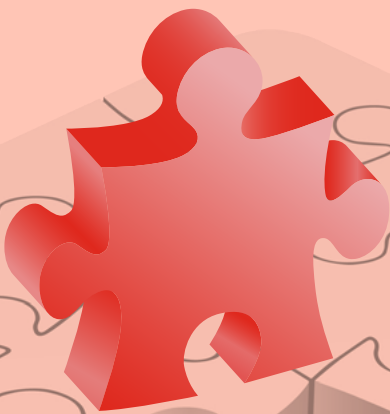


JBDS-IP Joint British
Diabetes Societies
for inpatient care

Discharge planning for adults with diabetes

January 2022



This document is coded JBDS 10 in the series of JBDS documents:

Other JBDS documents:

<i>The hospital management of hypoglycaemia in adults with diabetes mellitus</i>	<i>JBDS 01</i>
<i>The management of diabetic ketoacidosis in adults</i>	<i>JBDS 02</i>
<i>Management of adults with diabetes undergoing surgery and elective procedures: improving standards</i>	<i>JBDS 03</i>
<i>Self-management of diabetes in hospital</i>	<i>JBDS 04</i>
<i>Glycaemic management during the inpatient enteral feeding of stroke patients with diabetes</i>	<i>JBDS 05</i>
<i>The management of the hyperosmolar hyperglycaemic state (HHS) in adults with diabetes</i>	<i>JBDS 06</i>
<i>Admissions avoidance and diabetes: guidance for clinical commissioning groups and clinical teams</i>	<i>JBDS 07</i>
<i>Management of hyperglycaemia and steroid (glucocorticoid) therapy</i>	<i>JBDS 08</i>
<i>The use of variable rate intravenous insulin infusion (VRII) in medical inpatients</i>	<i>JBDS 09</i>
<i>Discharge planning for adult inpatients with diabetes</i>	<i>JBDS 10</i>
<i>Management of adults with diabetes on the haemodialysis unit</i>	<i>JBDS 11</i>
<i>Management of glycaemic control in pregnant women with diabetes on obstetric wards and delivery units</i>	<i>JBDS 12</i>
<i>The management of diabetes in adults and children with psychiatric disorders in inpatient settings</i>	<i>JBDS 13</i>
<i>A good inpatient diabetes service</i>	<i>JBDS 14</i>
<i>Inpatient care of the frail older adult with diabetes</i>	<i>JBDS 15</i>
<i>Diabetes at the front door</i>	<i>JBDS 16</i>
<i>The Management of Glycaemic Control in People with Cancer</i>	<i>JBDS 17</i>

These documents are available to download from the ABCD website at <https://abcd.care/joint-british-diabetes-societies-jbds-inpatient-care-group>, the Diabetes UK website at www.diabetes.org.uk/joint-british-diabetes-society and the chemotherapy board website at www.ukchemotherapyboard.org

These guidelines can also be accessed via the Diabetologists (ABCD) app (need ABCD membership to access the app)



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Statement for inpatient guidelines

These guidelines have been developed to advise the discharge planning process for people with Diabetes currently in Hospital.

The guideline recommendations have been developed and reviewed by a multidisciplinary team led by the Joint British Diabetes Society (JBDS) and including representation from Primary Care Diabetes Society, Diabetes UK. People with diabetes have been involved in the development of the guidelines via stakeholder events organised by Diabetes UK.

It is intended that the guideline will be useful to clinicians and service commissioners in planning, organising and delivering high quality diabetes inpatient care. There remains, however, an individual responsibility of healthcare professionals to make decisions appropriate to the circumstance of the individual, informed by them and/or their guardian or carer and taking full account of their medical condition and treatment.

When implementing this guideline full account should be taken of the local context and in line with statutory obligations required of the organisation and individual. No part of the guideline should be interpreted in a way that would knowingly put staff, those with diabetes or anyone else at risk.

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Disclaimer

The information contained in this guidance is a consensus of the development and consultation groups' views on current treatment. It should be used in conjunction with any local policies/procedures/guidelines and should be approved for use according to the trust clinical governance process. Care has been taken in the preparation of the information contained in the guidance. Nevertheless, any person seeking to consult the guidance, apply its recommendations or use its content is expected to use independent, personal medical and/or clinical judgement in the context of the individual clinical circumstances, or to seek out the supervision of a qualified clinician. The group makes no representation or guarantee of any kind whatsoever regarding the guidance content or its use or application and disclaim any responsibility for its use or application in any way.

To enable the guideline to stay relevant, it is envisaged that all of the JBDS guidelines will be updated or reviewed each year. As such these are 'living' documents – designed to be updated based on recently published evidence or experience. Thus, feedback on any of the guidelines is welcomed. Please email christine.jones@nuh.nhs.uk with any comments, suggestions or queries.

Conflict of interest statement

The authors declare no conflicts of interest

Lead authorship

Esther Walden, Diabetes UK (formerly Diabetes Specialist Nurse, Norfolk and Norwich University Hospital and former Chair, Diabetes Inpatient Specialist Nurse (DISN) UK Group)

Current writing group

Carol Jairam, (Diabetes Specialist Nurse), Imperial College Healthcare NHS Trust
Professor Ketan Dhatariya, Norfolk and Norwich University Hospitals NHS Foundation Trust
Dr Daniel Flanagan, Plymouth Hospitals NHS Trust
Dr Omar Mustafa, King's College Hospital NHS Foundation Trust, London
Professor Alan Sinclair, Foundation for Diabetes Research in Older People (fDROP) and King's College, London

Previous authors

Professor Anne Dornhorst: The current authorship is grateful to Anne for all her hard work on earlier versions of this guideline.

Previous writing and review group

Helen Atkins, University Hospitals of Leicester NHS Trust
Dr Moulinath Banajee, Bolton NHS Foundation Trust
Caroline Brooks, Maidstone and Tunbridge Wells NHS Foundation Trust
Dr Umesh Dashora, East Sussex Healthcare NHS Trust
Diabetes Inpatient Specialist Nurse (DISN) UK Group
Fraser Burton, Stockport NHS Foundation Trust
Dr Simon Croxton, University Hospitals Bristol NHS Foundation Trust
Cathy Grove, The Diabetes Management and Education Group (DMEG)
Elizabeth Hackett, (United Kingdom Clinical Pharmacy Association (UKCPA) Diabetes & Endocrinology Committee
Professor Gerry Rayman, The Ipswich Hospital NHS Trust
Josie Ross, Aneurin Bevan University Health Board
Professor Mike Sampson, Norfolk and Norwich University Hospitals NHS Foundation Trust
Fiona Smith, The Rotherham NHS Foundation Trust
Sheila Smyth, Colchester Hospital University NHS Foundation Trust
Karen Turner, Colchester Hospital University NHS Foundation Trust
Maureen Wallymahmed, Aintree University Hospitals NHS Foundation Trust

Supporting organisations and funders

Association of British Clinical Diabetologists (ABCD), Chair: Dr Dipesh Patel (Royal Free, London)
Diabetes Inpatient Specialist Nurse (DISN) UK Group, Chair: Erwin Castro (East Sussex)
Diabetes UK: Klea Isufi, Inpatient Care Lead
Joint British Diabetes Societies (JBDS) for Inpatient Care, Chair: Professor Ketan Dhatariya (Norwich)

Endorsed by

Primary Care Diabetes Society (PCDS)

Royal College of Physicians (RCP)

Training, Research and Education for Nurses in Diabetes (Trend Diabetes)

