Clinical Practice Guidelines - Edition 3, 2022

Medications for Listed Organisations

(SI 449 of 2015)

Pre-Hospital Emergency Care Council

MEDICATIONS FOR LISTED ORGANISATIONS (SI 449 of 2015)

PHECC Clinical Practice Guidelines

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The process of developing CPGs has been long and detailed. The quality of the finished product is due to the painstaking work of many people, who through their expertise and review of the literature, ensured a world-class publication.

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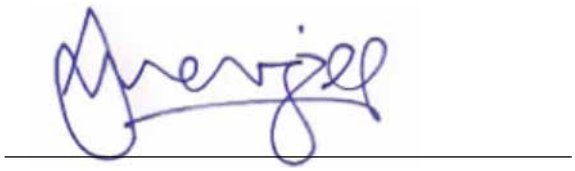
MEDICATIONS FOR LISTED ORGANISATIONS (SI 449 of 2015)

INTRODUCTION

The purpose of these clinical practice guidelines (CPGs) are to provide safe guidelines to responders for administration of specified prescription-only medications, without a prescription, to a person for the purpose of saving life or reducing severe distress in emergency situations.

The responder will be an individual, appointed by a listed organisation, who has completed a PHECC-approved course of training regarding the administration of such medications and the management of any adverse reaction.

This is a significant advance in pre-hospital care in Ireland, as it now provides a pathway for responders (as opposed to practitioners) to administer prescription-only meditations in certain situations.



Dr David Menzies, Chair, Medical Advisory Committee

IMPLEMENTATION

The CPGs herein may be implemented provided:

1. The non-medical person maintains current certification on the medication(s) as outlined in PHECC's Education & Training Standard.
2. The non-medical person is authorised, by the listed organisation on whose behalf he/she is acting, to implement the specific CPG.
3. The medications are listed on the tenth schedule.

Medication dose

The medication dose specified on the relevant CPGs shall be the definitive dose in relation to non-medical person's administration of the specified medication(s). The onus rests on the non-medical person to ensure that he/she is using the latest version of CPGs which are available on the PHECC website www.phecc.ie

Definitions

Adult	A patient of 16 years or greater, unless specified on the CPG
Paediatric patient	Any child, infant or neonate

Documentation

Completing the documentation is paramount in the interest of patient safety and the risk management process. The Ambulatory Care Report (ACR) must be completed to meet these requirements.

CODES EXPLANATION

CFR — Cardiac First Responder (Level 1) for which the CPG pertains

FAR — First Aid Responder (Level 2) for which the CPG pertains

EFR — Emergency First Responder (Level 3) for which the CPG pertains

EFR BTEC — An EFR who has completed Basic Tactical Emergency Care training and has been privileged to operate in adverse conditions

Sequence step — A sequence (skill) to be performed

Mandatory sequence step — A mandatory sequence (skill) to be performed

A Decision Process
The Responder must follow one route

EFR — A skill or sequence that only pertains to EFR or higher clinical levels

Consider treatment options — Given the clinical presentation consider the treatment option specified

Medication, dose & route — A medication which may be administered by a CFR or higher clinical level
The medication name, dose and route is specified

Medication, dose & route — A medication which may be administered by an EFR or higher clinical level
The medication name, dose and route is specified

1/2/3.4.1 Version 2, 07/11
1/2/3.x.y Version 2, mm/yy — CPG numbering system
1/2/3 = clinical levels to which the CPG pertains
x = section in CPG manual,
y = CPG number in sequence,
mm/yy = month/year CPG published

FAR — First Aid Responder or lower clinical levels not permitted this route


Ring ambulance control

Request AED — Request an AED from local area

Instructions — An instruction box for information

Special instructions — Special Instructions
Which the Responder must follow

Go to CPG — A direction to go to a specific CPG following a decision process
[Note: only go to the CPGs that pertain to your clinical level]

Start from — A clinical condition that may precipitate entry into the specific CPG

Special Authorisation — Special Authorisation
This authorises the Practitioner to perform an intervention under specified conditions

