

TREATMENT OF HYPOGLYCAEMIA FLOW CHART

This guidance does not override the individual responsibility of health professionals to make appropriate decision according to the circumstances of the individual patient in consultation with the patient and/or carer. Health care professionals must be prepared to justify any deviation from this guidance.

Introduction

Hypoglycaemia is the most acute diabetic emergency, requiring immediate treatment. It is defined as capillary or venous blood glucose below 4 mmols.

This guidance relates to the care of all patients over the age of 16 in Worcestershire Acute Hospitals NHS Trust.

This guideline is for use by the following staff groups:

Registered doctors and nurses

Lead Clinician(s)

Alison Hall
Natalie Trigg

Lead Nurse Diabetes
Diabetes Specialist Nurse

Approved by *Specialty Medicine DMB* on:

3rd Septmeber 2020

Approved by Medicines Safety Committee on:

9th September 2020

Review Date:

9th September 2023

This is the most current version and should be used until a revised version is in place

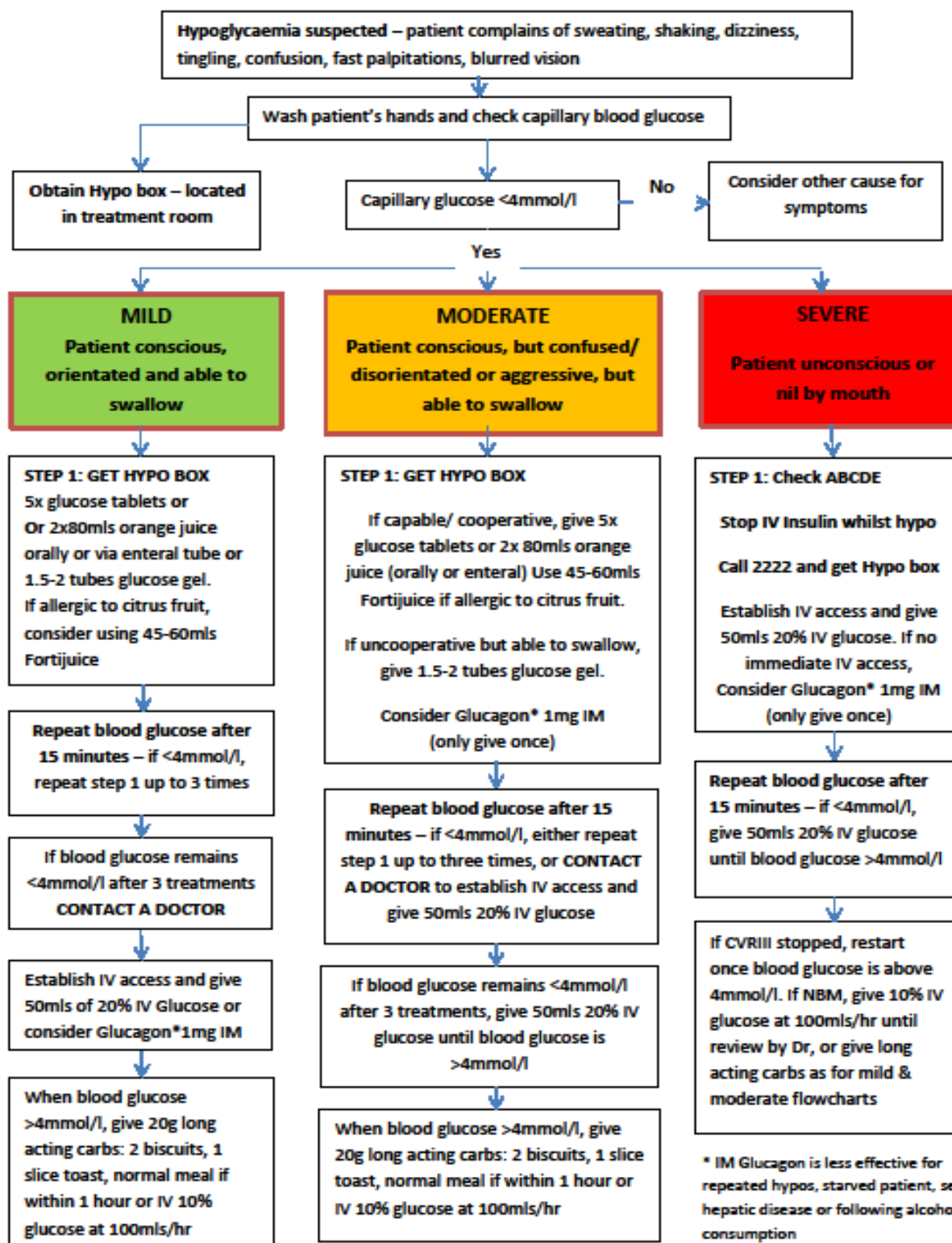
Key amendments to this guideline

Date	Amendment	Approved by:
20/05/2008	Guideline approved by	Medicines Safety Committee
July 2011	Flowchart updated and reference added	Emma Innes
06/07/2011	Guideline reviewed and Approved by Medicines Safety Committee	Medicines Safety Committee
June 2013	Guideline extended whilst under review	Emma Innes
15/10/2013	Guideline extended for 3 month period whilst under review	David Jenkins
21/03/2014	Give 2 x 100mls orange juice via enteral tube. If allergic to citrus fruit avoid using orange juice. Changed IV insulin scale to CVRIII	Susan Rogers
17/08/2016	Document extended for 12 months as per TMC paper approved on 22 nd July 2015	TMC
24/08/2017	Document extended for 12 months as per TMC paper approved on 22 nd July 2015	TMC
05/12/2017	Sentence added in at the request of the Coroner	
June 2018	Document extended for 3 months as per TLG recommendation	TLG
June 2019	Document extended for 6 months whilst review and approval process	Alison Hall
23/05/2020	Flowchart updated and reference added	Natalie Trigg
23/05/2020	Give 2 x 80mls orange juice either orally or via enteral tube. (previously 2x 100mls) If allergic to citrus fruit avoid using orange juice, consider using 45-60mls Fortijuce. GlucoGel has been changed to Glucose Gel (due to brand of gel frequently changing) Hypo boxes kept in treatment room, not Resus trolley. IV management – 50mls 20% IV Glucose (kept in hypo box) Continue monitoring post hypo treatment until 1x CBG >7mmol/l	Natalie Trigg

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TREATMENT OF HYPOGLYCAEMIA

Hypoglycaemia defined as blood glucose less than 4mmol/l



**Increase blood glucose monitoring to every 15 minutes until 1 reading >7 mmol/l is obtained.
Continue regular 4-6 hourly blood glucose monitoring for the next 24 hours.**

if IV or IM treatment required, an online datix incident form must be completed.

Patient Group Directions for glucose tablets, glucose gel, 10% and 20% IV glucose and Glucagon can be found on the Trust Intranet.

WAHT-END-004

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Monitoring Tool