United Kingdom Clinical Pharmacy Association (UKCPA) Diabetes & Endocrinology Committee

Foundation for Diabetes Research in Older People (fDROP)

Young Diabetologists & Endocrinologists' Forum (YDEF)

JBDS IP Group

Dr Ahmed Al-Sharefi, South Tyneside and Sunderland NHS Foundation Trust

Dr Parizad Avari, Imperial College Healthcare NHS Trust

Elizabeth Camfield, Guy's and St Thomas' NHS Foundation Trust

Erwin Castro, (East Sussex), Chair, Diabetes Inpatient Specialist Nurse (DISN) UK Group

Dr Jason Cheung, Norfolk and Norwich University Hospitals NHS Foundation Trust

Dr Umesh Dashora, East Sussex Healthcare NHS Trust

Dr Parijat De, Sandwell and West Birmingham Hospitals NHS Trust

Professor Ketan Dhataria, (Norwich), Chair, Joint British Diabetes Societies (JBDS) for Inpatient Care

Dr Daniel Flanagan, Plymouth Hospitals NHS Trust

Dr Stella George, East and North Hertfordshire NHS Trust

Dr Masud Haq, Maidstone and Tunbridge Wells NHS Trust

Klea Isufi, Diabetes UK

June James, University Hospitals of Leicester NHS Trust

Andrea Lake, Cambridge University Hospitals NHS Foundation Trust

Lily Larsen, Diabetes UK

Dr Anthony Lewis, Belfast Health and Social Care Trust, Northern Ireland

Dr Sue Manley, University Hospitals Birmingham NHS Foundation Trust

Dr Omar Mustafa, King's College Hospital NHS Foundation Trust, London

Philip Newland-Jones, University Hospital Southampton NHS Foundation Trust

Dr Dipesh Patel, Royal Free London, NHS Foundation Trust

Professor Gerry Rayman, The Ipswich Hospitals NHS Trust

Dr Stuart Ritchie, NHS Lothian

Dr Aled Roberts, Cardiff and Vale University Health Board

Professor Mike Sampson, Norfolk and Norwich University Hospitals NHS Foundation Trust

Dr Aisha Saqib, Guy's and St Thomas' NHS Foundation Trust

Professor Alan Sinclair, Director, Foundation for Diabetes Research in Older People (fDROP) and King's College, London

Esther Walden, Diabetes UK

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Foreword

Nearly 5 million people are now living with diabetes in the UK and almost one fifth of hospital beds in England and Wales are occupied up by people with diabetes. Poor discharge planning can lead to poorer outcomes and increased rates of readmission for people with diabetes. Therefore, it is essential that the discharge process is well planned, documented, and communicated and is made in agreement with the person with diabetes and their carers. This document continues the series of Joint British Diabetes Societies for Inpatient Care (JBDS-IP) guidelines which have been developed to improve the standards of care for people with diabetes when they are admitted to hospital. This guidance focuses on ensuring a safe and timely discharge or transfer from hospital by means of effective discharge planning. It has been updated to reflect the latest advice for discharge planning in general and discusses the specific needs of people with diabetes. It should be used within the wider context of general discharge planning.

During the writing process, comments have been incorporated from a wide range of organisations with an interest in diabetes.

As with all of the JBDS-IP documents, this guideline is dynamic and will be reviewed in response to feedback via JBDS organisations with a view to incorporating emerging evidence. The authors welcome any comments, criticisms, or suggestions for future reviews. If you have any comments please email either esther.walden@diabetes.org.uk or ketan.dhatariya@nnuh.nhs.uk



A handwritten signature in black ink, appearing to read 'E Walden'.

What has changed in this document

- All sections have been updated to remain in line with current nationally recognised guidance on discharge planning
- The classification of discharges has been updated to reflect current government discharge pathways including the discharge to assess model
- A section on special circumstances has now been included
- Where necessary, links to other JBDS guidelines that may be pertinent have been added
- The appendices have been updated to include general information on frailty
- This guideline refers to people or person with diabetes instead of inpatients where possible to align with 'language matters' (1). Please read as guidance for a person with diabetes in a ward or other hospital setting throughout

Rationale for this guideline

This document was reviewed and updated in November 2021 to reference and accommodate changes in governmental discharge planning guidance, treatment options, and technological advances. It also considers how COVID-19 has changed working practices. All of these factors have influenced the way discharges are planned and executed. Whilst the core goal of a safe and timely transition from hospital to other discharge destinations remains relevant, emerging evidence and social structures have necessitated reviews of some processes.

'Good discharge planning involves making sure those who require support with their glucose control in the immediate period after leaving hospital are identified prior to discharge' (2).

This guideline has been developed to help healthcare professionals in secondary care plan the safe and effective discharge of people with diabetes in hospital. The guideline complements the 2021 Department of Health and social care guidelines on a hospital discharge service by emphasising the specific steps and assessments required for people living with diabetes (3).

This document focuses specifically on aspects of diabetes care that should be considered for discharge and includes a range of summary checklists for staff. However, it is important to recognise that discharge or transfer planning is not condition specific and that all aspects of a person's health and social needs should be taken into consideration.

It is intended this guideline will supplement current hospital Trusts' discharge policies already in place.

Who should read this guideline?

- All members of the hospital multidisciplinary Diabetes Specialist Team (DST)
- All medical and nursing staff and allied healthcare professionals looking after people with diabetes in hospital
- The single point of assessment discharge coordinator for each acute area
- All members of the community diabetes care provider team
- Hospital and ward managers
- Local clinical commissioning groups
- Social services teams

Executive Summary:

Recommendations for effective and appropriate discharge planning

- Effective discharge planning improves patient experience, reduces length of stay and readmission rates
- Discharge planning for people with diabetes in the hospital setting should begin at the time of admission to ensure a smooth, safe, and documented transition from hospital to discharge destination (Table 1)
- Clear guidelines for all wards need to be in place for early referral to the diabetes specialist team
- All people in hospital and/or their carers/family should be involved in their diabetes care pathway and discharge planning (Table 2)
- A person's ability to self-manage, their functional status and comorbidity profile and their level of social support should be taken into account when choosing a glycaemic management plan for discharge
- All medication, insulin passports, equipment and devices for glycaemic management and monitoring, as appropriate to individual needs and wishes, must be available at the time of discharge (Tables 3 – 5)
- People newly started on insulin for continuation post discharge and people admitted as a consequence of issues with the prescribing or administration of insulin are likely to require a period of specialist training and assessment by the diabetes specialist team. Early referral to the diabetes team will potentially prevent discharge delays
- All people and their carers must be aware of who their diabetes care provider will be following discharge. They should be given contact details to access emergency support for diabetes care if required along with a clear description of whether diabetes related issues were the reason for admission
- Anyone admitted for reasons directly related to diabetes management/care e.g. DKA or hypoglycaemia, should have a clear description of the reason for admission with written plan for prevention of recurrence
- People who are discharged to a care home should have a discharge plan agreed between all stakeholders including primary care, community nursing and the care provider
- On discharge all community services pertinent to the person, including the GP, must be informed of changes made to the diabetes treatment and follow up plans in the care pathway
- People should be given a copy of their continuing diabetes care plan and discharge summary which should include the name of the medication, dosage, frequency of dosing, device for injections (GLP-1 and/or insulin) if appropriate, and follow-up arrangements post-discharge
- The discharge planning process should include all of the person's needs, of which diabetes should be a part, not the sole focus
- Ensure the discharge planning for people admitted primarily for another condition but who also have active foot disease does not overlook their specific foot care needs

Introduction

Since 2010, the National Diabetes Inpatient Audit (NaDIA) has provided an annual snapshot of diabetes inpatient care in England and Wales. It has consistently shown the prevalence of diabetes in acute hospital inpatients is about 15-20% (4). The majority of people with diabetes in the hospital setting are admitted as emergencies and are older people with significant co-morbidities. There has been a steady increase in referrals to specialist diabetes services in hospital. The NaDIA (2019) report highlighted that 75 percent of those surveyed in 2019 were seen by the diabetes team compared to only 54 percent in 2010 (4). Improvements in care are ongoing and encompass promoting activities that can enable all staff to improve diabetes care within and across clinical teams, beyond ward rounds, bedside care delivery and back to the community settings.

