</p> <ul style="list-style-type: none"> <li>Teach the application of the glucose sensor procedure to the person with diabetes and/or their carer where possible.</li> <li>Identify and demonstrate an understanding of when it is appropriate to test capillary glucose levels</li> <li>Be able to advise on appropriate individualised glycaemic targets.</li> <li>Discuss appropriate frequency of glucose monitoring</li> <li>Interpret the results and report readings outside the individual's agreed target range to the appropriate person.</li> <li>Seek medical advice if glucose levels &gt; 12mmols/L check for blood ketones – see "Sick Day Rules" treatment</li> <li>Seek urgent medical advice if blood ketones are 1.5mmol/L or greater. Refer immediately to Emergency Care if individual is unwell</li> </ul>
<p><b>5. Experienced registered nurse</b></p>	<p>As 4, and:</p> <ul style="list-style-type: none"> <li>Interpret home glucose results, assess other parameters and take appropriate action including initiating further tests such as HbA1c.</li> <li>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.</li> <li>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</li> <li>Monitor and support junior staff to ensure they have appropriate competence.</li> </ul>
<p><b>6. Senior / advanced clinical practitioner*</b></p> <p>* Includes nurse consultant role</p>	<p>As 5, and:</p> <ul style="list-style-type: none"> <li>Use results to optimise treatment interventions according to evidence-based practice, taking into account, the wishes of the person with diabetes</li> <li>Initiate intermittently scanned/continuous glucose monitoring if appropriate with discussion of person with diabetes or carer</li> <li>Develop specific local guidelines for use in different situations</li> <li>If a registered non-medical prescriber, prescribe sensors as required, within own competence and scope of practice.</li> </ul>

### Suggested examples to assess competence in this area:

- ✓ Observation of performing the test correctly.
- ✓ Interpret a number of test results correctly and state what action is required.

### Useful resources:

Glucose monitoring guidelines: Consensus document Available at [www.trenddiabetes.online/resources/](http://www.trenddiabetes.online/resources/)

Type 2 diabetes in adults - Quality standard [QS209]Published: 02 March 2023: [www.nice.org.uk/guidance/qs209/chapter/Quality-statement-4-Continuous-glucose-monitoring-for-adults-who-use-insulin-and-need-help-monitoring-their-blood-glucose](http://www.nice.org.uk/guidance/qs209/chapter/Quality-statement-4-Continuous-glucose-monitoring-for-adults-who-use-insulin-and-need-help-monitoring-their-blood-glucose)

Type 1 diabetes in adults - Quality standard [QS208]Published: 02 March 2023: [www.nice.org.uk/guidance/qs208/chapter/Quality-statement-2-Continuous-glucose-monitoring](http://www.nice.org.uk/guidance/qs208/chapter/Quality-statement-2-Continuous-glucose-monitoring)

## 10. ORAL THERAPIES

### For the safe administration and use of oral antihyperglycaemic medication, you should be able to:

<p><b>1. Unregistered practitioner / care assistant</b></p> <p><b>2. Pre-registration student nurse / student nurse associate</b></p> <p><b>3. Nursing Associate</b></p>	<ul style="list-style-type: none"> <li>• Demonstrate an understanding of the progressive nature of type 2 diabetes and the need for treatment intensification over time.</li> <li>• Describe the effect of commonly used antihyperglycaemic agents on glucose levels.</li> <li>• Describe the side effects of commonly used antihyperglycaemic agents.</li> <li>• List the signs of hypoglycaemia and be able to administer appropriate treatment.</li> </ul>
<p><b>4. Proficient registered nurse</b></p>	<p>As 1,2,3 and:</p> <ul style="list-style-type: none"> <li>• Demonstrate knowledge of the range of oral antihyperglycaemic agents currently available and their mode of action.</li> <li>• Demonstrate knowledge of therapeutic doses and recommended timing of doses.</li> <li>• Administer or supervise the administration of prescribed medication, and document accurately.</li> <li>• Explain to the person with diabetes the risks and benefits of taking, or not taking, a medicine.</li> <li>• List which oral antihyperglycaemic agents carry a risk of hypoglycaemia.</li> <li>• Describe how the efficacy of oral therapies is measured.</li> </ul>
<p><b>5. Experienced registered nurse</b></p>	<p>As 4, and:</p> <ul style="list-style-type: none"> <li>• Describe indications for the initiation of different classes of oral antihyperglycaemic agents.</li> <li>• Demonstrate understanding of the various factors which impact on the action of antihyperglycaemic agents.</li> <li>• 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.</li> <li>• Demonstrate understanding around the potential for adverse effects and how to avoid, recognise, report, minimise and manage them.</li> <li>• Apply the principles of evidence-based practice including cost-effectiveness.</li> <li>• Demonstrate up-to-date knowledge of, and work within, national and local guidelines (e.g. NICE, SIGN, ADA/EASD).</li> <li>• 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).</li> <li>• Monitor and support junior staff to ensure they have the appropriate competence.</li> </ul>
<p><b>6. Senior / advanced clinical practitioner*</b></p> <p>* Includes nurse consultant role</p>	<p>As 5, and:</p> <ul style="list-style-type: none"> <li>• Explain the rationale behind, and the potential risks and benefits of different therapies.</li> <li>• Facilitate and support structured evidence-based education relating to antihyperglycaemic agents for individuals or groups.</li> <li>• Demonstrate awareness and understanding of published research in new oral therapies.</li> <li>• If a registered non-medical prescriber, prescribe medication as required within own competencies and scope of practice.</li> <li>• Adjust oral treatment according to individual circumstances, following local policies or individual clinical management plans.</li> <li>• Audit outcomes of care against accepted national and/or local standards.</li> </ul>

#### 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](http://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 2022 <https://diabetesjournals.org/care/article/45/11/2753/147671/Management-of-Hyperglycemia-in-Type-2-Diabetes>

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](http://www.diabetesonthenet.com/course/type-2-diabetes-non-insulin-therapies/details)

EASD Learning: <https://easd-elearning.eu/courses/management-of-hyperglycaemia-in-type-2-diabetes/>

## 11. INJECTABLE THERAPIES

**For the safe administration of insulin and GLP-1 receptor agonists, you should be able to:**

<p><b>1. Unregistered practitioner / care assistant</b></p> <p><b>2. Pre-registration student nurse / student nurse associate</b></p> <p><b>3. Nursing Associate</b></p>	<ul style="list-style-type: none"> <li>Describe the effect of insulin and GLP-1 receptor agonists on glucose levels.</li> <li>Show an understanding of the on-going nature of the therapy.</li> <li>Be aware of the normal glucose range and the individual's target.</li> <li>Administer insulin injections using a safety-engineered device, where supported by local policy.</li> <li>Administer GLP-1 receptor agonist injections using a safety-engineered device, where supported by local policy.</li> <li>Report identified problems appropriately.</li> <li>Follow local sharps disposal policy.</li> <li>Be aware of the UK Safety Directive on prevention of sharp injuries in the hospital, healthcare sector and in downstream workers</li> <li>Be involved in locally implemented Insulin Administration Delegation Initiative if appropriate</li> </ul>
<p><b>4. Proficient registered nurse</b></p>	<p>As 1,2,3 and:</p> <ul style="list-style-type: none"> <li>Demonstrate a basic knowledge of insulin types/regimens and GLP-1 receptor agonists (e.g. action, side effects) and administration devices used locally.</li> <li>Demonstrate a high level of competency in the safe administration of insulin and GLP-1 receptor agonists including:             <ul style="list-style-type: none"> <li>Timings of insulin/GLP-1 receptor agonist administration</li> <li>Correct choice of needle type and length for the individual</li> <li>Appropriate use of a lifted skin fold where necessary</li> <li>Correct method for injection site rotation and recording of sites</li> <li>Storage of insulin</li> <li>Single use of needles and safe sharps disposal</li> </ul> </li> <li>Examine injection procedure and sites at least annually for detection of lipohypertrophy, and be able to give appropriate advice for resolving poor injection sites.</li> <li>Be aware of common insulin and management errors and "Never events".</li> <li>Describe the correct reporting system for injectable therapy errors.</li> <li>Provide evidence of participation in insulin safety training.</li> <li>Describe circumstances in which insulin use might be initiated or altered, and know how to make appropriate referral.</li> </ul>
<p><b>5. Experienced registered nurse</b></p>	<p>As 4, and:</p> <ul style="list-style-type: none"> <li>Demonstrate a broad knowledge of different insulin types (e.g. action profiles and use in regimens).</li> <li>Demonstrate a broad knowledge of different GLP-1 receptor agonists (e.g. type, action profile, side effects).</li> <li>Provide necessary education relating to commencement of injection therapy.</li> <li>Initiate insulin or GLP-1 receptor agonist therapy where clinically appropriate.</li> <li>Assess individual's self-management skills and educational needs, and meet these needs or make appropriate referral.</li> <li>Support and encourage self-management wherever appropriate.</li> <li>Recognise when insulin therapy needs to be adjusted or changed, and refer appropriately.</li> <li>Recognise the potential psychological impact of insulin or GLP-1 receptor agonist therapies and offer support as required.</li> <li>Recognise signs of needle fear and offer strategies to help manage this.</li> <li>Educate HCPs in safe administration of insulin and GLP-1 receptor agonists.</li> <li>Monitor and support junior staff to ensure they have appropriate competence.</li> </ul>
<p><b>6. Senior / advanced clinical practitioner*</b></p> <p>* Includes nurse consultant role</p>	<p>As 5, and:</p> <ul style="list-style-type: none"> <li>Demonstrate expert knowledge of insulin and GLP-1 receptor agonist therapies, and act as a resource for people with diabetes, carers and other HCPs.</li> <li>Initiate insulin pump therapy.</li> <li>Deliver structured group education to people with diabetes and significant others.</li> <li>Empower and support the individual to achieve an individualised level of self-management and an agreed glycaemic target.</li> <li>Participate in the development of evidence-based local guidelines and policies.</li> <li>Investigate all incidents involving injectable therapies, report to the relevant agencies, and develop an action plan to prevent recurrence.</li> <li>If a registered non-medical prescriber, prescribe medications and devices as required within own competence and scope of practice.</li> <li>Adjust insulin treatment according to individual circumstances as appropriate, following local policies and individual clinical management plans.</li> <li>Be aware of emerging research relating to injection technique and be able to implement outcomes into daily practice.</li> </ul>

## 11. INJECTABLE THERAPIES

### Suggested examples to assess competence in this area:

- ✓ Observation of administration of insulin injection.
- ✓ Provide examples of anonymous care plans demonstrating correct interpretation of 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/](http://www.trenddiabetes.online/resources/)

### E-learning:

Getting it Right: Insulin safety e-learning <https://trenddiabetes.online/portfolio/insulin-safety-getting-it-right-e-learning-module/> available via <https://trenddiabeteslearning.co.uk>