Finding following clinical assessment, leading to treatment modalities

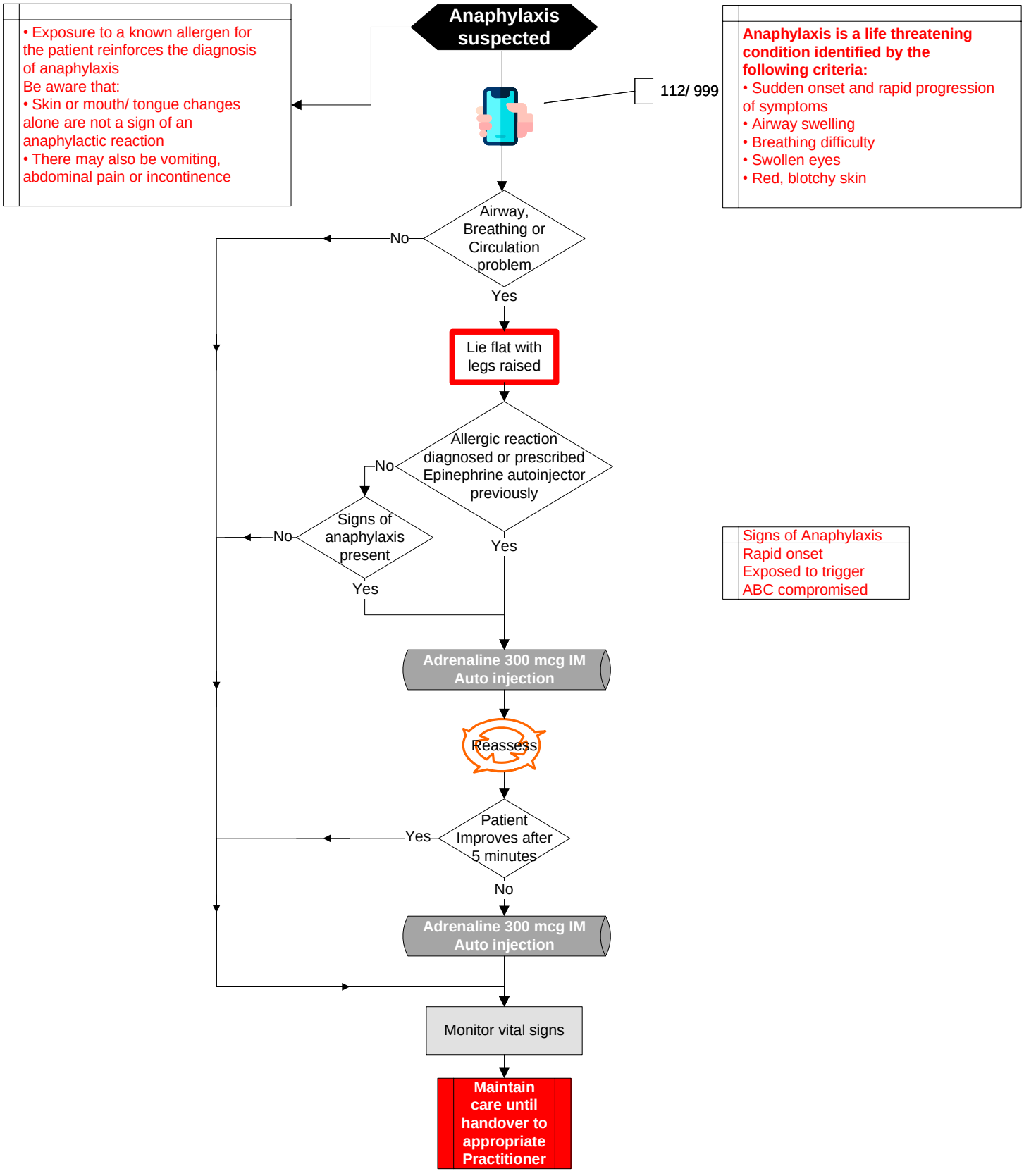
Reassess — Reassess the patient following intervention

A Cyclical Process in which a number of sequence steps are completed

A Parallel Process in which a number of sequence steps are completed

Listed Organisations and Adrenaline (auto injector adult)

1.4.15
Version 2, 01/2022



Special Authorisation:
You are authorised to administer Epinephrine (auto injector) IM following successful completion of the training module, provided you are acting on behalf of an organisation listed with the HPRA as specified in SI 449 of 2015

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Listed Organisations and Adrenaline (auto injector paediatric)

- Exposure to a known allergen for the patient reinforces the diagnosis of anaphylaxis

Be aware that:

- Skin or mouth/ tongue changes alone are not a sign of an anaphylactic reaction
- There may also be vomiting, abdominal pain or incontinence

Anaphylaxis suspected

112/ 999

Anaphylaxis is a life threatening condition identified by the following criteria:

- Sudden onset and rapid progression of symptoms
- Airway swelling
- Breathing difficulty
- Swollen eyes
- Red, blotchy skin

Airway, Breathing or Circulation problem

No

Yes

Lie flat with legs raised

Allergic reaction diagnosed or prescribed Epinephrine autoinjector previously

No

Yes

Signs of anaphylaxis present

No

Yes

Signs of Anaphylaxis

Rapid onset
Exposed to trigger
ABC compromised

Adrenaline IM
6 mts to < 10 yrs 0.15 mg (auto injector)
≥ 10 yrs 0.3 mg (auto injector)

Reassess

Patient Improves after 5 minutes

Yes

No

Adrenaline IM
6 mts to < 10 yrs 0.15 mg (auto injector)
≥ 10 yrs 0.3 mg (auto injector)

Monitor vital signs

Maintain care until handover to appropriate Practitioner

Special Authorisation:
You are authorised to administer Epinephrine (auto injector) IM following successful completion of the training module, provided you are acting on behalf of an organisation listed with the HPRA as specified in SI 449 of 2015