The Department of Health (DH) recognises that good discharge planning from hospital improves patient experience, reduces length of stay and readmission rates, and suggests 10 key steps that need to be followed to ensure safe and timely discharge (Table 1) (5). It should also be emphasised that discharge planning for people with diabetes should take place within the wider context of effective care planning. The DH general summary of outcomes for effective discharge planning is shown below (Table 2) (3; 5).

Advice for commissioning services

Since the beginning of the Covid-19 pandemic, discharge services have changed significantly in order to ensure maximum available bed capacity in acute care settings at all times. Clinicians involved in the discharge planning process and hospital discharge teams should ensure they are familiar with the framework advocated by the Department of Health and Social Care (3).

The Institute of Public Care (IPC) 2018 makes some recommendations for planning and commissioning discharge services for older people (6). These include:

1. Having a **good understanding of the patterns of demand** so that, at the point of discharge, a range and sufficient supply of the required services is readily available.
2. **Consider whether an assessment in hospital is the best place** or whether this could be done at the person's own home.
3. Employing a **systematic mechanism that identifies people** who, when in the community, require less or no further support.
4. Discharge services should in most cases offer short-term **help that focuses on supporting recovery and recuperation**. These services must involve therapists, nurses and care workers, all of whom share the outcomes focus.

Table 1. 10 key steps to ensure safe and timely discharge

1.	Start planning for discharge or transfer before or on admission
2.	Identify whether the person has simple discharge needs (pathway 0) or complex discharge/transfer planning needs (Pathways 1-3), involving the patient and carer in your decision
3.	Review every individual daily to assess medical need to reside criteria. Review people who do not fit the criteria to reside twice daily
4.	Complex discharges should be referred to the single point of assessment coordinator with their ongoing needs communicated
5.	Set an expected date of discharge or transfer within 24–48 hours of admission, and discuss with the patient and their carer
6.	Review the clinical management plan with the patient each day, or as appropriate, take any necessary action and update progress towards the discharge or transfer date
7.	Involve the person and carers so that they can make informed decisions and choices that deliver a personalised care pathway and maximise their independence
8.	Plan discharges and transfers to take place over all seven days of the week to deliver continuity of care
9.	Use a discharge checklist 24–48 hours prior to transfer
10.	Make decisions to discharge and transfer people each day. Detailed functional assessments should no longer take place in acute care settings

Adapted from References (3; 5).

Table 2. Recommendations and Outcomes of Effective Discharge Planning

Recommendations	Outcomes
1. Discharge and transfer planning starts early to anticipate problems, put appropriate support in place and agree an expected discharge date	<ul style="list-style-type: none"> • Potential reduced length of stay • Reduced risk of readmission • Reduced risk of delayed discharge
2. A person-centered approach treats individuals with dignity and respect, and meets their diverse or unique needs to secure the best outcomes possible	<ul style="list-style-type: none"> • People in hospital and carers should feel their expertise is recognised and used appropriately in care planning and goal setting
3. The care planning process is coordinated effectively – Discharge Coordinators are responsible for arrangements for people on pathways 1-3	<ul style="list-style-type: none"> • Potential reduced length of stay • Reduced risk of readmission • Reduced risk of delayed discharge
4. Communication creates strong and productive relationships between practitioners, the person in hospital and their carers	<ul style="list-style-type: none"> • The service is valued by the local community through clear lines of communication
5. Health and social care and voluntary organisations work collaboratively and make decisions on the process and timing of discharges and transfers	<ul style="list-style-type: none"> • Resources are used to best effect enabling targets to be met and therefore improve service delivery
6. Review the clinical management plan with the patient each day and the MDT take any necessary action and update progress towards the discharge or transfer date	<ul style="list-style-type: none"> • Optimises the individuals and others involvement, staff input, patient safety and experience
7. Discharge coordinators are involved, where appropriate, ensuring each everyone has a case manager who will make all the necessary discharge arrangements	<ul style="list-style-type: none"> • Positive relationships with other local providers of health, social care, and housing services • Resources are used effectively according to need
8. Service users and their carers are involved at all stages of discharge planning, given good information and helped to make care planning decisions/choices	<ul style="list-style-type: none"> • Service users and their carers can feel confident of continued support with the right information and advice to help them in decision-making, continued support on discharge and an identified point of contact
9. People who do not have capacity to make decisions are given their rights and obligations under the Mental Capacity Act	<ul style="list-style-type: none"> • Avoidance of blame, disputes over responsibility for delays and fewer complaints • Safer transition and communication between primary, community and secondary care when multi-agency support is required

Adapted from References (3; 5).

Classification of discharges

In order to help simplify the discharge process, guide clinicians focus, and prioritise resources, the Department of Health now recommends the discharge to assess model for discharge planning which has 4 identified patient pathways as follows (3):

Pathway 0

50% of people – simple discharge, no formal input from health or social care needed once home. N.B.: early referral could prevent admission for some (e.g. people with new type 1, or those recovered from a severe hypo. For more information see the JBDS guideline on Diabetes at the Front Door - <https://abcd.care/resource/diabetes-front-door>).

Pathway 1

45% of people – support to recover at home; able to return home with support from health and/or social care.

Pathway 2

4% of people – rehabilitation or short-term care in a 24-hour bed-based setting.

Pathway 3

1% of people – require ongoing 24-hour nursing care, often in a bedded setting. Long-term care is likely to be required for these individuals.

Classification of discharges table

Pathway 0 Discharges	Pathway 1 – 3 Discharges
<ul style="list-style-type: none">Involve minimal disturbance to the person's daily routineDoes not prevent or hamper the person being discharged to their usual place of residenceWill not require a significant change in support offered to the individual	<ul style="list-style-type: none">Deviates from the normal discharge pathway and require complex coordination or services to enable safe dischargeThis may include social work referrals, multidisciplinary meetings, continuing care checklists and a possible change between admission and discharge destination
<p>e.g.</p> <ul style="list-style-type: none">Self-caring person with diabetes with no decline in functional ability as a result of illnessPregnant woman with newly diagnosed diabetesPost-operative recovery from surgery	<p>e.g.</p> <ul style="list-style-type: none">Frail older personPeople living with mental illnessPeople living with learning difficultiesHomeless personPerson post limb amputationPerson requiring multi-agency support'Vulnerable adult'Person with dementia or cognitive impairment

The discharge to assess model of planning:

With the aim of supporting people to maximise their independence and remain in their own home the discharge to assess model has three stages:

Stage 1: review each individual daily in the morning and identify people for discharge to leave that day.