## 12. CONTINUOUS SUBCUTANEOUS INSULIN INFUSION (CSII)

To support the person using continuous subcutaneous insulin infusion, you should be able to:

<p><b>1. Unregistered practitioner / care assistant</b>  <b>2. Pre-registration student nurse / student nurse associate</b>  <b>3. Nursing Associate</b></p>	<ul style="list-style-type: none"> <li>Understand that some people with type 1 diabetes use insulin pumps instead of insulin injections.</li> <li>Identify / check for glucose monitoring equipment and / or insulin delivery systems and highlight urgently to registered staff</li> </ul>
<p><b>4. Proficient registered nurse</b></p>	<p>As 1,2,3 and:</p> <ul style="list-style-type: none"> <li>Demonstrate an awareness of insulin pumps when in contact with the individuals using this.</li> <li>Know how to treat hypoglycaemia in someone using an insulin pump therapy.</li> <li>Know actions to take/advise in the case of insulin pump failure.</li> <li>Demonstrate an understanding of the impact of intercurrent illness and the urgent need for escalation to specialist team for review and treatment if individual is unwell.</li> <li>Follow local/ national guidance if admitted to acute sector for care.</li> <li>Enable the person with diabetes to self-care when in the hospital setting.</li> </ul>
<p><b>5. Experienced registered nurse</b></p>	<p>As 4, and:</p> <ul style="list-style-type: none"> <li>List the criteria for use of insulin pump therapy.</li> <li>Demonstrate an understanding of the difference in insulin delivery and benefits/risks associated with this therapy.</li> <li>Ensure the individual has access to the most appropriate device for monitoring glucose and blood ketone levels.</li> <li>Monitor and support junior staff to ensure they have appropriate competence.</li> </ul>
<p><b>6. Senior / advanced clinical practitioner*</b>  <small>* Includes nurse consultant role</small></p>	<p>As 5, and:</p> <ul style="list-style-type: none"> <li>Coordinate assessment processes relating to potential service users.</li> <li>Support the individual using pump therapy to develop safe self management skills.</li> <li>Provide structured education to support informed decision making, regarding how this therapy differs when controlling and monitoring their diabetes, including: specific insulin pump devices, follow-up requirements, risk versus benefit and additional functions associated with pump devices.</li> <li>Demonstrate understanding and provide education supporting nutritional requirements, glycaemic effects of different foods, weight management and concepts of carbohydrate counting.</li> <li>Support individuals to assess insulin pump settings and make appropriate changes to insulin ratios, sensitivity factors and use additional features for activity and illness.</li> <li>Develop and ensure delivery of educational materials, supportive networks and models of diabetes care that foster empowerment and lifelong learning about diabetes.</li> <li>Work with the person with diabetes to facilitate lifestyle adjustment in response to changes in their diabetes or circumstances.</li> <li>Review glucose monitoring results to support effective use of insulin pump therapy.</li> <li>Provide education for other HCPs and care workers in diabetes self-care skills in using insulin pump therapy.</li> <li>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. smart meters, CGM, connective pen devices etc).</li> </ul>

### 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.
- ✓ Provide examples of anonymous care plans of starting someone on an insulin pump, and their follow-up.
- ✓ Direct questioning about a variety of insulin pump scenarios (e.g. going on holiday, pump failure).

### Useful resources:

- 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](http://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](http://www.abcd.care/sites/abcd.care/files/CSII_DTN_FINAL%20210218.pdf)
- Hybrid closed loop systems for managing blood glucose levels in type 1 diabetes Technology appraisal guidance TA943 (2023). Available at: <https://www.nice.org.uk/guidance/TA943>
- Type 1 diabetes in adults Quality standard [QS208] (2023). Available at <https://www.nice.org.uk/guidance/qs208>

## 13. HYBRID CLOSED-LOOP THERAPY (HCL)

To support the person using hybrid closed loop insulin infusion, you should be able to:	
<b>1. Unregistered practitioner / care assistant</b> <b>2. Pre-registration student nurse / student nurse associate</b> <b>3. Nursing Associate</b>	<ul style="list-style-type: none"> <li>Understand that some people with type 1 diabetes use insulin pumps instead of insulin injections</li> <li>Where possible, check with the person if they are using attentional technology to support their insulin pump therapy i.e. continuous glucose monitoring systems</li> <li>If the person is not able to communicate check if they have additional devices stuck to their body – Inform the Senior nursing and medical team</li> </ul>
<b>4. Proficient registered nurse</b>	<p>As 1,2,3 and:</p> <ul style="list-style-type: none"> <li>Demonstrate an awareness of hybrid close loop (HCL) insulin pump therapy – work with individual (family or carer) to ensure that they have both the insulin pump and sensor therapy on and that they are working.</li> <li>Know how to treat hypoglycaemia in someone using an insulin pump.</li> <li>Know what to do in the case of insulin pump failure.</li> <li>Demonstrate an understanding of the impact of intercurrent illness and the urgent need for escalation to specialist team for review and treatment if individual is unwell.</li> <li>Follow local/ national guidance if admitted to acute sector for care.</li> <li>Enable the person with diabetes to self-care when in the hospital setting.</li> <li>Ensure clear communication and documentation to other team members regarding the use of HCL system.</li> </ul>
<b>5. Experienced registered nurse</b>	<p>As 4, and:</p> <ul style="list-style-type: none"> <li>Demonstrate awareness of updated guidance and the requirement for HCL systems</li> <li>Demonstrate an understanding of the difference in insulin delivery and benefits/risks associated with this therapy.</li> <li>Demonstrate an understanding of the different systems used and the linked CGM devices</li> <li>Ensure the individual has access to the most appropriate device for monitoring blood glucose and blood ketone levels in case of a sensor failure or concerns regarding readings.</li> <li>Monitor and support junior staff to ensure they have appropriate competence.</li> <li>Be able to assist in providing advice and guidance to HCL users during illness or equipment failure.</li> </ul>
<b>6. Senior / advanced clinical practitioner*</b> <small>* Includes nurse consultant role</small>	<p>As 5, and:</p> <ul style="list-style-type: none"> <li>Coordinate assessment and onboarding processes relating to potential service users.</li> <li>Demonstrated advanced clinical skills to support the person with diabetes regarding self-management skills and using advanced technologies to manage their diabetes.</li> <li>Tailor education to support informed decision making, regarding how this therapy differs when controlling and monitoring their diabetes, including: specific insulin pump devices, follow-up requirements, risk versus benefit and additional functions associated with HCL pump devices.</li> <li>Demonstrate understanding and where appropriate provide tailored education that supports nutritional requirements. Discuss glycaemic effects of different foods, weight management and concepts of carbohydrate counting or other supportive strategies where appropriate.</li> <li>Review carbohydrate counting skills and settings within the HCL system to support the individual with management of their diabetes.</li> <li>Deliver supportive educational materials, direct individuals to supportive networks and practice models of diabetes care that foster empowerment and lifelong learning about diabetes.</li> <li>Work with the person with diabetes to facilitate safe therapy and lifestyle adjustments in response to changes in their diabetes or circumstances.</li> <li>Using internal and external resources to support other HCPs and care workers in diabetes self-care skills in using insulin pump therapy, CGM, isCGM and HCL therapy.</li> <li>Work with team to develop services and access to advanced technologies across the board</li> </ul>

## 13. HYBRID CLOSED-LOOP THERAPY (HCL)

### Suggested examples to assess competence in this area:

- ✓ Observation in the clinical environment when supporting people on HCL therapies (e.g. pump review clinic, initiating pump therapy).
- ✓ Direct questioning about the mechanism/ action of a variety of HCL insulin pump systems.
- ✓ Provide examples of anonymous care plans of starting someone on HCL insulin pump therapy, the education / support provided and their follow-up arrangements.
- ✓ Direct questioning about a variety of insulin pump scenarios (e.g. going on holiday, pump failure).
- ✓ Completion of training certificates (online, face to face, virtual)

### Useful resources:

- <https://abcd.care/dtn/best-practice-guides>
- <https://abcd.care/dtn/education>
- <https://go.glooko.com/academy>
- <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10210119/>
- <https://www.nice.org.uk/guidance/ng17>
- <https://www.nice.org.uk/guidance/qs208>
- <https://easd-elearning.org/our-courses>
- <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9207329/>
- <https://www.england.nhs.uk/wp-content/uploads/2024/01/decision-support-tool-making-a-decision-about-managing-type-1-diabetes.pdf>
- [https://abcd.care/sites/default/files/resources/JBDS\\_20\\_Using\\_Technology\\_to\\_Support\\_Diabetes\\_Care\\_in\\_Hospital\\_1.pdf](https://abcd.care/sites/default/files/resources/JBDS_20_Using_Technology_to_Support_Diabetes_Care_in_Hospital_1.pdf)