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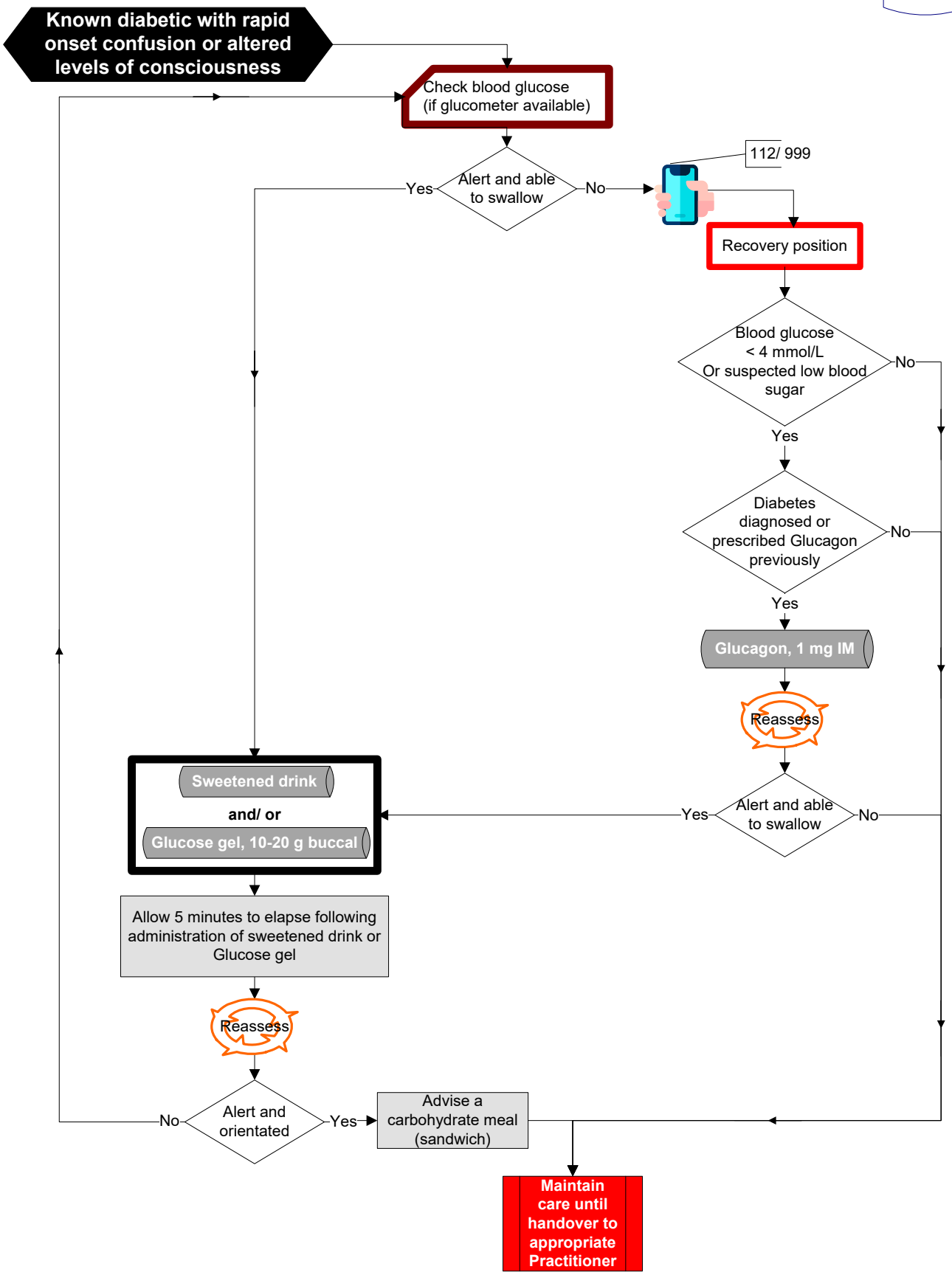
Listed Organisations and Glucagon (adult)

1.4.19
Version 2, 01/2022



Special Authorisation:
You are authorised to administer Glucagon IM, following successful completion of the training module, provided you are acting on behalf of an organisation listed with the HPRA as specified in SI 449 of 2015

Glucagon will not be effective when administered to under nourished persons

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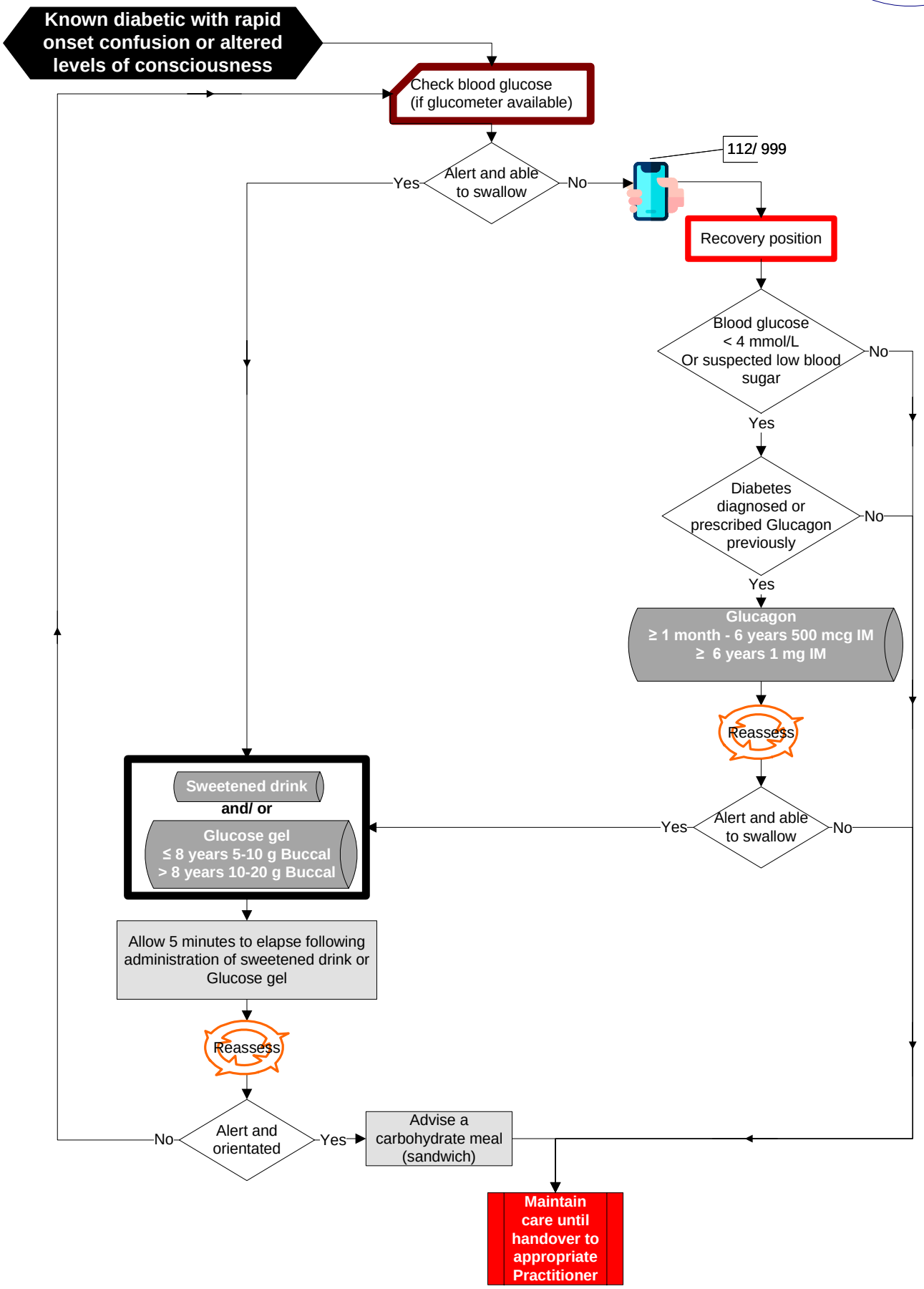
Listed Organisations and Glucagon (paediatric)