Planning at the point of admission – including collecting details of usual home circumstances and referral to services if necessary. Provide patient information leaflet to ensure people are involved in decision making. The DH leaflet can be found here or Appendix 1 [Hospital discharge information leaflet \(publishing.service.gov.uk\)](https://www.publishing.service.gov.uk)

Stage 2: the details of how to discharge people

- Inform the individual, carers and relevant ongoing support providers – provide information leaflets
- Ward staff to arrange discharge for those on pathway 0, for all others, provided details of needs to single point of assessment coordinator who will decide which pathway is appropriate
- All people suitable for discharge to be transferred to a discharge lounge asap. For people with diabetes this should include effective communication between teams about care needs in relation to mealtimes, diabetes equipment and contact for diabetes related issues
- It will be the case managers' role to ensure individuals and their families are informed of arrangements, transport is organised, settle in support is provided where needed and Covid test results are available where required

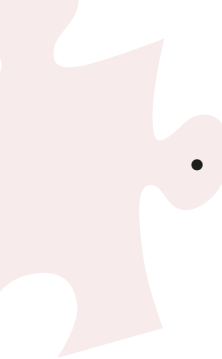
Stage 3 Assessment and care planning at home

- Case manager to liaise with all agencies to ensure staff and infrastructure are available to meet care needs
- Use of personal budgets to be discussed with the individual and family if longer-term care will be required (> 6 weeks)
- Case manager to provide frequent review and adjustments of care package according to need

People with complex ongoing health and/or social care needs - pathways 1-3

The following groups of people require particular attention, should be referred to the diabetes inpatient team, and are considered to have complex discharge needs:

- People with frequent attendances for diabetes emergencies i.e. diabetic ketoacidosis or hypoglycaemia. Whilst the discharge itself may not be complex, involvement of the mental health team or psychology should be sought at the earliest possible opportunity (being aware their input could impact discharge arrangements) and followed up post discharge

- 
- People with complex ongoing health and social care needs who are from residential homes, community hospitals or are being discharged home with a package of care e.g. those with moderate to severe frailty (see Appendices 3 and 4 for a frailty scale and inpatient pathway), people with high comorbidity load or those with mental health/dementia issues, especially those who live alone. Where possible the DST should provide liaison/support in the initial transition period post discharge. Consider referring to the guideline for inpatient care of the frail older adult with diabetes (7)
 - Individuals who lack capacity to make a decision about their long-term care needs (includes people with learning disabilities). Involvement of the learning disabilities team and mental health team, if appropriate, should be sought at the earliest possible opportunity and followed up post discharge
 - People who have been living with type 1 diabetes for many years and are becoming increasingly frail, (particularly if admission is related to struggles with diabetes management at home). Discharge will often require difficult decisions and may require a specific care plan. For more information see reference (7). This group is also likely to benefit substantially from the input of the hospital social services team and early referral is recommended (8)

Healthwatch England (2015) focused on the experiences of older people and those who were homeless or living with a mental health condition (9). Their inquiry demonstrated that the effects of poor co-ordination of care and services leading to failed discharges were especially detrimental. Co-ordination of services is key to preventing 'revolving door' admissions and poor health outcomes. They recommended:

- Ensuring prompt referral to all services involved will aid the discharge process
- For all these groups of patients individual assessment is required and consideration should be given to referral to the 'safeguarding vulnerable adults' team

Assessment

Discharge planning should be built into the initial assessment process and should look beyond the inpatient episode of care. NICE recommends discharge planning should start at the point of admission for medical emergencies (10). This proactive approach is aimed at ensuring safety for the individual at home or community facilities and reducing the risk of admission (7). Assessment provides the opportunity for information gathering, and anticipation of potential problems which allows for early resolution of potential barriers to discharge. Clear, sensitive communication with the individual and their family is essential especially for people who experience a considerable new loss of function (11). This then allows the opportunity to understand and plan for the information that may be required on discharge. Lack of knowledge of diabetes and discharge instructions is a significant contributor to early readmission among people with diabetes (12). The ReCoDED study demonstrated people reporting they were given no discharge instruction had a lower comprehension score and statistically significant higher readmission rates than those who reported receiving information (13).

Initial Discharge Assessment by the Ward Nurse

The initial discharge assessment will be undertaken by the ward staff using the 10 key steps outlined in Table 1 and any other assessment tools in use in individual hospitals. This assessment will help to determine which members of the multidisciplinary team will need to be involved during the inpatient stay and in the discharge planning process and ensure those who are expected to be on pathways 1-3 are referred to the single point of discharge contact. Early referral is paramount to avoid delays in discharge, particularly given that functional assessments should not take place in the ward environment once the person is stable enough for discharge. Ward pharmacists should be involved in this initial discharge assessment in order to determine issues with concomitant medications that may affect blood glucose levels and highlight potential difficulties with medication administration and adherence. Many diabetes teams now use web-linked glucose meters and other IT solutions to proactively review people who are 'flagged' within these systems; however, it remains imperative to refer any person to the diabetes team as soon as possible if they are likely to need support with diabetes management either during their admission or on discharge. Prompt referral to the DST for involvement in the inpatient care pathway and discharge planning process should be completed following a set criteria as determined by the diabetes inpatient team. These should be evidence-based criteria which can facilitate discharge planning and reduce length of stay. If Trusts do not have such criteria, the 2011 'The Think Glucose' assessment tool, (Table 3) can be used (14).

Table 3. Think Glucose – Patient assessment tool and referral criteria to Diabetes Specialist Team (DST).

Always Refer	Sometimes Refer	Rarely Refer
Admission for urgent or major elective surgical procedure Diabetic ketoacidosis / hyperosmolar hyperglycaemic state Severe hypoglycaemia Newly diagnosed Type 1 diabetes Newly diagnosed Type 2 diabetes Intravenous insulin infusion with glucose outside limits Previous problems with diabetes in hospital Intravenous insulin infusion for over 48 hours Impaired consciousness Unable to self-manage Parental or enteral nutrition Foot ulceration Sepsis Vomiting Person request	Significant educational need Intravenous insulin infusion with good glucose control Nil by mouth more than 24 hours post-surgery Persistent hyperglycaemia Possible Type 2 diabetes Stress hyperglycaemia Poor wound healing Steroid therapy	Minor, self-treated hypoglycaemia Transient hyperglycaemia Simple educational need Routine dietetic advice Well controlled diabetes Good self-management skills Routine diabetes care

Principles of discharge planning in diabetes care

For people with diabetes multiple factors may make transitions of care difficult, including poor communication, poor patient education, inappropriate follow-up, and clinically complex patients (15).

Discharge planning should therefore recognise the complex interplay between, physical, social, and psychological factors as well as educational needs and external influencing factors. In general:

- The discharge needs of people with diabetes should be assessed within 24 hours of admission. Assessment involves information gathering regarding knowledge of diabetes, self-management skills, education and social circumstances, expected change in functionality as a consequence of ill-health and any potential barriers to self-care that may affect a safe discharge
- To aid planning, discharges should be categorised as pathway 0, or not and referred to the discharge coordinator as soon as possible
- Prompt referral to the DST should be made following individual assessment in line with the Trusts referral criteria, and for anyone with an expected discharge on pathways 1-3
- Care-planning and goal setting should involve the person with diabetes and, if appropriate, their carer to improve adherence and maximise independence as appropriate
- Key information should be provided in a timely manner, throughout the inpatient stay and again on discharge
- Consideration should be given to the safe management of medicines to reduce errors occurring during transition. The Royal College of Physicians have developed guidance and resources to aid this smooth transition and increase medicine safety which can be accessed here [Medication safety at hospital discharge: improvement guide and resource | RCP London](#)
- The inpatient stay is often dynamic metabolically, physiologically, and functionally necessitating open, frequent communication amongst members of the multi-disciplinary team. The discharge plans should be reviewed daily by the MDT and twice daily for all people not meeting the criteria to reside. Consider if a member of the diabetes team should also be part of these reviews
- Staff should ensure that people are ready for discharge once the acute phase of care is complete, and the person with diabetes has been provided with all necessary equipment and education relating to their diabetes care to manage at home - (see Tables 5, 6 and 7)
- Changes made to diabetes care should be communicated to the relevant care provider in the community setting to ensure continuity. As far as possible, patients and carers should be made aware of the expected treatment pathway post discharge, the diabetes care provider and contact details
- The individual person and other health care professionals involved should be aware of any investigation results pending, with actions to be taken post discharge clearly documented and communicated to any ongoing care provider
- All persons who are homeless or at risk of homelessness on discharge should be referred by acute hospital staff to local authority homelessness/housing options teams, under the requirements of the Homelessness Reduction Act, 2017 (16)