## 14. HYPOGLYCAEMIA

### For the identification and treatment of hypoglycaemia, you should be able to:

<p><b>1. Unregistered practitioner / care assistant</b></p> <p><b>2. Pre-registration student nurse / student nurse associate</b></p> <p><b>3. Nursing Associate</b></p>	<ul style="list-style-type: none"> <li>• State the normal glucose range and describe the level at which it would be appropriate to treat as hypoglycaemia.</li> <li>• List the signs and symptoms of hypoglycaemia, and describe what is defined as mild, moderate, moderate and defined as severe.</li> <li>• Recognise that some people may not recognise symptoms of hypoglycaemia Impaired awareness of hypoglycaemia (IAH) (e.g. older people, those with a long duration of diabetes, and those who have experienced frequent episodes of hypoglycaemia).</li> <li>• Recognise risk of looming hypoglycaemia in people who have a glucose level of 4.0-6.0mmol</li> <li>• Demonstrate competent use of glucose monitoring equipment to confirm hypoglycaemia.</li> <li>• Know how to access and give appropriate treatment for hypoglycaemia.</li> <li>• Ensure appropriate hypoglycaemia treatments are accessible and within the expiry date.</li> <li>• Document and report the hypoglycaemia event to a registered nurse.</li> <li>• If the individual is unresponsive, ensure their airway is clear and call emergency services.</li> </ul>
<p><b>4. Proficient registered nurse</b></p>	<p>As 1,2,3 and:</p> <ul style="list-style-type: none"> <li>• Recognise and list appropriate treatment for mild, moderate and severe hypoglycaemia.</li> <li>• Assess level of Impaired awareness of hypoglycaemia (IAH)( Hypo Awareness) using a validated tool (e.g. GOLD score).</li> <li>• Describe what should be done if hypoglycaemia is not resolved and glucose levels remain low.</li> <li>• Ensure episodes of hypoglycaemia are followed up appropriately.</li> <li>• Identify which medications have a risk of hypoglycaemia and explain how this may be minimised.</li> <li>• 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, frailty , impaired kidney function and medications insulin and sulfonylurea).</li> <li>• Check the injection technique and sites of injections in those individuals using insulin therapy according to recommended practice.</li> <li>• Describe methods of hypoglycaemia avoidance and explain how these can be implemented to reduce future risk.</li> <li>• Demonstrate knowledge of the current driving regulations for people with diabetes and how they relate to hypoglycaemia.</li> <li>• Be aware of the recommended glucose targets , Time in Range (TIR) for type 1 and type 2 diabetes and in pregnancy.</li> <li>• Be aware when tight glycaemic control is not recommended (e.g. in the frail or older person, or those in end-of-life care).</li> </ul>
<p><b>5. Experienced registered nurse</b></p>	<p>As 4, and:</p> <ul style="list-style-type: none"> <li>• Identify individuals at high risk of hypoglycaemia, advise and adjust glucose-lowering therapy accordingly (e.g. those with HbA1c below target).</li> <li>• Provide advice regarding driving regulations and hypoglycaemia, according to current DVLA guidelines.</li> <li>• Describe hypoglycaemia unawareness Impaired awareness of hypoglycaemia (IAH) and its possible causes including frequent episodes of hypoglycaemia.</li> <li>• Interpret glucose levels, Time in Range (TIR) and HbA1c results to identify unrecognised hypoglycaemia.</li> <li>• Discuss possible alternative therapies that carry a lower risk of hypoglycaemia and added impact on CV and CKD risk.</li> <li>• Discuss the use of technologies demonstrated to reduce risk associated with hypoglycaemic unawareness?</li> <li>• Work with individuals to prevent recurrent episodes of hypoglycaemia.</li> <li>• Advise on adjustment of oral therapies and insulin dose where appropriate.</li> <li>• Participate in educating other HCPs, people with diabetes, and carers of people with diabetes in the identification, causes, prevention and appropriate treatment of hypoglycaemia.</li> <li>• Monitor and support junior staff to ensure they have appropriate competence.</li> </ul>
<p><b>6. Senior / advanced clinical practitioner*</b></p> <p>* Includes nurse consultant role</p>	<p>As 5, and:</p> <ul style="list-style-type: none"> <li>• 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).</li> <li>• Provide expert advice and ongoing review for individuals with complex hypoglycaemic issues.</li> <li>• Identify and teach appropriate strategies for prevention of hypoglycaemia during and after exercise and under special circumstances (e.g. during periods of fasting).</li> <li>• Act as an expert resource for information on hypoglycaemia for other HCPs.</li> <li>• Work in collaboration with A&amp;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</li> </ul>

## 14. 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](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/](http://www.trenddiabetes.online/resources/)

Exercise for Type 1 Diabetes: <https://extod.org>

DAFNE Type 1 structured education: <https://dafne.nhs.uk>

Time in range: A best practice guide for UK diabetes healthcare professionals in the context of the COVID-19 global pandemic: <https://onlinelibrary.wiley.com/doi/10.1111/dme.14433>

## 15. HYPERGLYCAEMIA

For the identification and treatment of hyperglycaemia, you should be able to:

<p><b>1. Unregistered practitioner / care assistant</b></p> <p><b>2. Pre-registration student nurse / student nurse associate</b></p> <p><b>3. Nursing Associate</b></p>	<ul style="list-style-type: none"> <li>• State the glucose range of someone with and without diabetes.</li> <li>• State the target glucose levels for an individual with diabetes and appropriate frequency of glucose monitoring required.</li> <li>• List the signs and symptoms of hyperglycaemia.</li> <li>• Recognise that some people may be asymptomatic of hyperglycaemia (e.g. older people).</li> <li>• Perform glucose and blood/urine ketone tests according to local guidelines, correctly document results and report those out of the acceptable range.</li> </ul>
<p><b>4. Proficient registered nurse</b></p>	<p>As 1,2,3 and:</p> <ul style="list-style-type: none"> <li>• List the causes of hyperglycaemia, including non-adherence with medication, glucocorticosteroids and intercurrent illness.</li> <li>• Recognise the appropriate treatment needed for the different levels of hyperglycaemia in type 1 and type 2 diabetes.</li> <li>• Support self-management where possible.</li> <li>• Describe how to manage hyperglycaemia, ketonaemia/ketonuria to minimise the risk of progression to diabetic ketoacidosis (DKA) or hyperosmolar hyperglycaemic state (HHS) in accordance with national and local policies.</li> <li>• Describe the referral pathway for DKA and HHS management.</li> </ul>
<p><b>5. Experienced registered nurse</b></p>	<p>As 4, and:</p> <ul style="list-style-type: none"> <li>• Recognise appropriate glycaemic treatment targets, Time in Range (TIR) for specific groups (e.g. pregnant women, older people, those with significant co-morbidities, the frail and those at end of life).</li> <li>• Determine possible cause of hyperglycaemia, such as unrecognised infection or other pathologies such as pancreatitis.</li> <li>• Work in partnership with the person with diabetes and/or their carer to agree treatment goals.</li> <li>• Participate in educating people with diabetes, carers and other HCPs in the management of illness and identification, treatment and prevention of hyperglycaemia.</li> <li>• Monitor and support junior staff to ensure they have the appropriate competence.</li> </ul>
<p><b>6. Senior / advanced clinical practitioner*</b></p> <p>* Includes nurse consultant role</p>	<p>As 5, and:</p> <ul style="list-style-type: none"> <li>• Provide expertise in the development of management plans for people with complex hyperglycaemia.</li> <li>• Support and advise people with diabetes using treatments that can cause hyperglycaemia (e.g. steroids).</li> <li>• Liaise with A&amp;E teams and paramedic emergency service leads to identify people frequently presenting with episodes of DKA or HHS.</li> <li>• Act as a resource for information on hyperglycaemia management for other HCPs.</li> <li>• Identify complex cases for MDT discussion / wider team learning</li> </ul>

**Suggested examples to assess competence in this area:**

- ✓ 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.

**Useful resources:**

JBDS-IP (2022) Management of Hyperosmolar Hyperglycaemic State (HHS) in adults with diabetes available at [https://abcd.care/sites/default/files/site\\_uploads/JBDS\\_Guidelines\\_Current/JBDS\\_06\\_The\\_Management\\_of\\_Hyperosmolar\\_Hyperglycaemic\\_State\\_HHS\\_%20in\\_Adults\\_FINAL\\_0.pdf](https://abcd.care/sites/default/files/site_uploads/JBDS_Guidelines_Current/JBDS_06_The_Management_of_Hyperosmolar_Hyperglycaemic_State_HHS_%20in_Adults_FINAL_0.pdf)

JBDS Inpatient Care Group: The Management of Diabetic Ketoacidosis in Adults (2023) available at [https://abcd.care/sites/default/files/site\\_uploads/JBDS\\_Guidelines\\_Current/JBDS\\_02\\_Nursing\\_Management\\_for\\_DKA\\_v1\\_20122022.pdf](https://abcd.care/sites/default/files/site_uploads/JBDS_Guidelines_Current/JBDS_02_Nursing_Management_for_DKA_v1_20122022.pdf)

Time in range: A best practice guide for UK diabetes healthcare professionals in the context of the COVID-19 global pandemic: <https://onlinelibrary.wiley.com/doi/10.1111/dme.14433>

## 16. INTERCURRENT ILLNESS

### To manage intercurrent illness, you should be able to:

<p><b>1. Unregistered practitioner / care assistant</b></p> <p><b>2. Pre-registration student nurse / student nurse associate</b></p> <p><b>3. Nursing Associate</b></p>	<ul style="list-style-type: none"> <li>Identify common signs of intercurrent illness and report to a registered nurse.</li> <li>Be aware of the impact of intercurrent illness on glycaemic control.</li> <li>Document and report any clinical findings outside the expected range.</li> </ul>
<p><b>4. Proficient registered nurse</b></p>	<p>As 1,2,3 and:</p> <ul style="list-style-type: none"> <li>Take a comprehensive assessment and personal history.</li> <li>Initiate appropriate preliminary investigations (e.g. glucose and ketone measurements).</li> <li>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).</li> <li>Facilitate and administer prescribed baseline treatment.</li> <li>Give advice regarding continuation of treatments for diabetes during intercurrent illness, and provide written information.</li> <li>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.</li> </ul>
<p><b>5. Experienced registered nurse</b></p>	<p>As 4, and:</p> <ul style="list-style-type: none"> <li>Interpret test results and initiate appropriate action.</li> <li>Support the person with diabetes or their carer in managing diabetes during intercurrent illness.</li> <li>Recognise when treatment may need adjusting.</li> <li>Give advice about sick-day diabetes management, including ketone testing where appropriate, and provide appropriate literature for people with diabetes and/or carers.</li> <li>Educate people with diabetes, carers and other HCPs about sick-day management.</li> <li>Monitor and support junior staff to ensure they have the appropriate competence.</li> </ul>
<p><b>6. Senior / advanced clinical practitioner*</b></p> <p>* Includes nurse consultant role</p>	<p>As 5, and:</p> <ul style="list-style-type: none"> <li>Provide expert advice for people with complex issues and multiple pathologies.</li> <li>Make treatment adjustments according to individual circumstances, following local policies or individual clinical management plans.</li> <li>Contribute to the evidence base and implement evidence-based practice in relation to the management of intercurrent illness in people with diabetes.</li> <li>Educate other HCPs about the effects and consequences of intercurrent illness on people with diabetes.</li> <li>Initiate/participate in quality improvement and the development of guidelines.</li> </ul>

### Suggested examples to assess 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.

### Useful resources:

Diabetes at the Front Door: [https://abcd.care/sites/abcd.care/files/site\\_uploads/JBDS\\_Diabetes\\_Front\\_Door\\_amended\\_FINAL\\_27032020.pdf](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/](http://www.trenddiabetes.online/resources/)

JBDS Inpatient Care Group: The Management of Diabetic Ketoacidosis in Adults (2023) available at: <https://abcd.care/resource/current/jbds-02-management-diabetic-ketoacidosis-adults>

JBDS-IP (2022) Management of Hyperosmolar Hyperglycaemic State (HHS) in adults with diabetes available at: [https://abcd.care/sites/default/files/site\\_uploads/JBDS\\_Guidelines\\_Current/JBDS\\_06\\_The\\_Management\\_of\\_Hyperosmolar\\_Hyperglycaemic\\_State\\_HHS\\_%20in\\_Adults\\_FINAL\\_0.pdf](https://abcd.care/sites/default/files/site_uploads/JBDS_Guidelines_Current/JBDS_06_The_Management_of_Hyperosmolar_Hyperglycaemic_State_HHS_%20in_Adults_FINAL_0.pdf)

How to advise on sick day rules - DiabetesontheNet: <https://diabetesonthenet.com/diabetes-primary-care/how-to-advise-on-sick-day-rules/>

Sick Day Rules for DAFNE Type 1: <https://dafne.nhs.uk/wp-content/uploads/2020/03/HG-01-002-v3-Sick-day-rules-Standard-1.pdf>