1.7.32
Version 3, 01/2022



Special Authorisation:
You are authorised to administer Glucagon IM, following successful completion of the training module, provided you are acting on behalf of an organisation listed with the HPRA as specified in SI 449 of 2015

Glucagon will not be effective when administered to under nourished persons

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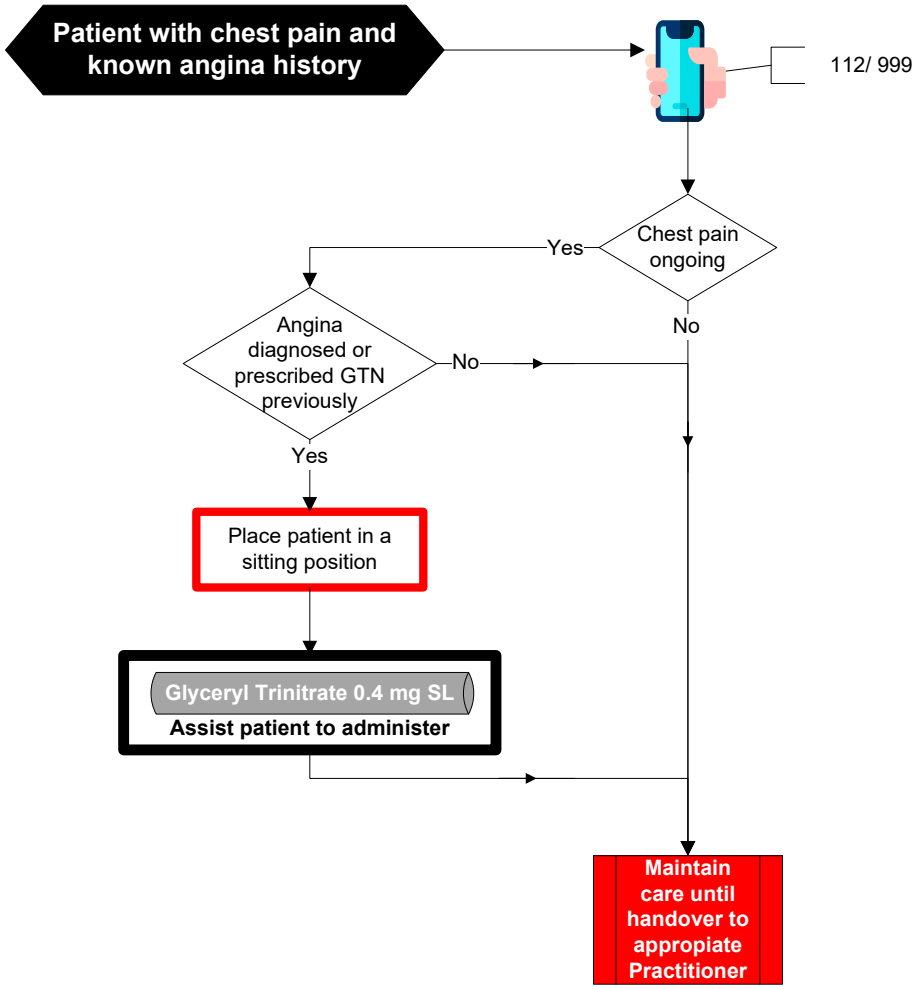
Listed Organisations and Glyceryl Trinitrate (GTN)



Special Authorisation:
You are authorised to administer Glyceryl Trinitrate SL, following successful completion of the training module, provided you are acting on behalf of an organisation listed with the HPRA as specified in SI 449 of 2015

Listed Organisations and Naloxone (adult)

Suspected opioid overdose and unresponsive

Clinical indication of opioid overdose
1. Reduced level of consciousness
2. Inadequate breathing
3. Pin point pupil size

Confirmation
4. Drug paraphernalia present
5. Bystander history

Get someone to call 112/ 999
or
call yourself

Shout for help

Request **AED**

Scene safety
Be careful of sharps

Intramuscular (IM) Route
Inject into thigh muscle (repeat at two minute intervals when necessary)
For safety when administering via IM route, a needle may be used only once. If additional doses are required please use new needle

Breathing abnormally or gasping

Yes

No

Breathing abnormally may include;
- No breathing
- Breathing very slowly
- Intermittent gasping

Naloxone 0.4 mg (IM)
OR
Naloxone 0.4 mg – 2 mg (IN)

Maximum vol per IN dose not to exceed 2 mg

Place patient in the Recovery Position

Pulse present

No

Yes

Ventilate using pocket mask (1 breath / 6 sec)

Commence CPR

Switch on AED

Follow instructions from AED and Ambulance Call Taker

Continue **CPR** until an appropriate Practitioner takes over or patient starts to move

Maintain care until handover to appropriate practitioner

Follow instructions from Ambulance Call Taker

Special Authorisation:
You are authorised to administer Naloxone IN or IM, following successful completion of the training module, provided you are acting on behalf of an organisation listed with the HPRA as specified in SI 449 of 2015