Outlined below are: areas to consider during discharge assessment (Table 4). A general diabetes discharge checklist (Table 5). N.B. a further checklist for people being discharged on insulin can be found on page 22.

Table 4. Areas for consideration during discharge assessment

Diabetes	Social	Physical
Type of diabetes Degree of glycaemic control prior to admission	Socioeconomic factors - family support, employment status	Normal functional level prior to admission
Current glycaemic stability, – diabetes treatment, and biochemistry	Learning barriers – language, cognition, dexterity, competence related to diabetes self-management	Physical/ self-care limitations – e.g. blindness, stroke, amputation
Diabetes management – independently administers and adjusts insulin, tests blood glucose and ketones if applicable or needs support	Mental capacity – dementia, mental illness	Functional level, ability to self-care and consideration of age
Diabetes equipment required – pens, needles, insulin pump, monitoring equipment, specialist adaptations to support independence	Educational potential – sight, hearing, manual dexterity, cognitive ability	Presence of any symptoms
Diabetes complications – cardiovascular risk, kidney function, liver disease, retinopathy, neuropathy	Social support – carers and family circumstances, social services, community support	Presence of co-morbidities
Ability to continue/start insulin self-administration	Dependence on multi-agency support for continued care or care home resident	Life expectancy, prognosis End of life care
Nutritional status - parenteral or enteral feeding, supplements, change in meal timing, religious and cultural preferences	Resupply of medications post discharge	Physical capacity to comply with treatment
Educational need – has their diabetes treatment changed, did diabetes lead to the admission?	Homelessness	Mobility

Table 5. General diabetes discharge checklist

Hypoglycaemia avoidance (For people taking Insulin or sulphonylureas)
<input type="checkbox"/> Confirm the individual and/or carer are aware of the risk of hypoglycaemia
<input type="checkbox"/> Confirm the individual and/or carer know about the signs and symptoms and treatment of hypoglycaemia
<input type="checkbox"/> Confirm the individual and /or carer have access to treatment of hypoglycaemia at home e.g. options of quick-acting carbohydrate and glucagon if indicated
<input type="checkbox"/> Confirm DVLA requirements where applicable
Diabetes related Foot Disease
<input type="checkbox"/> Confirm the Diabetes Specialist Team are aware of discharge
<input type="checkbox"/> Check antibiotics
<input type="checkbox"/> Confirmdays worth of dressings provided
<input type="checkbox"/> District Nurse for dressings
<input type="checkbox"/> Podiatry appointment
<input type="checkbox"/> Diabetes Foot Clinic follow up
All people with diabetes
<input type="checkbox"/> Electronic Discharge Summary (EDS) to GP (to include medication changes and review expectations)
<input type="checkbox"/> Ensure the individual receives detailed discharge counselling especially on altered medication doses to ensure no errors are introduced on discharge
<input type="checkbox"/> EDS to Diabetes Care Provider and District Nurse, if appropriate
<input type="checkbox"/> Care plan
<input type="checkbox"/> Follow-up plans
<input type="checkbox"/> All discharge medication including return of the persons own drugs and insulin from fridge
Completed by:..... Signature.....
Date.....

Discharge considerations for people who require insulin post-discharge

People with diabetes who are to be discharged on insulin will require additional assessments to ensure they have all the appropriate equipment and knowledge required to manage their insulin safely on discharge. If there is no change to the person's ability to manage, ward nursing staff should check the person with diabetes is confident and competent by discussing usual diabetes management, checking injection technique and understanding of their condition and refer to the diabetes inpatient team as required.

All people with a new diagnosis of diabetes or who have changed to insulin treatment during their inpatient stay should be referred to the diabetes inpatient team as soon as insulin treatment is commenced. This allows for maximum time to provide education and equipment and ensure the person is safe to manage their insulin on discharge. Delays in this referral can cause delays in the discharge process.

The ward nurse should ensure all patients have the following:

- Appropriate formulation of insulin supplied in line with individual's needs and a full discharge treatment plan
- Provision of a 7 day supply of insulin syringes/ pen devices/ cartridges (this may vary with different Trusts from 7 – 14 days)
- 10ml vial of insulin (if required)
- Disposable pen with disposable needle (if required)
- Blood glucose meter and/or ketone meter, strips, and lancets
- Sharps bin if in line with Trust policy
- Insulin passport/insulin safety card
- Information leaflets appropriate to insulin regimen and hypoglycaemia management
- Contact number of DISN involved during the inpatient stay or community DSN if transferring to intermediate care

If the individual and/or carer are not able to self-manage insulin injections and requires District Nursing input, the ward nurse is responsible for ensuring the following:

- Referral to District Nursing team with clearly defined and specified level of support required documented, preferably within a personalised care plan
- Copy of discharge summary to be communicated to the District Nursing team sent 24 hours before discharge wherever possible to reduce risk of post-discharge discrepancies
- Ensure early referral to the diabetes specialist team to resolve any equipment issues in a timely manner and well before planned discharge time
- Ensure all appropriate medication and safety needles are sent home with the individual for use by the district nurse

Taken from the safe and supported discharge advice from the national inpatient diabetes Covid-19 response group. Table 6 provides some clinical scenarios to assist with discharge planning for people taking insulin and Table 7 is a specific discharge checklist for people being discharged on insulin (17).

Table 6.
Clinical scenarios to assist with discharge planning for people taking insulin

CLINICAL SCENARIO	DISCHARGE CARE PLAN
<p>Person is <u>unable</u> to self-administer insulin safely as they:</p> <ul style="list-style-type: none"> > Have a cognitive impairment e.g. learning disability, dementia > Have a risk issue e.g. recent self-harm, suicidal intent, severe mental health issues > Have visual impairment or dexterity issues 	<p>LEVEL 1 - NURSE ADMINISTRATION OF INSULIN</p> <p>⚠ Insulin doses to be clearly documented on discharge summary</p> <ul style="list-style-type: none"> > Refer to district nursing service for insulin administration and glucose/ketone monitoring. (N.B. if risk issue is indicated, risk assessment information must be shared) > District nurses to liaise with GP/Diabetes teams for insulin titration as per local guidance > Refer to checklist for safe discharge below
<p>Person/carer is <u>able</u> to administer insulin but needs <u>temporary supervision/support</u> as they:</p> <ul style="list-style-type: none"> > Are new to insulin treatment > Require insulin adjustment from a high dose (see above) > Need support with glucose +/- ketone monitoring or insulin titration > Need additional key education 	<p>LEVEL 2 - SUPERVISED ADMINISTRATION OF INSULIN REQUIRED (temporary until competent)</p> <p>⚠ Insulin doses to be clearly documented on discharge summary</p> <ul style="list-style-type: none"> > Refer to district nursing service for support with insulin administration to include glucose/ketone monitoring; education and advice > District nurses to liaise with GP/Diabetes teams for insulin titration as per local guidance > Refer to checklist for safe discharge below
<p>Person is <u>able</u> to safely self-administer insulin and they:</p> <ul style="list-style-type: none"> > Can monitor glucose +/- ketones > Can dispose of sharps safely 	<p>LEVEL 3 - SELF ADMINISTRATION OF INSULIN</p> <p>⚠ Insulin doses to be clearly documented on discharge summary and in the person's discharge information</p> <ul style="list-style-type: none"> > Ensure person understands signs & symptoms of hypoglycaemia & hyperglycaemia, and how to treat > Check person has contact details of diabetes team to get advice, support or follow up appointments if needed > Refer to checklist for safe discharge below