JBDS Using Technology to Support Diabetes Care in Hospital: [https://abcd.care/sites/default/files/resources/JBDS\\_20\\_Using\\_Technology\\_to\\_Support\\_Diabetes\\_Care\\_in\\_Hospital\\_1.pdf](https://abcd.care/sites/default/files/resources/JBDS_20_Using_Technology_to_Support_Diabetes_Care_in_Hospital_1.pdf)

## 17. MANAGING DIABETES IN HOSPITAL (GENERAL ADMISSION)

To support management of diabetes during a hospital admission, you should be able to:

<p><b>1. Unregistered practitioner / care assistant</b></p> <p><b>2. Pre-registration student nurse / student nurse associate</b></p> <p><b>3. Nursing Associate</b></p>	<ul style="list-style-type: none"> <li>• Perform ward glucose meters quality-control tests according to hospital policy.</li> <li>• Perform glucose and blood/urine ketone tests according to manufacturer's instructions.</li> <li>• Inform a registered nurse of any observed change in the condition of a person with diabetes.</li> <li>• Be aware of the importance of regular meals and snacks, especially for those using insulin or sulphonylureas.</li> <li>• Participate in foot checks and in the prevention of pressure sores including foot ulceration.</li> </ul>
<p><b>4. Proficient registered nurse</b></p>	<p>As 1,2,3 and:</p> <ul style="list-style-type: none"> <li>• Assess current concordance with treatment and glycaemic control.</li> <li>• 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.</li> <li>• Perform administration of prescribed medication.</li> <li>• Be aware of national and local guidance and training requirements on insulin safety.</li> <li>• Know the importance of administering insulin in relation to meals and the provision of snacks as appropriate.</li> <li>• Be familiar with the person with diabetes treatment regimen and device/delivery system</li> <li>• Recognise the impact that glucocorticosteroids have on glucose levels.</li> <li>• Be aware of different oral and injectable therapies and regimens.</li> <li>• Demonstrate knowledge of the management of glucose during corticosteroid treatment</li> <li>• Establish, maintain and discontinue prescribed insulin infusion regimens according to local policy and individual need.</li> <li>• Recognise the different indications for use of a variable-rate or fixed-rate insulin infusion.</li> <li>• Recognise diabetes-related emergencies (e.g. DKA, HHS or hypoglycaemia) and be aware of the importance of timely treatment according to local guidelines.</li> <li>• Demonstrate awareness of the importance of daily foot checks in those with poor mobility, renal impairment, and the frail and bedbound</li> <li>• Know the appropriate referral system to the diabetes specialist team and refer where appropriate.</li> <li>• Enable a safe and effective discharge plan for the person with diabetes following liaison with relevant agencies</li> </ul>
<p><b>5. Experienced registered nurse</b></p>	<p>As 4, and:</p> <ul style="list-style-type: none"> <li>• Recognise appropriate glycaemic treatment targets for special groups (e.g. older people, those with significant co-morbidities, the frail, and those at end of life).</li> <li>• Have an understanding of treatment pathways to manage steroid-induced hyperglycaemia.</li> <li>• Be aware of the impact of enteral feeding and food supplements, monitor and report glucose levels outside the agreed target range.</li> <li>• Demonstrate knowledge of the management of diabetes medications prior to investigations and procedures.</li> <li>• Assess and where appropriate, enable a person with diabetes to self-manage their diabetes during a hospital stay, according to local policy.</li> <li>• Promote ward link nurse initiatives and enhance knowledge by continuing professional development and disseminate knowledge to other HCPs.</li> <li>• Monitor and support junior staff to ensure they have the appropriate competence.</li> <li>• Demonstrate knowledge of national guidelines for the care of people with diabetes admitted to hospital.</li> <li>• Participate in research and audit, for the care of people with diabetes in hospital.</li> </ul>
<p><b>6. Senior / advanced clinical practitioner*</b></p> <p>* Includes nurse consultant role</p>	<p>As 5, and:</p> <ul style="list-style-type: none"> <li>• Support the person with diabetes to maintain and re-establish diabetes self-management.</li> <li>• Demonstrate knowledge of all current diabetes treatments.</li> <li>• Provide expert advice on the care of people with complex diabetes or uncommon regimens.</li> <li>• If a registered non-medical prescriber, prescribe medications as required within own competencies and scope of practice.</li> <li>• Initiate/participate in the development of local guidance for the care of people with diabetes in hospital.</li> </ul>

## 17. MANAGING DIABETES IN HOSPITAL (GENERAL ADMISSION)

### Suggested examples to assess competence in this area:

- ✓ Discussion of fictional case scenarios of various hospital situations (e.g. person with diabetes commenced on high-dose steroids, person changing from oral medication to twice daily insulin regimen) to demonstrate knowledge of correct management.
- ✓ Direct questioning about action profile and common side effects of a variety of diabetes treatments.
- ✓ Provide examples of anonymous discharge plans.

### Useful resources:

- JBDS-IP Discharge planning for adult inpatients with diabetes (2017) available at [www.abcd.care/sites/abcd.care/files/resources/JBDS\\_Discharge\\_Planning\\_amendment\\_RCN\\_2017.pdf](http://www.abcd.care/sites/abcd.care/files/resources/JBDS_Discharge_Planning_amendment_RCN_2017.pdf)
- JBDS-IP Management of Hyperglycaemia and Steroid (Glucocorticoid) Therapy (2023) available at [https://abcd.care/sites/default/files/site\\_uploads/JBDS\\_Guidelines\\_Archive/JBDS\\_o8\\_Steroids\\_DM\\_Guideline\\_FINAL\\_28052021\\_Archive.pdf](https://abcd.care/sites/default/files/site_uploads/JBDS_Guidelines_Archive/JBDS_o8_Steroids_DM_Guideline_FINAL_28052021_Archive.pdf)
- JBDS-IP Glycaemic management of the inpatient enteral feeding of stroke patients with diabetes (2018) available at [www.abcd.care/sites/abcd.care/files/resources/JBDS\\_Enterale\\_feeding\\_FINAL.pdf](http://www.abcd.care/sites/abcd.care/files/resources/JBDS_Enterale_feeding_FINAL.pdf)
- Diabetes at the Front Door [https://abcd.care/sites/abcd.care/files/site\\_uploads/JBDS\\_Diabetes\\_Front\\_Door\\_amended\\_FINAL\\_27032020.pdf](https://abcd.care/sites/abcd.care/files/site_uploads/JBDS_Diabetes_Front_Door_amended_FINAL_27032020.pdf)

## 18. MANAGING DIABETES DURING AND AFTER SURGERY

To support the management of diabetes before, during and after surgery, **in addition to the competencies outlined in general hospital admission**, you should be able to:

<p><b>1. Unregistered practitioner / care assistant</b>  <b>2. Pre-registration student nurse / student nurse associate</b>  <b>3. Nursing Associate</b></p>	<ul style="list-style-type: none"> <li>• Be aware of policies (local or national) relating to fasting in people with diabetes undergoing surgical or investigative procedures.</li> </ul>
<p><b>4. Proficient registered nurse</b></p>	<p>As 1,2,3 and:</p> <ul style="list-style-type: none"> <li>• Advise on diabetes care surrounding pre- and peri-operative procedures.</li> <li>• Be aware of the optimal pre-surgery HbA1c target.</li> <li>• Demonstrate knowledge of the indications for use of a variable-rate insulin infusion.</li> <li>• Set up, manage and discontinue a variable-rate insulin infusion, and know to continue long-acting insulin where appropriate (e.g. type 1 diabetes).</li> <li>• Identify current medication (both oral and injectable) and develop an individualised care plan, taking into account fasting requirements.</li> <li>• Follow guidelines regarding appropriate nutrition, monitoring glycaemic control, and administration of diabetes medication.</li> <li>• Know when to refer to dietetics for nutritional review.</li> <li>• Be aware of national recommendations, standards and guidelines for the care of people with diabetes undergoing surgery or investigation.</li> </ul>
<p><b>5. Experienced registered nurse</b></p>	<p>As 4, and:</p> <ul style="list-style-type: none"> <li>• Assess and, where appropriate, enable a person with diabetes to self-manage their diabetes during an inpatient stay, according to local policy.</li> <li>• Safely discontinue a variable rate insulin infusion.</li> <li>• Assess and respond to problems relating to the care of people with diabetes undergoing surgery.</li> <li>• Participate in the development and maintenance of local guidance for the care of people with diabetes undergoing surgical procedures.</li> <li>• Educate other HCPs in the care of people with diabetes undergoing surgery.</li> <li>• Monitor and support junior staff to ensure they have the appropriate competence.</li> </ul>
<p><b>6. Senior / advanced clinical practitioner*</b>  <small>* Includes nurse consultant role</small></p>	<p>As 5, and:</p> <ul style="list-style-type: none"> <li>• Provide expert advice for people with diabetes with complex management problems, uncommon regimens or user of technology/CSII undergoing surgery or investigation.</li> <li>• If a registered non-medical prescriber, prescribe medications as required within own competencies and scope of practice.</li> <li>• Participate in research and audit relating to the care of the person with diabetes undergoing surgery.</li> <li>• Participate in national initiatives to improve the quality of inpatient care for people with diabetes undergoing surgical procedures or investigations.</li> </ul>
<p><b>Suggested examples to assess competence in this area:</b></p> <ul style="list-style-type: none"> <li>✓ Review of anonymous care plan for someone with type 1 diabetes undergoing a common routine surgical procedure.</li> <li>✓ Review of anonymous care plan for someone with type 2 diabetes undergoing a common emergency surgical procedure.</li> <li>✓ Talk through how a variable-rate insulin infusion is discontinued in someone with type 1 diabetes.</li> </ul>	<p><b>Useful resources:</b></p> <p>Centre for Perioperative Care ( 2021) Perioperative Care of People with Diabetes Undergoing Surgery <a href="https://cpoc.org.uk/">https://cpoc.org.uk/</a></p> <p>JBDS-IP Discharge planning for adult inpatients with diabetes (2017) available at <a href="https://abcd.care/sites/abcd.care/files/resources/JBDS_Discharge_Planning_amendment_RCN_2017.pdf">https://abcd.care/sites/abcd.care/files/resources/JBDS_Discharge_Planning_amendment_RCN_2017.pdf</a></p>

## 19. PRE-CONCEPTION CARE

To support a woman with diabetes preparing for pregnancy, you should be able to:

<p><b>1. Unregistered practitioner / care assistant</b>  <b>2. Pre-registration student nurse / student nurse associate</b>  <b>3. Nursing Associate</b></p>	<ul style="list-style-type: none"> <li>• Demonstrate awareness of the inform registered practitioners if planning for pregnancy disclosed.</li> </ul>
<p><b>4. Proficient registered nurse</b></p>	<p>As 1,2,3 and:</p> <ul style="list-style-type: none"> <li>• Be aware of the latest national guidelines.</li> <li>• Explain to the woman the need for pre-conception care and signpost to local information and group sessions if available.</li> <li>• Identify medicines contraindicated in pregnancy and seek medical review.</li> <li>• Be aware of the need for the prescription of folic acid 5mg.</li> <li>• Know how to recognise and treat hypoglycaemia appropriately.</li> <li>• Initiate glucose monitoring in women with type 2 diabetes and know the appropriate target range.</li> <li>• Advise the appropriate frequency and timing of glucose monitoring in women with type 1 diabetes, and know the target range.</li> <li>• Demonstrate knowledge of the appropriate referral system including to the specialist diabetes team.</li> </ul>
<p><b>5. Experienced registered nurse</b></p>	<p>As 4, and:</p> <ul style="list-style-type: none"> <li>• Demonstrate knowledge of latest care recommendations for the pre-conception management of diabetes.</li> <li>• Provide education and support to the woman to achieve pre-conception glucose targets.</li> <li>• Act as a named contact person for women with diabetes contemplating pregnancy.</li> <li>• Participate in audit of healthcare outcomes.</li> <li>• Monitor and support junior staff to ensure they have appropriate competence.</li> </ul>
<p><b>6. Senior / advanced clinical practitioner*</b>  <small>* Includes nurse consultant role</small></p>	<p>As 5, and:</p> <ul style="list-style-type: none"> <li>• Demonstrate in-depth knowledge of pathophysiology of diabetes complications in pregnancy.</li> <li>• Have an in-depth knowledge of national and local guidelines relating to diabetes pre-pregnancy care.</li> <li>• Develop and implement management plans.</li> <li>• Plan, implement and deliver education programmes about diabetes pregnancy care for other HCPs.</li> <li>• If a registered non-medical prescriber, prescribe medications as required within own competencies and scope of practice.</li> <li>• Participate in the development of guidelines and protocols.</li> </ul>
<p><b>Suggested examples to assess competence in this area:</b></p> <ul style="list-style-type: none"> <li>✓ Provide a list of medications contraindicated in pregnancy and suitable alternatives.</li> <li>✓ Describe the advice to give to a woman with type 1 diabetes who is planning a pregnancy.</li> <li>✓ Describe the advice to give to a woman with type 2 diabetes taking antihypertensive and lipid-lowering medications.</li> </ul>	<p><b>Useful resources:</b></p> <p>NICE NG3: Diabetes in pregnancy: management from preconception to the post-natal period (Updated 2020) available at <a href="http://www.nice.org.uk/guidance/ng3">www.nice.org.uk/guidance/ng3</a></p> <p>Trend Diabetes leaflet for "Planning for a baby when you have diabetes" available at: <a href="http://www.trenddiabetes.online/resources/">www.trenddiabetes.online/resources/</a></p>

## 20. 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:

<p>1. Unregistered practitioner / care assistant 2. Pre-registration student nurse / student nurse associate 3. Nursing Associate</p>	<ul style="list-style-type: none"> <li>Carry out duties designated by a registered nurse for the care of a pregnant woman with diabetes, including routine screening and accurate documentation.</li> </ul>
<p>4. Proficient registered nurse</p>	<p>As 1,2,3 and:</p> <ul style="list-style-type: none"> <li>Be aware of the latest diabetes and pregnancy national guidelines.</li> <li>Identify pregnant women at risk of developing gestational diabetes and follow local screening guidelines</li> <li>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.</li> <li>Identify pregnant women with diabetes and make immediate referral to specialist team.</li> <li>Be aware of the need for 5mg folic acid daily before conception and during the first trimester.</li> <li>Identify pregnant women at risk of developing gestational diabetes and follow local screening guidelines.</li> <li>Identify medicines contraindicated in pregnancy and make appropriate referrals.</li> <li>Demonstrate an understanding of, and be involved in, the implementation of individual management plans and care targets.</li> <li>Be aware of DVLA guidelines regarding women already using insulin and those with gestational diabetes requiring insulin.</li> <li>Demonstrate an awareness of the importance of having a post-natal glucose test or 3 month HbA1c (and thereafter according to local policy) post-pregnancy if gestational or IGT diagnosed during pregnancy.</li> <li>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.</li> </ul>
<p>5. Experienced registered nurse</p>	<p>As 4, and:</p> <ul style="list-style-type: none"> <li>Describe the care recommendations for the management of diabetes in pregnancy, including the pathway for foetal monitoring.</li> <li>participate in the initiation and self-management advice required for continuous glucose monitoring systems.</li> <li>Provide appropriate education about gestational diabetes and its management to women diagnosed with the condition.</li> <li>Demonstrate an awareness of psychosocial impact of diabetes in pregnancy or a new diagnosis of gestational diabetes.</li> <li>Provide emotional support and motivational strategies.</li> <li>Demonstrate knowledge of the management of glucose during corticosteroid treatment</li> <li>Demonstrate knowledge of peri-operative care required for surgical intervention during pregnancy e.g. Caesarean Section</li> <li>Demonstrate knowledge of the implications of falling insulin requirements in the 3rd trimester and action needed.</li> <li>Demonstrate an awareness of the effects of pre-term steroids in women with diabetes and local management protocols/guidance.</li> <li>Provide contact numbers for emergency situations and rapid advice.</li> <li>Monitor and support junior staff to ensure they have appropriate competence.</li> </ul>
<p>6. Senior / advanced clinical practitioner* * Includes nurse consultant role</p>	<p>As 5, and:</p> <ul style="list-style-type: none"> <li>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).</li> <li>Demonstrate an in-depth knowledge and understanding of both pre-existing and gestational diabetes during pregnancy.</li> <li>Ensure effective communication systems are in place to inform general practice of the diagnosis of gestational diabetes in their women with diabetes</li> <li>Develop with the pregnant women and implement individual management plans.</li> <li>Participate in the development of management protocols.</li> <li>Advise on medications, dosage and regimens during and after pregnancy, including the need for significant reduction of insulin post-delivery.</li> <li>If a registered non-medical prescriber, prescribe medications as required, within own competencies and scope of practice.</li> <li>Plan, implement and deliver education programmes about diabetes pregnancy for other HCPs.</li> <li>Advise on management of diabetes if steroid use is necessary during pregnancy.</li> <li>Be a named contact for the pregnant woman, or a new mother with diabetes.</li> <li>Participate in research and audit.</li> </ul>

## 20. ANTENATAL AND POSTNATAL CARE

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### 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](http://www.nice.org.uk/guidance/ng3)  
JBDS-IP Management of glycaemic control in pregnant women with diabetes on obstetric wards and delivery units (2023) available at [https://abcd.care/sites/default/files/site\\_uploads/JBDS\\_Guidelines\\_Current/JBDS\\_12\\_Managing\\_diabetes\\_and\\_hyperglycaemia\\_during\\_labour\\_and\\_birth\\_with\\_QR\\_code\\_February\\_2023.pdf](https://abcd.care/sites/default/files/site_uploads/JBDS_Guidelines_Current/JBDS_12_Managing_diabetes_and_hyperglycaemia_during_labour_and_birth_with_QR_code_February_2023.pdf)

## 21. CARDIOVASCULAR DISEASE (CVD)

To care for people with established CVD or associated risk factors (including hypertension and dyslipidaemia), you should be able to:

<p><b>1. Unregistered practitioner / care assistant</b></p> <p><b>2. Pre-registration student nurse / student nurse associate</b></p> <p><b>3. Nursing Associate</b></p>	<ul style="list-style-type: none"> <li>• Demonstrate awareness of the risk factors for CVD and describe simple lifestyle measures such as diet, exercise and smoking cessation, and their impact in terms of reducing CVD risk.</li> <li>• Undertake monitoring and assessment as requested.</li> <li>• Perform blood pressure measurement in accordance with national hypertension guidelines.</li> <li>• Demonstrate awareness of the normal parameters for blood pressure measurements.</li> <li>• Be able to refer to appropriate guidance for home blood pressure monitoring &amp; 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</li> </ul>
<p><b>4. Proficient registered nurse</b></p>	<p>As 1,2,3 and:</p> <ul style="list-style-type: none"> <li>• Be aware that all people with diabetes are at risk of developing CVD.</li> <li>• Be aware of the normal parameters for Blood Pressure and Lipid ranges including adjusted parameters in the presence of microvascular disease</li> <li>• Describe the difference between primary and secondary cardiovascular prevention.</li> <li>• 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.</li> <li>• Interpret and act on test results appropriately, report abnormal results to a senior nurse.</li> <li>• 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.</li> <li>• Know how to refer to smoking cessation services and other lifestyle support.</li> </ul>
<p><b>5. Experienced registered nurse</b></p>	<p>As 4, and:</p> <ul style="list-style-type: none"> <li>• Demonstrate knowledge of the appropriate level of recall to support continuity of care</li> <li>• Order appropriate blood tests and specialist investigations and refer for appropriate specialist intervention.</li> <li>• Initiate and develop personalised care plans and set goals with the person with diabetes to reduce CVD risk.</li> <li>• Demonstrate knowledge and skills that support behaviour change.</li> <li>• Manage and co-ordinate individual patient care and education programmes.</li> <li>• Be aware of policies relating to the prevention and management of CVD and participate in the development of local guidelines and protocols.</li> <li>• Participate in the development of a service-wide programme of care designed to manage established CVD according to local and national guidelines</li> <li>• Monitor and support junior staff to ensure they have appropriate competence.</li> </ul>
<p><b>6. Senior / advanced clinical practitioner*</b></p> <p>* Includes nurse consultant role</p>	<p>As 5, and:</p> <ul style="list-style-type: none"> <li>• Participate in developing evidence-based practice guidelines and protocols.</li> <li>• Describe the link between diabetes and CVD.</li> <li>• Develop a service-wide programme of care designed to manage established CVD according to local and national guidelines.</li> <li>• If a registered non medical prescriber: Demonstrate an appreciation of the fine balance of the risks and benefits of prescribing for established CVD and Diabetes; working within own competence and scope of practice</li> <li>• If a registered non-medical prescriber, prescribe medications as required within own competencies and scope of practice.</li> <li>• Develop integrated care pathways with multi-disciplinary teams and liaise with MDT members including hypertension and cardiac specialist nurses.</li> </ul>

## 21. CARDIOVASCULAR DISEASE (CVD)

### 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.
- ✓ Observation of practice in a clinical environment.

### Useful resources:

Validated CV risk calculation tools:

Access the 10-year CV Risk QRisk3 calculator at: [www.qrisk.org/three/](http://www.qrisk.org/three/)

Access the JBS3 Lifetime CV Risk calculator at: [www.jbs3risk.co.uk/pages/risk\\_calculator.htm](http://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](http://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/guidance/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-of-patient-care/details](http://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-of-patient-care/details)