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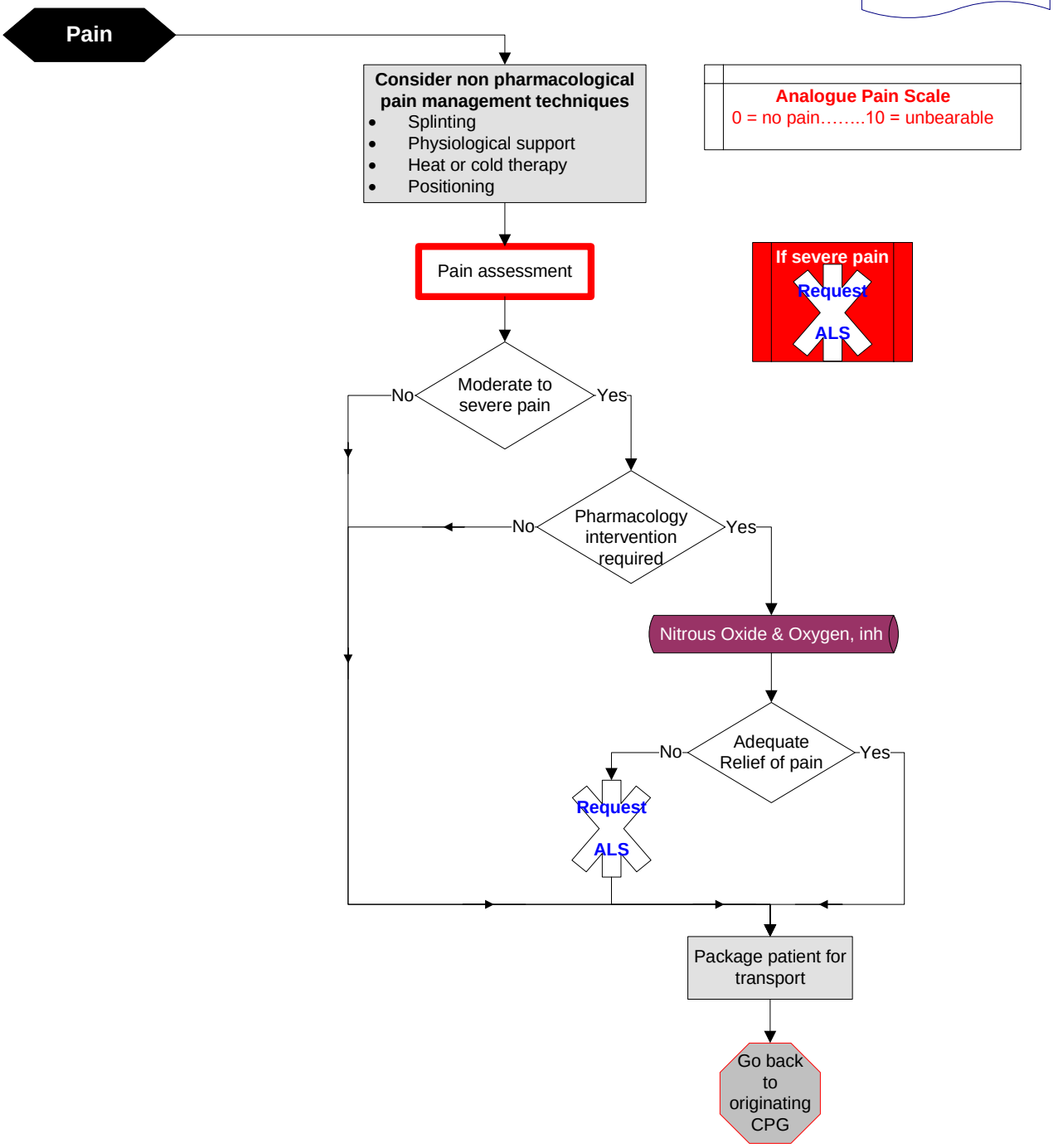
Listed Organisations and Nitrous Oxide & Oxygen