Table 7. Discharge checklist for people taking insulin

DISCHARGE CHECKLIST FOR PEOPLE USING INSULIN (Please ensure this is completed)			
Insulin therapy (2 week supply) - and starter pack if new to insulin	<input type="checkbox"/>	Blood ketone test strips*	<input type="checkbox"/>
Standard pen injection needles	<input type="checkbox"/>	Urine ketone strips (if ketone meter unavailable)*	<input type="checkbox"/>
Safety pen injection needles 5mm (Level 1 patients)	<input type="checkbox"/>	Sharps box	<input type="checkbox"/>
Lancets for finger pricking (safety lancets for Level 1 patients)	<input type="checkbox"/>	Discharge letter	<input type="checkbox"/>
Glucose meter	<input type="checkbox"/>	Referral to District Nurses (if needed)	<input type="checkbox"/>
Glucose test strips	<input type="checkbox"/>	Contact details for diabetes team (if needed)	<input type="checkbox"/>
Ketone meter*	<input type="checkbox"/>	Follow up appointment (if needed)	<input type="checkbox"/>
*all people with type 1 diabetes; people with type 2 diabetes and history of DKA			

Special circumstances

Multiple admissions related to diabetes or management of the condition - if someone is admitted for reasons directly related to insulin management at home e.g. diabetic ketoacidosis, hypoglycaemia or difficulty managing their insulin regimen, please check for recurrent admission and ensure prompt referral to the diabetes team. A holistic social and health care approach is likely to be required and people should be given a detailed plan of care for prevention of recurrence. For some older people, difficulties managing their insulin regimen may be the first sign of increasing frailty inability to manage independently.

Steroid therapy – all people who are to be discharged on corticosteroids MUST be taught blood glucose monitoring irrespective of diabetes status. Education should include technical aspects of use of a meter, effects of steroids on glycaemic control, timing of glucose checks, safe targets, recording of results, triggers for HCP support and follow-up details. The purpose of this intervention is to mitigate against the

development of any diabetes crises such as diabetic ketoacidosis (DKA) or hyperosmolar hyperglycaemic state (HHS) secondary to hyperglycaemia. Individuals should also be taught about potential hypoglycaemia due to tapering doses or cessation of steroid therapy. For pragmatic reasons, some institutions may opt for urine glucose testing, but this is not an option for those on SGLT-2 inhibitors.

SGLT-2 inhibitors – advise people to stop this class of drugs which include dapagliflozin, canagliflozin, empagliflozin and ertugliflozin or their combination tablets, as soon as they become unwell for whatever reason and seek urgent support from the GP, Practice Nurse or Diabetes Specialist Team (18). Ensure these medications are either recommenced on discharge or that both the person with diabetes and the usual diabetes care provider have written information about when/how to reintroduce the SGLT-2 inhibitor.

COVID 19 – there is an increased risk of insulin resistance and impaired insulin production from the pancreatic beta cells; this can precipitate hyperglycaemia and life-threatening Diabetic Ketoacidosis (DKA) in people with diabetes and even in people not previously known to have diabetes (19). Dexamethasone (and other steroids e.g. prednisolone) use during the acute phase has proven to be an essential component in managing the infection for those in hospital. However, its use generally exacerbates glycaemic control in those with existing diabetes and may also lead to hyperglycaemia. See section on steroid use.

Adult illiteracy – it cannot be assumed that everyone can read and write. 16.4% of adults in England have poor literacy skills (20). The person with functional illiteracy must be supported to ensure that medications on the discharge summary are clearly discussed prior to discharge. This is especially relevant when there are changes in insulin types and doses.

Technology – insulin pumps and other wearable and downloadable technologies should be maintained as far as possible in the inpatient setting providing that the patient is able to self-care. The use of technology which includes continuous glucose monitoring (CGM), continuous subcutaneous insulin infusion (CSII) and flash glucose monitoring (FGM), in patients with type 1 and type 2 diabetes continues to grow. The precise technology should be recorded in the care plan with prompt referral to the Diabetes Specialist Team for specialist input, educational reviews, provision of specific equipment and appropriate discharge planning to ensure continuation of therapy.

Education

- The ultimate goal of discharge planning is to provide the person with the 'survival skills' needed to manage and take responsibility for their own health, with self-management education being deemed a key component of the transition plan (8; 21)
- There is evidence which supports the idea that inpatient education can reduce length of stay (22; 23), influences earlier discharge and improved outcomes following discharge back to the community (24; 25). This concept is not new: as early as 1966, Etwiler described 3 phases of patient education: "acute or survival education," "in depth education," and "continuing education" (26). However, evidence suggests this still seems to be sometimes lacking (27). "Survival skills" describes education provided whilst the patient is in hospital so that issues are contained to topics essential for safe patient discharge

- More recently the American Diabetes Association suggested hospitalisation provides an opportunity for patient education (28). They suggest key areas such as nutrition, foot care, activity, concordance with medication, monitoring and risk reduction all be addressed
- The Diabetes Inpatient Specialist Nurse (DISN) with the support of generalist nurses, pharmacists, dietitians, if indicated, and medical staff can provide tailored education for specific educational gaps during an inpatient stay which is an essential part of discharge planning
- The basis of education involves basic pathophysiology, medicines management, avoidance of diabetes crises, maintenance of glycaemia and day to day impact of diabetes management on social activities
- If the ward nurse has the knowledge and skills to complement the DISN input, the blending of specialist and generalist nurse input can further strengthen patient support (29). Each individual nurse should work within his/her level of competence in accordance with the Trust guidance

An education checklist can be found in Appendix 2

Roles and responsibilities

- One of the biggest changes in more recent years has been the development of digital solutions to assist healthcare practices. All staff should work with the available technology to streamline the process
- All assessments should take place in the person's own home including funding decisions. However, safeguarding investigations should continue to take place in the hospital setting if necessary (3; 8)
- Medical staff – twice daily MDT meetings to review all inpatients no longer meeting acute care needs criteria. Request immediate discharge arrangements with virtual follow up where required. For those ready for discharge but require a functional assessment, follow the 'discharge to assess' model (p 15)
- For follow up arrangements people should be given number of the ward they were discharged from – not asked to see their GP or attend A&E. In some circumstances it can be arranged for the clinicians to proactively make contact with people post-discharge for test results or to follow up on home monitoring in a virtual ward scenario
- All acute centres should have a discharge coordinator to be the point of contact for community and social care staff (3)
- Nursing staff – ensure medical and functional discharge criteria are documented and communicated within the MDT. Ensure infection control guidance and procedures are followed prior to discharge (and considered in discharge planning; not done when the medical team say the patient can go). If there is likely to be a significant change to functional ability refer to the OT/PT as soon as possible following admission
- Nurses and allied HCP should consider these questions 1) why not home? 2) what needs to be done differently? 3) why not today?
- Allied HCP including social workers, occupational therapists and physiotherapists – all full assessments should be done in the person's home and not on the ward environment

Table 8. Roles and responsibilities

It is important to clearly define roles and responsibilities to ensure all aspects of discharge planning are covered but not unnecessarily duplicated.