## 22. NEUROPATHY

### To care for people with, or at risk of developing neuropathy, you should be able to:

<p><b>1. Unregistered practitioner / care assistant</b></p> <p><b>2. Pre-registration student nurse / student nurse associate</b></p> <p><b>3. Nursing Associate</b></p>	<ul style="list-style-type: none"> <li>• Demonstrate awareness that all people with diabetes are at risk of developing neuropathy.</li> <li>• Understand what neuropathy is and how a person with diabetes might describe it.</li> <li>• 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.</li> <li>• Provide basic foot care advice.</li> <li>• Report changes in pain, sensitivity, skin integrity, colour or temperature to a registered nurse or doctor.</li> <li>• Measure standing and lying blood pressure using an appropriate device.</li> </ul>
<p><b>4. Proficient registered nurse</b></p>	<p>As 1,2,3 and:</p> <ul style="list-style-type: none"> <li>• Recognise the need for annual diabetes foot screening, and determine risk status and refer as appropriate.</li> <li>• Demonstrate awareness of the different presentations of neuropathy and how to reduce risk.</li> <li>• Describe measures to prevent tissue damage in people with diabetes.</li> <li>• Recognise that neuropathy can present as loss or reduction in sensation, or it can be hypersensitive with pain.</li> <li>• Be aware of erectile and sexual dysfunction as a neuropathic process, and refer where appropriate.</li> </ul>
<p><b>5. Experienced registered nurse</b></p>	<p>As 4, and:</p> <ul style="list-style-type: none"> <li>• List the effects of neuropathy on various organs in the body (e.g. gastroparesis, postural hypotension).</li> <li>• Screen for the different types of neuropathy, including sexual dysfunction in both men and women.</li> <li>• Identify possible neuropathy and make the appropriate referral to confirm diagnosis.</li> <li>• Identify risk factors in the development of neuropathy.</li> <li>• Identify factors that may affect neuropathy (e.g. poor glycaemic control, rapid improvement in HbA1c).</li> <li>• Monitor and support junior staff to ensure they have appropriate competence.</li> </ul>
<p><b>6. Senior / advanced clinical practitioner*</b></p> <p>* Includes nurse consultant role</p>	<p>As 5, and:</p> <ul style="list-style-type: none"> <li>• Demonstrate detailed knowledge of the diagnosis, treatments and management of neuropathy.</li> <li>• Conduct a holistic assessment of the person with diabetes for neuropathic risk and ability to self-care.</li> <li>• Carry out an in-depth neurovascular assessment.</li> <li>• Advise and support people with diabetes and their carer about neuropathy and its management.</li> <li>• Provide or refer for psychological support as required.</li> <li>• If a registered non-medical prescriber, prescribe medications as required within own competencies and scope of practice.</li> <li>• Educate other HCPs on the prevention, screening for and progression of neuropathy.</li> <li>• Participate in research and the development and implementation of evidence-based guidelines.</li> <li>• Support or contribute to specialist diabetes clinics (e.g. pain management, erectile dysfunction).</li> </ul>

#### Suggested examples to assess competence in this area:

- ✓ Observation of performing a comprehensive foot assessment.
- ✓ List the common neuropathic conditions with their signs and symptoms, and recommended treatments.
- ✓ Provide examples of anonymous care plans of people with various types of neuropathy (e.g. gastroparesis, foot ulceration, erectile dysfunction) to demonstrate effective advice and management.

#### Useful resources:

Trend Diabetes leaflet Looking after your feet when you have diabetes available at: [www.trenddiabetes.online/resources/](http://www.trenddiabetes.online/resources/)

NICE NG19 Diabetes foot problems: prevention and management (2023) available at [www.nice.org.uk/guidance/ng19](http://www.nice.org.uk/guidance/ng19)

NICE CG173 Neuropathic pain in adults: pharmacological management in non-specialist settings (2013, updated 2018) available at [www.nice.org.uk/guidance/cg173](http://www.nice.org.uk/guidance/cg173)

IWGDF Guidelines on the prevention and management of diabetes-related foot disease: <https://iwgdfguidelines.org/wp-content/uploads/2023/07/IWGDF-Guidelines-2023.pdf>

## 23. FOOT CARE

**To support someone with diabetes to reduce their risk, or manage, foot complications, you should be able to:**

<p><b>1. Unregistered practitioner / care assistant</b></p> <p><b>2. Pre-registration student nurse / student nurse associate</b></p> <p><b>3. Nursing Associate</b></p>	<ul style="list-style-type: none"> <li>Describe the importance of foot screening as part of the diabetes annual review.</li> <li>Provide basic foot care advice and signpost to information.</li> <li>Demonstrate how to assess for peripheral sensory neuropathy using appropriate tools (e.g. 10g monofilament).</li> <li>Palpate pedal pulses (dorsal pedis and posterior tibial).</li> <li>Identify common foot deformities (e.g. bunions, hammer toes).</li> <li>Identify skin pathologies (e.g. calluses, ulcers, corns, bacterial/fungal infection) and report to a registered nurse.</li> </ul>
<p><b>4. Proficient registered nurse</b></p>	<p>As 1,2,3 and:</p> <ul style="list-style-type: none"> <li>Be aware of local and NICE guidelines related to the management of the “at risk” foot.</li> <li>Describe the screening and examination guidance for the diabetic foot.</li> <li>Understand the importance of the Diabetes Foot-care Pathway.</li> <li>List the different categories of the “at risk” foot and the recommended interventions.</li> <li>Describe the advice, education and management that should be provided to prevent the development of foot problems in the moderate to high individual.</li> <li>Recognise the signs of the acute diabetic foot problem and how to refer appropriately.</li> </ul>
<p><b>5. Experienced registered nurse</b></p>	<p>As 4, and:</p> <ul style="list-style-type: none"> <li>Describe the pathophysiology leading to foot problems in people with diabetes including poor glycaemic control which will delay the healing process.</li> <li>Describe the screening, prevention and management of foot problems in people with diabetes.</li> <li>Convey the results of the diabetic foot assessment and the associated level of risk to the person with diabetes.</li> <li>Describe the presentation of ischaemic, neuropathic and neuro-ischaemic complications of the diabetic foot.</li> <li>List the key interventions for individuals identified with infection and ulceration.</li> <li>Demonstrate the ability to assess for peripheral arterial disease (e.g. by assessing capillary refill time, assessing temperature gradient, the use of a Doppler).</li> <li>Monitor and support junior staff to ensure they have appropriate competence.</li> </ul>
<p><b>6. Senior / advanced clinical practitioner*</b></p> <p>* Includes nurse consultant role</p>	<p>As 5, and:</p> <ul style="list-style-type: none"> <li>Review glucose levels and offer treatment adjustment to allow for better healing of wounds/ulcers</li> <li>Plan appropriate strategies to assist people to adopt behaviours that reduce and prevent foot problems.</li> <li>List the treatment and management options available for the management of painful peripheral neuropathy, and describe their actions and side effects.</li> <li>Describe the recommended investigations and treatment for foot infections and ulceration in relation to the current evidence base.</li> <li>Describe the presentation of Charcot arthropathy, and the recommended investigations and treatment.</li> <li>If a registered non-medical prescriber, prescribe medication as required within own competencies and scope of practice.</li> <li>Audit outcomes of care against accepted national and/or local standards.</li> </ul>
<p><b>Suggested examples to assess competence in this area:</b></p> <ul style="list-style-type: none"> <li>✓ Observation of performing a foot assessment.</li> <li>✓ Describe the levels of “at risk”.</li> <li>✓ Describe the basic foot care advice to be given to someone with a current low risk foot assessment.</li> <li>✓ Describe the foot care advice to be given to someone with a neuropathic ulcer.</li> </ul>	<p><b>Useful resources:</b></p> <p>Trend Diabetes leaflet Looking after your feet when you have diabetes available at: <a href="http://www.trenddiabetes.online/resources/">www.trenddiabetes.online/resources/</a></p> <p>Diabetes UK (2017) Putting feet first. Annual review for everyone with diabetes over 12 years old.</p> <p>NICE NG19 Diabetes foot problems: prevention and management (Updated Oct 2019) available at <a href="http://www.nice.org.uk/guidance/ng19">www.nice.org.uk/guidance/ng19</a></p>

## 24. CHRONIC KIDNEY DISEASE (CKD)

To support people with, or at risk of, CKD, you should be able to:

<p><b>1. Unregistered practitioner / care assistant</b></p> <p><b>2. Pre-registration student nurse / student nurse associate</b></p> <p><b>3. Nursing Associate</b></p>	<ul style="list-style-type: none"> <li>• Demonstrate an awareness that all people with diabetes are at risk of developing CKD.</li> <li>• Perform blood/urine tests including eGFR and urinary albumin creatinine ratio, as directed.</li> <li>• Be aware of the need to manage, within agreed target, blood pressure for people with CKD</li> <li>• Be aware of the need for regular foot check and eye screening in all people with CKD.</li> <li>• Demonstrate competence in using a validated foot screening tool</li> <li>• 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</li> </ul>
<p><b>4. Proficient registered nurse</b></p>	<p>As 1,2,3 and:</p> <ul style="list-style-type: none"> <li>• Demonstrate awareness of renal complications and prevention.</li> <li>• List the annual screening tests to detect CKD.</li> <li>• Organise or perform urinary albumin/creatinine screening (ACR), blood pressure measurement and blood tests including urinary albumin creatinine ratios and eGFR, according to local and national protocols and guidelines.</li> <li>• Demonstrate awareness of the 5 different stages of CKD.</li> <li>• Be aware of Local and National referral criteria for nephrology (i.e. rate of decline in renal function)</li> <li>• Be aware that individuals with advanced CKD need referral to specialist care</li> </ul>
<p><b>5. Experienced registered nurse</b></p>	<p>As 4, and:</p> <ul style="list-style-type: none"> <li>• Review test results, and if outside the expected range, refer appropriately and plan follow-up.</li> <li>• Educate people with diabetes or their carer in prevention and importance of screening for CKD.</li> <li>• Demonstrate awareness of the impact that declining renal function may have on glycaemic control.</li> <li>• Be aware of the medications that may increase the risk of Acute Kidney Injury</li> <li>• Be aware that even medicines in the same class eg. SGLT2 inhibitors have different licensing depending on renal function</li> <li>• Ensure that the person prescribed such medication receives clear sick day management advice.</li> <li>• Demonstrate an awareness of diabetes medications contraindicated in moderate or severe renal disease, and the impact CKD has on the excretion of some medications, particularly sulphonylureas and insulin therapies.</li> <li>• 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).</li> <li>• 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.</li> <li>• Know when to refer to dietetics for advice on diabetes and renal diets.</li> <li>• Be aware of fluid restrictions required in people with advanced kidney disease.</li> <li>• Participate in guideline development and audit.</li> <li>• Educate HCPs regarding prevention, screening and progression of CKD.</li> <li>• Monitor and support junior staff to ensure they have the appropriate competence.</li> </ul>
<p><b>6. Senior / advanced clinical practitioner*</b></p> <p>* Includes nurse consultant role</p>	<p>As 5, and:</p> <ul style="list-style-type: none"> <li>• Be aware of relevant national policies related to diabetes and CKD.</li> <li>• Demonstrate a broad knowledge of renal treatments, including all renal replacement therapy and transplantation, and their impact on glycaemic control.</li> <li>• Demonstrate knowledge of how immunosuppression treatment, including steroids, may affect glycaemic control.</li> <li>• Review medications and ensure appropriate adjustments are made.</li> <li>• If a registered non-medical prescriber, prescribe medications as required within own competencies and scope of practice.</li> <li>• Know when to refer to specialist renal or diabetes teams.</li> <li>• Participate in research, audit and the development and dissemination of evidence-based protocols and guidelines.</li> <li>• Participate in the development and monitoring of integrated care pathways.</li> </ul>