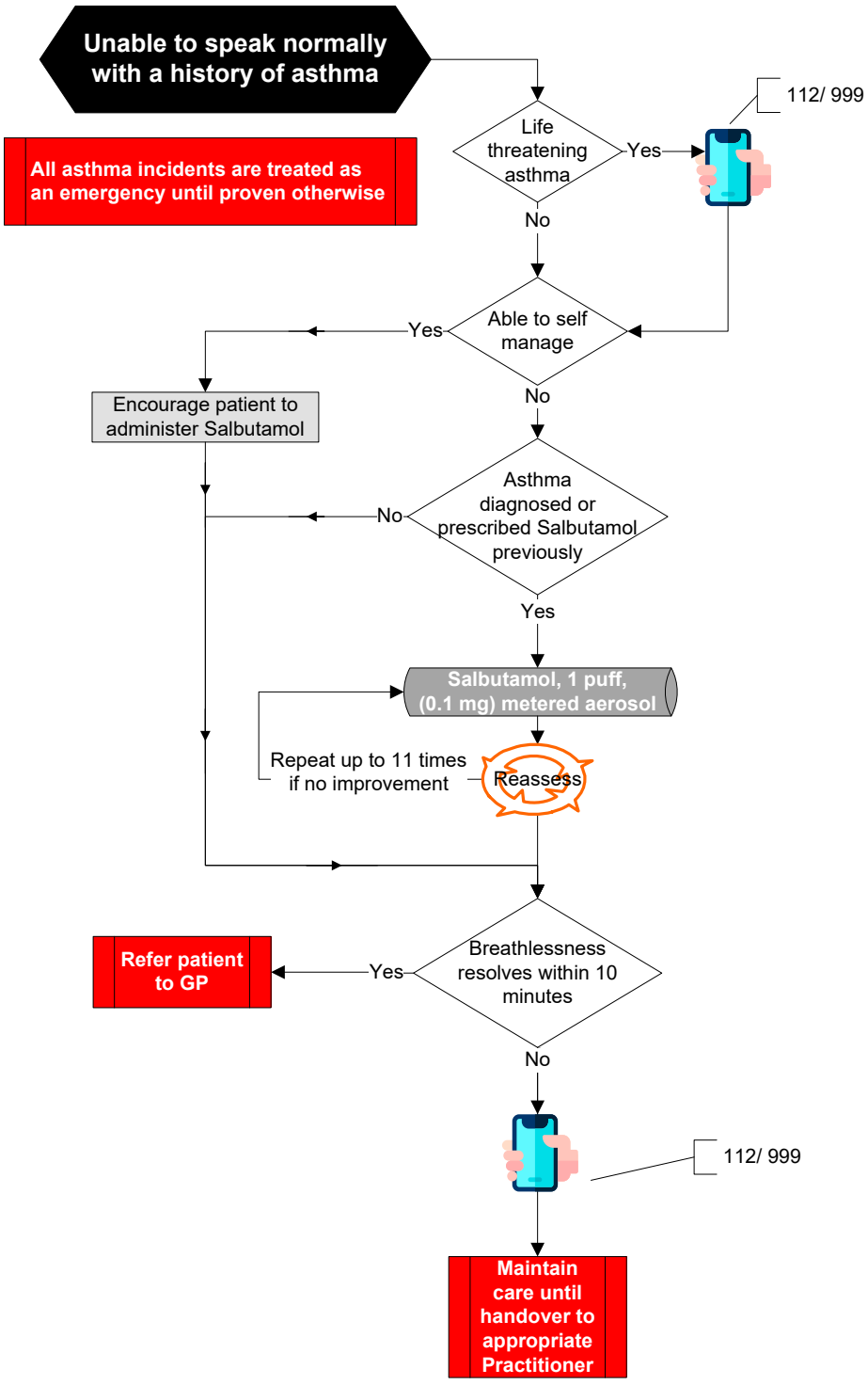


Decisions to give analgesia must be based on clinical assessment and not directly on a linear scale

Special Authorisation:
You are authorised to administer Nitrous oxide & oxygen gas, following successful completion of the training module, provided you are acting on behalf of an organisation listed with the HPRA as specified in SI 449 of 2015 and operating in a remote or hostile environment.

Listed Organisations and Salbutamol

1.3.4
Version 2, 01/2022



Life threatening asthma;
Inability to complete sentences in one breath
Respiratory rate > 25 or < 10/ min
Heart rate > 110/ min

and any one of the following;

- Feeble respiratory effort
- Exhaustion
- Confusion
- Unresponsive
- Blueish colour (cyanosis)

During an asthma attack;
Do use a spacer device if one is available
Do listen to what the patient is saying – they may have had attacks before.

Don't put your arm around the patient or lie them down - this will restrict their breathing.
Don't worry about giving too much Salbutamol, during an asthma attack extra puffs of medication are safe.

Special Authorisation:
You are authorised to administer Salbutamol inhaler, following successful completion of the training module, provided you are acting on behalf of an organisation listed with the HPRA as specified in SI 449 of 2015

APPENDIX 1 - MEDICATION FORMULARY FOR LISTED ORGANISATIONS VERSION 3, 2022

This Medication Formulary is published by the Pre-Hospital Emergency Care Council (PHECC). It supports material to non-medical persons operating on behalf of listed organisations while administering medications permitted under Medicinal Products Tenth Schedule (SI 449 of 2015) **and (SI 530 of 2018).**

This is a summary document only and non-medical persons are advised to consult with official publications to obtain more detailed information about the medications if required.

The Medication Formulary for listed organisations is a subset of the PHECC Medication Formulary for Practitioners published by Council.

The CPGs herein may be implemented provided:

1. The non-medical person maintains current certification on the specific medication(s) as outlined in PHECC's Education & Training Standard.
2. The non-medical person is authorised, by the listed organisation on whose behalf he/she is acting, to implement the specific CPG.
3. The medications are listed on the tenth schedule.

Medication dose

Every effort has been made to ensure accuracy of the medication doses herein. The medication dose specified on the relevant CPGs shall be the definitive dose in relation to non-medical person's administration of the specified medication(s). The onus rests on the non-medical person to ensure that he/she is using the latest version of CPGs which are available on the PHECC website www.phecc.ie

Definitions:

Adult: a patient of 16 years or greater.
Paediatric patient: a patient less than 16 years.

The dose for paediatric patients may never exceed the adult dose.

APPENDIX 1 - MEDICATION FORMULARY FOR LISTED ORGANISATIONS VERSION 3, 2022

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Changes to Monographs

1. Class and Description headings have merged to one Classification heading in line with BNF drug descriptors

2. Long term side effects have been removed unless essential

3. Pharmacology/Action has been removed unless essential information

4. Epinephrine has been changed to Adrenaline

New Medication

- Naloxone 1.8 mg/0.1 ml Nasal Spray (Nyxoid)

Adrenaline Auto injector		
Heading	**Add**	**Delete**
Medication	Adrenaline Auto Injector	Epinephrine
Contra-indications	Hypersensitivity to excipients	None Known

Aspirin		
Heading	**Add**	**Delete**
Presentation	300 mg Dispersible tablet 300 mg Enteric Coated (EC) tablet	
Long term effects		Complete removal of all long term effects

Glucagon		
Heading	**Add**	**Delete**
Classification	Hypoglycaemic: Glycogenolytic hormones.	Hormone and antihypoglycaemic
Dosage:	Paediatric: ≥ 1 month and < 25kg: 500 mcg IM ≥ 1 month and ≥ 25kg: 1 mg IM	Paediatric: 1-8 years: 0.5 mg IM > 8 years: 1mg IM
Side-effects	Common: Nausea Uncommon: vomiting Rare: may cause low blood pressure, dizziness, headache	Rare, may cause low blood pressure, dizziness, headache, nausea& vomiting
Additional Information	Stable at room temperature for 18 months, use immediately once reconstituted.	