This should include realistic goals, timeframes and measurable outcomes.

How will monitoring be carried out?

Who will monitor compliance with the guideline?

Page/ Section of Key Document	Key control:	Checks to be carried out to confirm compliance with the policy:	How often the check will be carried out:	Responsible for carrying out the check:	Results of check reported to: <i>(Responsible for also ensuring actions are developed to address any areas of non-compliance)</i>	Frequency of reporting:
	WHAT?	HOW?	WHEN?	WHO?	WHERE?	WHEN?
All	All patients with hypoglycaemia will be treated immediately	Review of notes and discussion with patient	Annually	Diabetes Specialist Nurses	NaDIA as part of annual audit. NaDIA report to be shared with Medicines Safety Committee. NaDIA harm report for severe hypoglycaemia	Annual review of NADIA audit and NaDIA Harms reporting
All	All patients who are able to eat and drink will receive starchy carbohydrate	Review of notes and discussion with patient	Annually	Diabetes Specialist Nurses	NaDIA as part of annual audit.	Annually

References

- British National Formulary (September 2017) 6.1.4
- Diabetes UK (2010) Hypoglycaemia
- Frier & Fisher (1999) Hypoglycaemia in Clinical Diabetes. Wiley.
- Pickup & Williams (1997) Textbook of Diabetes. Vol 1, chapter 40. Blackwell Science.
- The Hospital Management of Hypoglycaemia in Adults with Diabetes Mellitus' (September 2013) NHS Diabetes

Contribution List

This key document has been circulated to the following individuals for consultation;

Designation
Dr I Babar Consultant Endocrinologist
Dr M Babar Consultant Endocrinologist
Dr Andreea Ganea-Arnold Consultant Endocrinologist
All Diabetes Specialist Nurses and Dieticians
All Diabetes Consultants
Ward Managers of Avon 3 and Ward 2

This key document has been circulated to the chair(s) of the following committee's / groups for comments;

Committee
Diabetes Directorate
Specialty Medicine Divisional Management Board

Supporting Document 1 - Equality Impact Assessment Tool

. To be completed by the key document author and included as an appendix to key document when submitted to the appropriate committee for consideration and approval.

Please complete assessment form on next page;



Herefordshire & Worcestershire STP - Equality Impact Assessment (EIA) Form
Please read EIA guidelines when completing this form

Section 1 - Name of Organisation (please tick)

Herefordshire & Worcestershire STP	<input type="checkbox"/>	Herefordshire Council	<input type="checkbox"/>	Herefordshire CCG	<input type="checkbox"/>
Worcestershire Acute Hospitals NHS Trust	<input checked="" type="checkbox"/>	Worcestershire County Council	<input type="checkbox"/>	Worcestershire CCGs	<input type="checkbox"/>
Worcestershire Health and Care NHS Trust	<input type="checkbox"/>	Wye Valley NHS Trust	<input type="checkbox"/>	Other (please state)	<input type="checkbox"/>

Name of Lead for Activity	Alison Hall
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Details of individuals completing this assessment	Name	Job title	e-mail contact
	Alison Hall	Lead Nurse Diabetes	Alison.hall24@nhs.net
Date assessment completed	03/08/2020		