Assessment	Ward nurse Ward pharmacist - Ensure accurate medicines reconciliation of drug/insulin brand, doses and formulation to enable clear decisions and changes to be made Diabetes inpatient specialist nurse (DISN) or other member of the diabetes specialist team (DST) on receipt of referral or on proactive surveillance
Referral to MDT or DST	Ward nurse Any staff member caring for the person with diabetes
Care-planning	Patient and / or significant other(s) Ward nurse DISN Ward pharmacist or diabetes specialist pharmacist
Review of discharge plans	Medical team Ward pharmacist Ward nurse DISN Social workers Occupational therapists Discharge co-ordinator for complex discharges MDT members as appropriate
Provision of diabetes equipment, literature, websites and relevant approved apps for IOS and Smart devices	Diabetes inpatient specialist nurse Ward pharmacist Social workers Occupational therapists
Ensuring equipment sent on discharge	Ward nurse
Provision of diabetes care plan	DISN Ward nurse
Discharge summary	Medical staff Ward pharmacist Ward nurse
Liaison with GP, district nurse, community psychiatric nurse (CPN), carers and care home as appropriate	DISN Ward nurse Social worker (and other relevant allied professionals as required)
Follow up provision clearly documented	Medical team DST

Summary of discharge planning for inpatients with diabetes in acute Trusts

On admission

- Assessment of clinical issue and impact on glycaemic control and prompt diabetes team referral if required
- Functional ability of self-care, including self-management of diabetes
- Social support
- Medicines reconciliation

During the inpatient stay

- Attainment of safe glycaemic control
- Adjustment of medications to achieve safe glycaemic control
- Assess ability to self-manage changes to diabetes treatment or monitoring regimen
- Encourage to self-care as able
- Inclusion in care-planning
- Inclusion of carers/family as agreed with the patient
- Review of diabetes education
- Review and provision of diabetes information, equipment, websites, relevant apps
- Update plans in line with clinical and social changes

On day of discharge

- Specific diabetes information regarding drug therapy changes & plans for monitoring. (including any plans for re-introduction of diabetes & concomitant medication temporarily stopped during the inpatient episode)
- Provision of care-plan
- Provision of discharge summary
- Ensure all equipment required to manage diabetes are present
- Referral to community services if required
- Discharge plan communicated to GP practice
- Follow-up plans

Post discharge

- Telephone contact
- Visit by community services as relevant
- Outpatient appointment
- Communication of changes to usual diabetes care provider

Conclusions

These guidelines have been produced by a writing team of active diabetes specialist clinicians, and are meant to be a brief and practical summary on diabetes discharge planning for clinical teams. Diabetes discharge planning should take place within the wider framework of safe discharge planning, but there are diabetes specific issues that can sometimes be overlooked and are summarised in the checklists. 'When discharge goes wrong, it comes at significant cost, both to individuals and to the health and social care system' (9). A multi-disciplinary co-ordinated and patient-centred approach can help improve patient outcomes by reducing medication errors in transitions of care, reduce delayed discharges, minimise hospital readmissions and improve patient satisfaction.

Appendix 1

Government discharge leaflet



HM Government



Planning together: leaving hospital when the time is right



This leaflet explains why it is important to start planning for you to leave hospital.

Why are we starting to plan for me to leave hospital?

Our top priority is to help you get better and support you to leave hospital when the time is right. You will only leave hospital when you no longer need hospital care and it is safe to do so. It is important that, together, we start planning right away to ensure you leave hospital in a safe and timely manner.

In most cases, you will return home. You might need some additional care to help you in your recovery, or practical support such as help with shopping. If you are a care home resident you will most likely return to your care home. If you require more complex care and support this could be in another bed in a community setting.

What might I expect?

Early conversations – Soon after you arrive in hospital we will discuss and plan how you will be able to leave. We will involve your carers, family and/or friends in conversations if you would like them to be included.

'Expected date of discharge' – Soon after you arrive in hospital you will be given an 'expected date of discharge' (expected date you will leave hospital) which will be reviewed during your stay.

What matters most to you to be considered – The team caring for you will ask 'what matters most to you?'. They will ensure this is considered when planning for you to leave hospital.

Questions to ask during your hospital stay:

1. What is the main reason I am in hospital for?
2. What is going to happen to me today and tomorrow?
3. What extra help might I need when I leave hospital?
4. When will I be able to leave hospital?

Appendix 2

Educational Review Checklist

This should be individualised to person's current needs with some subjects revisited post discharge as required.

- What is diabetes – type, pathophysiology, treatment
- Oral glucose lowering drugs – mode of action, dosing, frequency, side-effects, timing
- Glucagon-like peptide 1 (GLP 1) injectable - mode of action, dosing, frequency, injection technique, injection sites, side-effects, timing
- Food and nutrition – nutritional goals, outline of nutritional care plan i.e. principles of a healthy diet, adequate carbohydrate at the right times during admission, carbohydrate counting, weight management, nutrition support such as enteral feeding and nutritional supplementation
- Glucose Monitoring – indication and frequency, target range and reason for individual parameters, choice of glucose meter, practical aspects of testing and care of meter, sites for testing, alternative site testing, sharps disposal
- Other glucose monitoring systems – Flash glucose monitoring, real-time continuous glucose monitoring (RT-CGM). Ensure that patient has a supply at home and advise to contact Care Provider for continuation of supplies
- Blood ketone testing – indications, practical aspects of testing, frequency and interpretation of results
- HbA1c – what is it, relevance to care, target
- Insulin action – endogenous and exogenous effects on blood glucose, injection technique, storage of insulin, getting supplies of insulin, carbohydrate counting in relation to dose adjustments if appropriate, glycaemic index and portion sizes
- Injection sites - rationale for rotation, lipodystrophy
- Choice of device – syringe and vial, disposable pens, re-useable pens with cartridges, pump, reservoir for pump, infusion sets
- Needle length – rationale for choice, injection technique, sharps disposal
- Hypoglycaemia - causes, types of hypoglycaemia, signs and symptoms, treatment, options of simple and complex carbohydrates with regard to the glycaemic index of foods, prevention strategies, use of glucagon if appropriate
- Hyperglycaemia – causes, signs and symptoms, acute effects, long-term effects, medication adjustments, when to escalate for admission avoidance
- Pregnancy – women of child-bearing age, pre-conceptual care, planned pregnancy, care during pregnancy, contraception
- Sick day rules – safe management of diabetes during intercurrent illness, insulin dose adjustment, monitoring, blood ketone testing for patients with type 1 diabetes or ketosis-prone type 2 diabetes