MEDICATIONS FOR LISTED ORGANISATIONS (SI 449 of 2015)

Glucose Gel		
Heading	**Add**	**Delete**
Dosage	Repeat dose after 15 min if required	Repeats as required
Classification	Nutrients. Sugars: Antihypoglycaemic.	

Glyceryl Trinitrate (GTN)		
Heading	**Add**	**Delete**
Contra-Indications	similar class medication (e.g. sildenafil, tadalafil and vardenafil)	

Naloxone IM		
Heading	**Add**	**Delete**
Dosage	Repeat doses at 3 min PRN to a max dose of 2 mg	Repeat at two minutes intervals if necessary

Nitrous Oxide 50% and Oxygen 50% (Entonox®)		
Heading	**Add**	**Delete**
Classification	Analgesics – Volatile Liquid Anaesthetics - Potent analgesic gas contains a mixture of both Nitrous Oxide and Oxygen.	

Salbutamol		
Heading	**Add**	**Delete**
Classification	Beta-2 Adrenoceptor agonist selective – short acting.	Sympathetic agonist
Presentation	100 mcg	0.1 mg
Usual Dosages	100 mcg Paediatric: < 5 yrs - 100 mcg/ 1 actuation metered aerosol spray (repeat aerosol x 5 PRN) > 5 yrs - 100mcg/ 1 actuation metered aerosol spray (repeat aerosol x 11 PRN)	0.1 mg Paediatric: 0.1 mg metered aerosol spray. Repeat up to 11 sprays.

Clinical level: CFR **Medications for Listed Organisations**

Medication	Adrenaline Auto injector
Classification	Sympathetic agonist, sympathomimetic - vasoconstrictor
Presentation	Pre-filled Auto injector.
Administration	Intramuscular (IM). (**CPG:** 1.4.15, 1.7.31).
Indications (reason for administration)	Severe anaphylaxis.
Contra-Indications (reasons for not administrating)	Hypersensitivity to excipients.
Usual Dosages	**Adult:** 0.3 mg (Auto injector). Repeat once after 5 minutes if no improvement. **Paediatric:** 6 months < 10 years; 0.15 mg (Auto injector). ≥ 10 years; 0.3 mg (Auto injector). Repeat once after 5 minutes if no improvement.
Side effects (anticipated but unwanted effects that may occur)	Palpitations. Increased blood pressure. Chest pain.
Additional information	

Clinical level: CFR **Medications for Listed Organisations**

Medication	Aspirin
Classification	Antithrombotic – Antiplatelet drug which reduces clot formation
Presentation	300 mg Dispersible tablet 300 mg Enteric Coated (EC) tablet
Administration	Orally - dispersed in water, or to be chewed - if not a dispersible form. (**CPG**: 1/2/3.4.10).
Indications (reason for administration)	Cardiac chest pain or suspected heart attack.
Contra-Indications (reasons for not administrating)	Active ulcer. Bleeding disorder (e.g. haemophilia). Known severe adverse reaction. Patients < 16 years old.
Usual Dosages	**Adult:** 300 mg tablet. **Paediatric:** Contraindicated.
Side effects (anticipated but unwanted effects that may occur)	Abdominal pain and discomfort. Wheezing. Stomach and haemorrhage in the intestine.
Additional information	Aspirin 300 mg is indicated for cardiac chest pain even if patient is on blood thinning medication or is already on aspirin. If the patient has swallowed an aspirin (enteric coated) tablet without chewing it, or dissolving in water, administer 300 mg PO as the patient should be regarded as not having taken any aspirin.

Clinical level: CFR **Medications for Listed Organisations**

Medication	Glucagon
Classification	Hypoglycaemic: Glycogenolytic hormones.
Presentation	1 mg vial powder and solution for dissolving the powder.
Administration	Intramuscular (IM). (**CPG:** 1.4.19, 1.7.32)
Indications (reason for administration)	Low blood sugar in patients unable to take oral glucose with a blood glucose level < 4 mmol/L.
Contra-Indications (reasons for not administrating)	Less than 1 year old. Known severe adverse reaction.
Usual Dosages	**Adult:** 1 mg IM. **Paediatric:** ≥ 1 month and < 25kg: 500 mcg IM. ≥ 1 month and ≥ 25kg: 1 mg IM
Side effects (anticipated but unwanted effects that may occur)	**Common:** Nausea **Uncommon:** vomiting **Rare:** may cause low blood pressure, dizziness, headache
Additional Information	May be ineffective in patients with low stored sugar e.g. prior use in previous 24 hours or poorly nourished people Store in refrigerator. Stable at room temperature for 18 months, use immediately once reconstituted. Protect from light

Clinical level: CFR **Medications for Listed Organisations**

Non - Medication	Glucose gel
Classification	Nutrients. Sugars: Antihypoglycaemic.
Presentation	Glucose gel in a tube or sachet.
Administration	Buccal administration: Administer gel to the inside of the patient's cheek and gently massage the outside of the cheek. (**CPG:** 1.4.19, 1.7.32)
Indications (reason for administration)	Low blood sugar. Blood sugar < 4 mmol/L. Known diabetic with confusion or altered levels of consciousness.
Contra-Indications (reasons for not administrating)	Known severe adverse reaction.
Usual Dosages	Adult: 10 – 20 g buccal (recheck blood glucose and repeat as required) Paediatric:. ≤ 8 years 5 – 10 g buccal (repeat as required) > 8 years 10 – 20 g buccal (repeat as required)
Side effects (anticipated but unwanted effects that may occur)	May cause vomiting in patients under the age of five if administered too quickly.
Additional information	Proceed with caution for patients with: - airway difficulties. - reduced level of consciousness.