## 24. CHRONIC KIDNEY DISEASE

### 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/](http://www.trenddiabetes.online/resources/)

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

GPNotebook education: Prescribing for people living with T2DM and Renal Impairment. [www.diabetesonthenet.com](http://www.diabetesonthenet.com)

Executive summary of the KDIGO 2024 Clinical Practice Guideline for the Management of Blood Pressure in Chronic Kidney Disease <https://kdigo.org/wp-content/uploads/2024/03/KDIGO-2024-CKD-Guideline.pdf>

## 25. RETINOPATHY

### To care for people with, or at risk of, retinopathy, you should be able to:

<p><b>1. Unregistered practitioner / care assistant</b></p> <p><b>2. Pre-registration student nurse / student nurse associate</b></p> <p><b>3. Nursing Associate</b></p>	<ul style="list-style-type: none"> <li>• Demonstrate awareness that all people with diabetes are at risk of developing retinopathy.</li> <li>• Demonstrate an awareness that people with diabetes are at higher risk of other eye complications.</li> <li>• Support people with diabetes with impaired vision.</li> <li>• Encourage people with diabetes to attend all retinal screening appointments.</li> <li>• Encourage people with diabetes to attend regular optometry appointments.</li> </ul>
<p><b>4. Proficient registered nurse</b></p>	<p>As 1,2,3 and:</p> <ul style="list-style-type: none"> <li>• Recognise the need for regular retinal screening.</li> <li>• Recognise the need for regular optometry appointments</li> <li>• Demonstrate awareness of retinal complications and how these can be prevented and delayed.</li> <li>• Participate in retinal screening or laser clinics.</li> <li>• Ensure all people with diabetes are on the diabetic retinopathy screening register.</li> <li>• Be aware of risk of causing further retinal damage to any person starting new therapies which may improve the glucose levels too quickly</li> </ul>
<p><b>5. Experienced registered nurse</b></p>	<p>As 4, and:</p> <ul style="list-style-type: none"> <li>• Educate the person with diabetes, and their carer, about preventing the development and delaying the progression of, and the importance of screening for retinopathy.</li> <li>• Participate in education programmes for HCPs.</li> <li>• Discuss with person with diabetes to avoid improving glucose levels too quickly as this is a risk for increasing level of retinopathy i.e. starting insulin pump therapy or Hybrid closed loop system. Advise person to contact Eye Clinic if any changes in eyes are apparent.</li> <li>• Refer people with reduced vision to eye clinic liaison officers for access to vision aids.</li> <li>• Recognise the importance of checking for urine microalbuminuria, and glycaemic, blood pressure and cholesterol management in preventing and/or progressing diabetic retinopathy.</li> <li>• Ensure retinal screening is informed if someone with diabetes becomes pregnant so that they can be placed on the pregnancy pathway.</li> </ul>
<p><b>6. Senior / advanced clinical practitioner*</b></p> <p>* Includes nurse consultant role</p>	<p>As 5, and:</p> <ul style="list-style-type: none"> <li>• Participate in research and disseminate evidence-based practice.</li> <li>• Write and review local protocols and guidelines in line with national guidelines.</li> <li>• Review medication and ensure appropriate changes are made.</li> <li>• Provide or refer for psychological support as required.</li> <li>• Plan, implement and deliver education programmes for HCPs and new retinal screeners.</li> <li>• Participate in the development and monitoring of integrated care pathways.</li> <li>• Keep updated with new therapies available for people with diabetic macular oedema and proliferative diabetic retinopathy.</li> </ul>
<p><b>Suggested examples to assess competence in this area:</b></p> <ul style="list-style-type: none"> <li>✓ Provide an example of an anonymous care plan for someone with advanced retinopathy to illustrate the appropriate support provided.</li> </ul>	<p><b>Useful resources:</b></p> <p>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 lamps, talking clocks, magnifiers and bumpons (a tactile aid)- suitable for marking medications and settings on washing machines</p> <p>Talking meters to help with glucose monitoring are also available on prescriptions namely the CareSens N Voice Talking Meter from Spirit Health Care and GlucoRx Nexus Voice Meter from Williams Medical Supplies and Freestyle Libre 2 System from Abbott.</p>

## 26. MENTAL HEALTH

### To care for someone with diabetes and poor mental health, you should be able to:

<p><b>1. Unregistered practitioner / care assistant</b></p> <p><b>2. Pre-registration student nurse / student nurse associate</b></p> <p><b>3. Nursing Associate</b></p>	<ul style="list-style-type: none"> <li>• Have an awareness of how poor mental health, such as depression, anxiety, psychosis and schizophrenia affects people with diabetes.</li> <li>• 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.</li> </ul>
<p><b>4. Proficient registered nurse</b></p>	<p>As 1,2,3 and:</p> <ul style="list-style-type: none"> <li>• Conduct a mental health assessment using a recognised depression tool.</li> <li>• Raise the issue of current mental health/addiction problems sensitively during individual consultations.</li> <li>• Demonstrate awareness that some mental health medications can have a detrimental effect on glycaemic and lipid control.</li> <li>• Support the person with diabetes and poor mental health in obtaining the appropriate investigations in a timely manner.</li> <li>• 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.</li> </ul>
<p><b>5. Experienced registered nurse</b></p>	<p>As 4, and:</p> <ul style="list-style-type: none"> <li>• Assess those people with mental health problems and how antipsychotic medication impacts on the risk of developing type 2 diabetes and their diabetes management.</li> <li>• Demonstrate knowledge of the psychological impact of diabetes and facilitate referral to psychological support or mental health services, as required.</li> <li>• 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, obsessive- compulsive disorder, eating disorders, addiction and dependence).</li> <li>• Refer or ensure an appropriate mental health practitioner is involved in the person's care if they are demonstrating poor mental health.</li> <li>• Manage and coordinate individual patient care and education requirements.</li> <li>• Recognise the implications of poor mental health on lifestyle choices and support the person with small, self determined, achievable changes.</li> <li>• If a registered prescriber, prescribe medications as required within own competence and scope of practice.</li> <li>• Monitor and support junior staff to ensure they have appropriate competence.</li> </ul>
<p><b>6. Senior / advanced clinical practitioner*</b></p> <p>* Includes nurse consultant role</p>	<p>As 5, and:</p> <ul style="list-style-type: none"> <li>• Provide support and expert advice to other HCPs on the management of diabetes in people with complex mental health problems.</li> <li>• 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.</li> <li>• 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).</li> </ul>

#### Suggested examples to assess competence in this area:

- ✓ 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.

#### Useful resources:

Trend Diabetes leaflets for "Alcohol, smoking and illicit drugs: what you need to know if you have diabetes" available at [www.trenddiabetes.online/resources/](http://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%20diabetes%20in%20adults%20and%20children%20with%20psychiatric%20disorders%20in%20inpatient%20settings-August-2017.pdf>

## 27. RESIDENTIAL AND NURSING HOMES

### To care for someone with diabetes living in a residential or nursing home, you should be able to:

<p><b>1. Unregistered practitioner / care assistant</b></p> <p><b>2. Pre-registration student nurse / student nurse associate</b></p> <p><b>3. Nursing Associate</b></p>	<ul style="list-style-type: none"> <li>• Understand the normal glycaemic range and report readings outside this range to the appropriate person.</li> <li>• Demonstrate how to perform the basic components of an annual review and report abnormal findings.</li> <li>• Perform glucose and ketone monitoring according to the manufacturers' instructions.</li> <li>• Demonstrate how to perform a basic foot examination and report adverse findings.</li> <li>• Recognise the risk of, as well as the signs and symptoms, of hyperglycaemia.</li> <li>• Recognise the risk of, as well as the signs, symptoms, and treatment for hypoglycaemia.</li> <li>• Recognise the importance of access and timing of meals in relation to diabetes medication.</li> <li>• Describe what to do if food is refused.</li> <li>• Administer insulin safely if trained to do so.</li> <li>• Recognise and follow local policy for the disposal of sharps.</li> </ul>
<p><b>4. Proficient registered nurse</b></p>	<p>As 1,2,3 and:</p> <ul style="list-style-type: none"> <li>• Identify and review the specifics of diabetes management in each individual's care plan, including nutritional status.</li> <li>• Have a good working knowledge of, and follow national policies and procedures relating to the management of older or frail people with diabetes.</li> <li>• Have a broad understanding of diabetes medications, timings in relation to meals, and common side effects.</li> <li>• Ensure residents take their medication. Be aware of side-effects and know how to treat and report these.</li> <li>• Know when to refer for GP assessment or specialist care.</li> <li>• Understand the requirement for influenza and pneumonia vaccination.</li> <li>• Organise access to retinopathy screening.</li> <li>• 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.</li> <li>• Support and regularly review unregistered practitioners who have been trained to monitor glucose and administer insulin.</li> </ul>
<p><b>5. Experienced registered nurse</b></p>	<p>As 4, and:</p> <ul style="list-style-type: none"> <li>• Identify people with diabetes who are at a high risk of poor glycaemic, lipid and blood pressure control.</li> <li>• Manage and coordinate individual patient care plans.</li> <li>• Deliver HCP education programmes depending on the needs of residential staff.</li> <li>• Have knowledge of how to monitor intercurrent illness in relation to glycaemic control, and when to seek specialist advice.</li> <li>• Report frequent episodes of hypoglycaemia and hyperglycaemia to the GP for a joint review.</li> <li>• Monitor and support junior staff to ensure they have appropriate competence.</li> </ul>
<p><b>6. Senior / advanced clinical practitioner*</b></p> <p>* Includes nurse consultant role</p>	<p>As 5, and:</p> <ul style="list-style-type: none"> <li>• Provide expert advice on the care of people with diabetes in residential and nursing homes.</li> <li>• Demonstrate expert knowledge of diabetes medications and prescribe, if qualified as a non-medical prescriber, within one's own competence and scope of practice.</li> <li>• Liaise with services across organisation and professional boundaries.</li> <li>• Participate in guideline or protocol development.</li> <li>• Initiate and/or participate in audit and research.</li> <li>• Develop appropriate commissioned education programmes in collaboration with care home staff.</li> </ul>
<p><b>Suggested examples to assess competence in this area:</b></p> <ul style="list-style-type: none"> <li>✓ Provide the education programme content for residential and nursing home staff.</li> <li>✓ Provide examples of anonymous care plans for residents with type 1 and type 2 diabetes to demonstrate effective management.</li> <li>✓ Outline the specific care needed for someone with type 1 diabetes, and type 2 diabetes.</li> </ul>	<p><b>Useful resources:</b></p> <p>End of Life Guidance for Diabetes Care HCP documents at <a href="http://www.trenddiabetes.online/resources/">www.trenddiabetes.online/resources/</a></p> <p>Diabetes and Dementia HCP document and leaflet at <a href="http://www.trenddiabetes.online/resources/">www.trenddiabetes.online/resources/</a></p> <p>Type 2 diabetes mellitus in older people: a brief statement of key principles of modern day management including the assessment of frailty. A national collaborative stakeholder initiative <a href="https://doi.org/10.1111/dme.13644">https://doi.org/10.1111/dme.13644</a></p>