- Sick day rules - identify medications which may need to be temporarily stopped to ensure safe management of diabetes during intercurrent illness
- Presence of frailty – level of severity, effect on self-management, re-setting of glycaemic targets, need for carer input
- Exercise – effect on glycaemic control, effects on cardiovascular outcomes, principles of dose adjustment, national recommendations
- Acute complications and avoidance of same – DKA, HHS, hypoglycaemia
- Chronic complications – microvascular, macrovascular
- Alcohol – effect on glycaemic control, national recommendations
- Smoking – effect on glycaemic control, national recommendations, smoking cessation
- Shift work – food intake, monitoring and adjustment of medications such as insulin
- Driving – legalities of DVLA reporting, hypoglycaemia management, restrictions, insurance
- Special occasions & cultural issues – managing diabetes safely for celebrations, religious occasions such as Ramadan
- Eye Care – impact of diabetes on eyes, need for retinal screening, expected care provision
- Foot care – daily foot care, access to podiatry, emergency care
- Written instructions, websites and approved apps – to supplement discussions, education and care plan
- Sex – erectile dysfunction, treatments, counselling
- Psychology support or psychiatric support - community psychiatric nurse (CPN) if needed, Crisis teams and Mental Health Teams in the community. Ensure the person is aware of self-referral to psychological wellbeing services (IAPT)
- Travel – preparation, vaccination, travel letter, adjusting insulin when crossing time zones, impact of extremes of temperature on blood glucose monitoring, storage of insulin during travel
- Identification – ID card, medical alert jewellery, insulin passport
- On-going follow up – clear understanding of diabetes care provider, appointments, prescriptions and assistance as required
- Prescriptions – initial and on-going supplies
- Contact details for diabetes care provider and emergency occasions


Amalgamated from reference (30)


Appendix 3


Frailty scales and resources


Clinical Frailty Scale*


 **1 Very Fit** – People who are robust, active, energetic and motivated. These people commonly exercise regularly. They are among the fittest for their age.


 **2 Well** – People who have **no active disease symptoms** but are less fit than category 1. Often, they exercise or are very **active occasionally**, e.g. seasonally.


 **3 Managing Well** – People whose **medical problems are well controlled**, but are **not regularly active** beyond routine walking.


 **4 Vulnerable** – While **not dependent** on others for daily help, often **symptoms limit activities**. A common complaint is being "slowed up", and/or being tired during the day.

 **5 Mildly Frail** – These people often have **more evident slowing**, and need help in **high order IADLs** (finances, transportation, heavy housework, medications). Typically, mild frailty progressively impairs shopping and walking outside alone, meal preparation and housework.

 **6 Moderately Frail** – People need help with **all outside activities** and with **keeping house**. Inside, they often have problems with stairs and need **help with bathing** and might need minimal assistance (cuing, standby) with dressing.

 **7 Severely Frail** – **Completely dependent for personal care**, from whatever cause (physical or cognitive). Even so, they seem stable and not at high risk of dying (within ~ 6 months).

 **8 Very Severely Frail** – Completely dependent, approaching the end of life. Typically, they could not recover even from a minor illness.

 **9. Terminally Ill** - Approaching the end of life. This category applies to people with a **life expectancy <6 months**, who are **not otherwise evidently frail**.

Scoring frailty in people with dementia


The degree of frailty corresponds to the degree of dementia. Common **symptoms in mild dementia** include forgetting the details of a recent event, though still remembering the event itself, repeating the same question/story and social withdrawal.

In **moderate dementia**, recent memory is very impaired, even though they seemingly can remember their past life events well. They can do personal care with prompting.

In **severe dementia**, they cannot do personal care without help.

* 1. Canadian Study on Health & Aging, Revised 2008.
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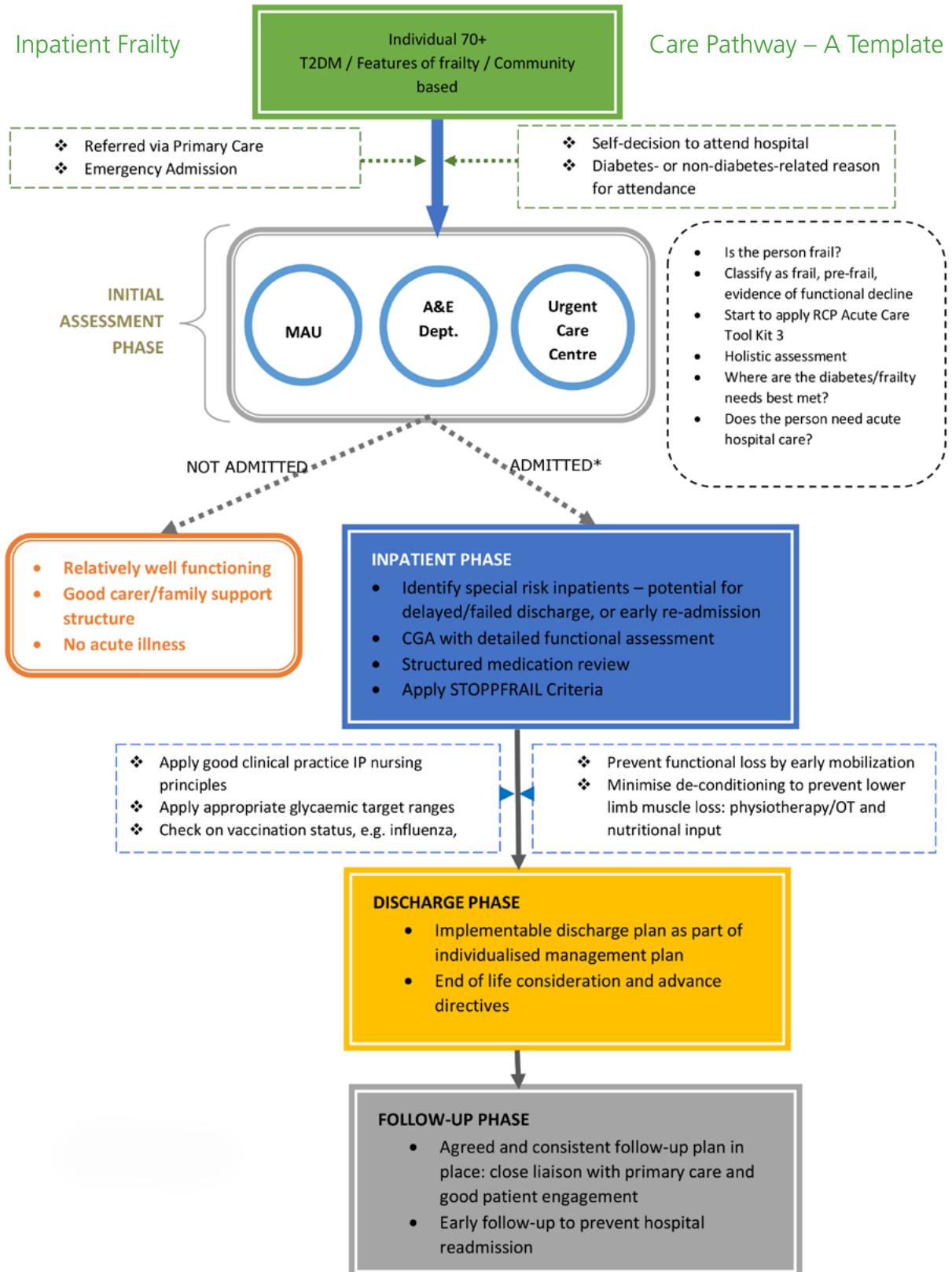
From Reference (31).

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The Royal College of Physicians have developed an acute care toolkit which provides resources and guidance for staff managing older frail people in acute care. The toolkit can be accessed here [Acute care toolkit 3: Acute care for older people living with frailty | RCP London](#)

Appendix 4

Template inpatient frailty care pathway – reproduced from reference (7)



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