Clinical level: CFR **Medications for Listed Organisations**

Medication	Glyceryl trinitrate (GTN)
Class	Nitrate.
Presentation	Aerosol spray: metered dose 0.4 mg.
Administration	Sublingual (SL) – under the tongue: Hold the pump spray vertically with the valve head uppermost. Place as close to the mouth as possible and spray under the tongue. The mouth should be closed after each dose. (**CPG**: 1.4.10)
Indications (reason for administration)	Angina. Suspected heart attack or angina. Assist patient with administration.
Contra-Indications (reasons for not administrating)	Viagra or similar class medication (e.g. sildenafil, tadalafil and vardenafil) used within previous 24 hours. Known severe adverse reaction.
Usual Dosages	**Adult:** 0.4 mg Sublingual (under the tongue). **Paediatric:** Not indicated.
Side effects (anticipated but unwanted effects that may occur)	Headache. Temporary low blood pressure. Flushing. Dizziness.
Additional information	If the pump is new or it has not been used for a week or more the first spray should be released into the air.

Clinical level: CFR Medications for Listed Organisations

Medication	Naloxone
Classification	Opioid toxicity: Opioid receptor antagonist. The management and reversal of opiate overdose.
Presentation	Pre-loaded syringe
Administration	Intramuscular (IM). (**CPG**: 1.3.6).
Indications (reason for administration)	Inadequate breathing and/or altered level of consciousness following known or suspected narcotic overdose.
Contra-Indications (reasons for not administrating)	Known severe adverse reaction.
Usual Dosages	**Adult:** 0.4 mg IM. (Repeat at 3 min PRN to a max dose of 2 mg) **Paediatric:** Not indicated.
Pharmacology/Action	**Narcotic antagonist** Reverse the respiratory depression and analgesic effect of narcotics.
Side effects (anticipated but unwanted effects that may occur)	Acute reversal of narcotic effect ranging from nausea & vomiting to agitation and seizures.
Additional information	Rapid reversal will precipitate acute withdrawal syndrome. Prepare to deal with aggressive patients. For safety a needle may be used only once. If additional doses are required use a new needle every time.

Clinical level: CFR **Medications for Listed Organisations**

Medication	Naloxone 1.8 mg/0.1 ml Nasal Spray (Nyxoid)
Classification	Opioid Receptor Antagonist which acts on opioid receptors – Opioid overdose in a non-medical and medical setting
Presentation	Naloxone 18mg per 1ml as Nyxoid® 1.8 mg/0.1 ml unit dose nasal spray in a single dose container. Clear, colourless to pale yellow solution. (Each spray is equivalent to 1.8 mg)
Administration	Intranasal (IN) (CPG 1.3.6)
Indications	Emergency therapy for known or suspected opioid overdose as manifested by respiratory or CNS depression
Contra-Indications	Hypersensitivity to the active substance or to any of the excipients
Usual Dosages	**Adult:** Administer one 1.8mg dose spray into one nostril. If no response, give a second dose after 2 – 3 minutes. If the patient responds to initial dose but then relapses into respiratory depression, give the second dose immediately. Administer each dose into alternate nostrils. Paediatric: Not indicated
Side effects	Dizziness, headache, tachycardia, hypotension or hyper-tension, Nausea, vomiting
Additional information	Nyxoid preparations contain **only one dose** – Do not prime or test before prior to administration. Nyxoid should only be made available once the suitability and competence of an individual to administer naloxone in the appropriate circumstances has been established. Patients who respond satisfactorily to Nyxoid must be closely monitored. The effect of some opioids can be longer than the effect of naloxone, which could lead to reoccurrence of respiratory depression and therefore further doses of naloxone may be required.

Clinical Level: EFR Medications for Listed Organisations

Medication	Nitrous Oxide 50% and Oxygen 50% (Entonox®)
Classification	Analgesics – Volatile Liquid Anaesthetics - Potent analgesic gas contains a mixture of both Nitrous Oxide and Oxygen.
Presentation	Cylinder, coloured blue with white and blue triangles on cylinder shoulders. February 2022 Medical gas: 50% Nitrous Oxide & 50% Oxygen.
Administration	Self-administered. Inhalation by demand valve with face-mask or mouthpiece. (**CPG:** 3.2.6)
Indications (reason for administration)	Pain relief.
Contra-Indications (reasons for not administrating)	Altered level of consciousness. Chest Injury/Pneumothorax. Shock. Recent scuba dive. Decompression sickness. Intestinal obstruction. Inhalation Injury. Carbon monoxide (CO) poisoning. Known severe adverse reaction.
Usual Dosages	**Adult:** Self-administered until pain relieved. **Paediatric:** Self-administered until pain relieved.
Side effects (anticipated but unwanted effects that may occur)	Disinhibition. Decreased level of consciousness. Light headedness.
Additional information	Do not use if patient unable to understand instructions. In cold temperatures, warm cylinder and invert to ensure mix of gases. Brand name: Entonox®. Has an addictive property. Caution when using Entonox for greater than one hour as risk of Sickle Cell Crisis.

Clinical level: CFR Medications for Listed Organisations

Medication	Salbutamol
Classification	Beta-2 Adrenoceptor agonist selective – short acting.
Presentation	Aerosol inhaler: Metered dose 100mcg per actuation (Puff).
Administration	Inhalation via aerosol inhaler. (**CPG**: 1.3.4).
Indications (reason for administration)	Acute asthmatic attack.
Contra-Indications (reasons for not administrating)	Known severe adverse reaction.
Usual Dosages	**Adult:** 100 mcg metered aerosol spray. Repeat up to 11 sprays **Paediatric:** < 5 yrs - 100 mcg/ 1 actuation metered aerosol spray (repeat aerosol x 5 PRN). > 5 yrs - 100mcg/ 1 actuation metered aerosol spray (repeat aerosol x 11 PRN).
Side effects (anticipated but unwanted effects that may occur)	Increased heart rate. Tremors.
Additional information	It is more efficient to use a volumizer (spacer) in conjunction with an aerosol inhaler when administering Salbutamol.

MEDICATIONS FOR LISTED ORGANISATIONS (SI 449 of 2015)

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