## 28. PRISON AND SECURE UNITS

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

<p><b>1. Unregistered practitioner / care assistant</b>  <b>2. Pre-registration student nurse / student nurse associate</b>  <b>3. Nursing Associate</b></p>	<ul style="list-style-type: none"> <li>Follow local policy regarding care of resident with diabetes in secured units.</li> <li>Understand the need for access to, and appropriate timing of, meals in relation to diabetes medication.</li> <li>Perform blood glucose and ketone testing according to manufacturers' instructions.</li> <li>Understand the normal glycaemic range for the individual and report readings outside this range to the appropriate person.</li> <li>Describe the signs and symptoms of hyperglycaemia.</li> <li>Describe the signs and symptoms and appropriate treatment for hypoglycaemia. Be aware of the GOLD score</li> <li>Describe what to do if food is refused</li> <li>Follow local policy regarding sharps disposal.</li> <li>Know how to recognise depression, anxiety and other mental illness in people with diabetes.</li> </ul>
<p><b>4. Proficient registered nurse</b></p>	<p>As 1,2,3 and:</p> <ul style="list-style-type: none"> <li>Have a good knowledge of policies and procedures relating to the management of diabetes within the custodial environment.</li> <li>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.</li> <li>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.</li> <li>Identify residents who have a high GOLD score and are at high risk of hypoglycaemia or who lack hypoglycaemia awareness, and ensure that safeguarding is in place.</li> <li>Have a broad understanding of diabetes medications and common side effects.</li> <li>Have an in-depth knowledge of prison policies relating to use of prescription medicines and sharps disposal.</li> <li>Demonstrate knowledge of implications that "not-in-possession medications" may have on glycaemic control and diabetes management and ensure systems are in place to support access to medications</li> <li>Be able to describe the action required for the treatment of hypoglycaemia.</li> <li>Be able to describe the action required for the treatment of hyperglycaemia and intercurrent illness.</li> <li>Demonstrate knowledge of the impact of substance and alcohol misuse on glycaemic control.</li> <li>Know when to refer for medical assessment or specialist care (e.g. pregnancy, type 1 diabetes).</li> <li>Have a working knowledge of other agencies (e.g. community health staff, dietitians, ophthalmology and podiatry services) and how to refer to them.</li> </ul>
<p><b>5. Experienced registered nurse</b></p>	<p>As 4, and:</p> <ul style="list-style-type: none"> <li>Manage and co-ordinate individual diabetes care and education programmes remote or face to face.</li> <li>Work with residents with diabetes who have difficulties with medication concordance and encourage selfmanagement with an agreed care plan if appropriate.</li> <li>Ensure residents understand how to take their medication, are aware of the side effects, and how to report them.</li> <li>Be aware of the need for regular review of diabetes complications and risk factors.</li> <li>Know how to monitor intercurrent illness and when to seek specialist advice.</li> <li>Plan for on-going diabetes care following release.</li> <li>Ensure that specialist advice is sort for an individual who's control is worsening and/or is at risk of DKA or other complications</li> <li>Monitor and support junior staff to ensure they have appropriate competence.</li> <li>Participate in audit and shared learning.</li> </ul>
<p><b>6. Senior / advanced clinical practitioner*</b>  <small>* Includes nurse consultant role</small></p>	<p>As 5, and:</p> <ul style="list-style-type: none"> <li>Provide expert advice on the care of residents with diabetes.</li> <li>Demonstrate expert knowledge of diabetes medications and prescribe, if qualified as a non-medical prescriber, within one's own competence and scope of practice.</li> <li>Develop systems that will allow CGM monitoring where appropriate</li> <li>Develop systems that will allow insulin pumps/ Hybrid closed Loops where appropriate</li> <li>Develop appropriate commissioned education programmes in collaboration with the prison staff. This maybe virtual or face to face depending on the institution.</li> <li>Provide education to prison healthcare staff to raise awareness of diabetes, its management and its short and longterm complications.</li> <li>Liaise with prison and specialist services across organisational and professional boundaries.</li> <li>Participate in guideline and protocol development.</li> <li>Initiate/participate in audit and research</li> </ul>

## 28. PRISON AND SECURE UNITS

### 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](http://www.trenddiabetes.online/resources/JBDS-IP) The Hospital Management of Hypoglycaemia in Adults with Diabetes Mellitus (Updated 2023) [https://abcd.care/sites/default/files/site\\_uploads/JBDS\\_Guidelines\\_Current/JBDS\\_01\\_Hypo\\_Guideline\\_with\\_QR\\_code\\_January\\_2023.pdf](https://abcd.care/sites/default/files/site_uploads/JBDS_Guidelines_Current/JBDS_01_Hypo_Guideline_with_QR_code_January_2023.pdf)

NHS England National Partnership Agreement for Health and Social Care for England: [https://assets.publishing.service.gov.uk/media/63f7452cd3bf7f62edc83629/6.7996\\_HMPPS\\_NPA\\_2022\\_25\\_V7\\_37\\_.pdf](https://assets.publishing.service.gov.uk/media/63f7452cd3bf7f62edc83629/6.7996_HMPPS_NPA_2022_25_V7_37_.pdf)

NHS Primary Care Service Specification 2020: <https://www.england.nhs.uk/wp-content/uploads/2020/03/primary-care-service-spec-medical-nursing-for-prisons-2020.pdf>

Diabetes care in prisons, Diabetes UK: <https://www.diabetes.org.uk/for-professionals/improving-care/good-practice/prisons#>

## 29. END OF LIFE CARE

### To care for someone with diabetes at the end of their life, you should be able to:

<p><b>1. Unregistered practitioner / care assistant</b></p> <p><b>2. Pre-registration student nurse / student nurse associate</b></p> <p><b>3. Nursing Associate</b></p>	<ul style="list-style-type: none"> <li>• Undertake glucose monitoring as agreed between the individual and diabetes team.</li> <li>• Document glucose results and report those that are outside the agreed target range to a registered nurse.</li> <li>• Be aware of policies relating to end-of-life care and diabetes.</li> <li>• List the signs and symptoms that may indicate hypoglycaemia or hyperglycaemia.</li> <li>• Be aware of the need to avoid dehydration on people in the last weeks and days of life</li> </ul>
<p><b>4. Proficient registered nurse</b></p>	<p>As 1,2,3 and:</p> <ul style="list-style-type: none"> <li>• Be able to discuss document relating to advance directives, Emergency health care planning and ReSPECT forms</li> <li>• Assess the person's needs and ensure they are pain-free, adequately hydrated and symptom-free from their diabetes.</li> <li>• Be aware that palliative care may vary in time, and diabetes control needs to be assessed on an individual and daily basis.</li> <li>• Demonstrate knowledge of appropriate glucose targets (e.g. 6 – 15mmol/L) to avoid hypoglycaemia and symptomatic hyperglycaemia.</li> <li>• Be aware that glucocorticoid steroids may cause diabetes, which may require insulin treatment. Steroids can also worsen glycaemic control with pre-existing diabetes.</li> <li>• 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.</li> <li>• 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.</li> <li>• Recognise that people with type 2 diabetes may not need treatment for diabetes in the last few days of life.</li> <li>• Be aware that, where possible, diabetes treatment plans and medication changes must be discussed with the individual and significant others.</li> <li>• Be aware of the 4 stages (A-D Gold Standard Framework) for considering the use of glucose lowering therapies.</li> </ul>
<p><b>5. Experienced registered nurse</b></p>	<p>As 4, and:</p> <ul style="list-style-type: none"> <li>• Initiate and develop personalised care plans in collaboration with the person with diabetes and significant others, including Advanced Care Planning.</li> <li>• Describe indications for the initiation or discontinuation of glucose-lowering agents.</li> <li>• Advise on the necessity and frequency of glucose monitoring, in agreement with the individual and significant others.</li> <li>• Recognise when treatment needs to be adjusted.</li> <li>• Monitor and support junior staff to ensure they have appropriate competence.</li> </ul>
<p><b>6. Senior / advanced clinical practitioner*</b></p> <p>* Includes nurse consultant role</p>	<p>As 5, and:</p> <ul style="list-style-type: none"> <li>• Plan, implement and deliver education programmes about diabetes and palliative care for other HCPs.</li> <li>• If a registered non-medical prescriber, adjust and prescribe medication related to diabetes, as required, within own competence and scope of practice.</li> <li>• Participate in the development of guidelines and protocols related to diabetes and palliative care.</li> </ul>
<p><b>Suggested examples to assess competence in this area:</b></p> <p>✓ Provide examples of anonymous care plans demonstrating appropriate advice and management of diabetes given to people with a few months of life to a few days.</p>	<p><b>Useful resources:</b></p> <p>End of Life diabetes care: clinical care recommendations. 4rd edition available at <a href="http://www.trenddiabetes.online/resources/">www.trenddiabetes.online/resources/</a></p> <p><a href="https://www.goldstandardsframework.org.uk/advance-care-planning">https://www.goldstandardsframework.org.uk/advance-care-planning</a></p> <p><a href="https://www.rcn.org.uk/clinical-topics/end-of-life-care/advance-care-planning">https://www.rcn.org.uk/clinical-topics/end-of-life-care/advance-care-planning</a></p> <p>JBDS-IP Management of Hyperglycaemia and Steroid (Glucocorticoid) Therapy (Revised 2023) <a href="https://abcd.care/sites/default/files/site_uploads/JBDS_Guidelines_Current/JBDS_08_Management_of_Hyperglycaemia_and_Steroid_%28Glucocorticoid%29_Therapy_with_QR_code_January_2023.pdf">https://abcd.care/sites/default/files/site_uploads/JBDS_Guidelines_Current/JBDS_08_Management_of_Hyperglycaemia_and_Steroid_%28Glucocorticoid%29_Therapy_with_QR_code_January_2023.pdf</a></p>

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