Section 2

Activity being assessed (e.g. policy/procedure, document, service redesign, policy, strategy etc.)	Title: TREATMENT OF HYPOGLYCAEMIA FLOW CHART
What is the aim, purpose	

and/or intended outcomes of this Activity?	To ensure that anyone who develops hypoglycaemia is treated promptly and correctly and preventative measures are taken to minimise the risk of a further episode of hyperglycaemia.			
Who will be affected by the development & implementation of this activity?	<input type="checkbox"/>	Service User	<input checked="" type="checkbox"/>	Staff
	<input checked="" type="checkbox"/>	Patient	<input type="checkbox"/>	Communities
	<input type="checkbox"/>	Carers	<input type="checkbox"/>	Other _____
	<input type="checkbox"/>	Visitors	<input type="checkbox"/>	
Is this:	<input checked="" type="checkbox"/> Review of an existing activity <input type="checkbox"/> New activity <input type="checkbox"/> Planning to withdraw or reduce a service, activity or presence?			
What information and evidence have you reviewed to help inform this assessment? (Please name sources, eg demographic information for patients / services / staff groups affected, complaints etc.)	Hypoglycaemia occurs in a number of settings including patients own homes. During a hospital admission hypoglycaemia can occur due to a number of factors. These are well established evidence of hypoglycaemia in hospital and sometimes harm occurring because of hypoglycaemia. This is documented by the National Inpatient Diabetes Audit and by the Think glucose initiatives.			
Summary of engagement or consultation undertaken (e.g. who and how have you engaged with, or why do you believe this is not required)	The annual NaDIA audit includes patient experience and asks specific questions about hypoglycaemia and its management in hospital.			
Summary of relevant findings	Hypoglycaemia is common and not always treated appropriately			

Section 3

Please consider the potential impact of this activity (during development & implementation) on each of the equality groups outlined below. **Please tick one or more impact box below for each Equality Group and explain your rationale.**

Please note it is possible for the potential impact to be both positive and negative within the same equality group and this should be recorded. Remember to consider the impact on e.g. staff, public, patients, carers etc. in these equality groups.

Equality Group	Potential positive impact	Potential neutral impact	Potential negative impact	Please explain your reasons for any potential positive, neutral or negative impact identified
Age		X		Applies to all ages
Disability		X		Applies equally to all
Gender Reassignment		X		No impact
Marriage & Civil Partnerships		X		No impact
Pregnancy & Maternity		X		No impact
Race including Traveling		X		No impact

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Equality Group	Potential positive impact	Potential neutral impact	Potential negative impact	Please explain your reasons for any potential positive, neutral or negative impact identified
Communities				
Religion & Belief		X		No impact
Sex		X		No impact
Sexual Orientation		X		No impact
Other Vulnerable and Disadvantaged Groups (e.g. carers; care leavers; homeless; Social/Economic deprivation, travelling communities etc.)		X		No impact
Health Inequalities (any preventable, unfair & unjust differences in health status between groups, populations or individuals that arise from the unequal distribution of social, environmental & economic conditions within societies)		X		No impact

Section 4

What actions will you take to mitigate any potential negative impacts?	Risk identified	Actions required to reduce / eliminate negative impact	Who will lead on the action?	Timeframe
How will you monitor these actions?				
When will you review this EIA? (e.g in a service redesign, this EIA should be revisited regularly throughout the design & implementation)	When pathway requires renewal or if any change are required.			

Section 5 - Please read and agree to the following Equality Statement

1. Equality Statement

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1.1. All public bodies have a statutory duty under the Equality Act 2010 to set out arrangements to assess and consult on how their policies and functions impact on the 9 protected characteristics: Age; Disability; Gender Reassignment; Marriage & Civil Partnership; Pregnancy & Maternity; Race; Religion & Belief; Sex; Sexual Orientation

1.2. Our Organisations will challenge discrimination, promote equality, respect human rights, and aims to design and implement services, policies and measures that meet the diverse needs of our service, and population, ensuring that none are placed at a disadvantage over others.

1.3. All staff are expected to deliver services and provide services and care in a manner which respects the individuality of service users, patients, carer's etc, and as such treat them and members of the workforce respectfully, paying due regard to the 9 protected characteristics.

Signature of person completing EIA	
Date signed	04/08/2020
Comments:	
Signature of person the Leader Person for this activity	
Date signed	04/08/2020
Comments:	



Supporting Document 2 – Financial Impact Assessment

To be completed by the key document author and attached to key document when submitted to the appropriate committee for consideration and approval.

	Title of document:	Yes/No
1.	Does the implementation of this document require any additional Capital resources	No
2.	Does the implementation of this document require additional revenue	No
3.	Does the implementation of this document require additional manpower	No
4.	Does the implementation of this document release any manpower costs through a change in practice	No
5.	Are there additional staff training costs associated with implementing this document which cannot be delivered through current training programmes or allocated training times for staff	No
	Other comments:	

If the response to any of the above is yes, please complete a business case and which is signed by your Finance Manager and Directorate Manager for consideration by the Accountable Director before progressing to the relevant committee for approval.