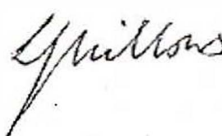



**Patient Group Direction For The Administration Of Sodium Chloride
0.9% Intravenous Infusion By Haemodialysis Staff Nurses Working
Within NHS Grampian**

Lead Author: Senior Charge Nurse, Banff and Buchan Renal Units	Consultation Group: See relevant page in the PGD	Approver: Medicines Guidelines and Policies Group Authorisation: NHS Grampian
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Signature: 		Signature: 
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NHSG Identifier: NHSG/PGD/NaCl_haemo/ MGPG1166	Review Date: June 2023 Expiry Date: June 2024	Date Approved: June 2021
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**NHS Grampian have authorised this Patient Group Direction to help individuals
by providing them with more convenient access to an efficient and clearly defined
service within the NHS Board. This Patient Group Direction cannot be used until
Appendix 1 and 2 are completed.**

Uncontrolled when printed

Version 6

Revision History:

Reference and approval date of PGD that has been adapted and/or superseded	PGD supersedes NHSG/PGD/NaCl_haemo/MGPG930	
Date of change	Summary of Changes	Section heading
December 2020	2 year review of PGD.	
April 2021	Inclusion criteria changed to reflect current practice.	Inclusion criteria

NHGS Identifier: NHSG/PGD/NaCl_haemo/MGPG1166
Keyword(s): PGD Patient Group Direction Sodium Chloride, Haemodialysis, Nurses

Policy Statement: It is the responsibility of the individual healthcare professionals and their line managers to ensure that they work within the terms laid down in this PGD and to ensure that staff are working to the most up to date PGD. By doing so, the quality of the services offered will be maintained, and the chances of staff making erroneous decisions which may affect individual, staff or visitor safety and comfort will be reduced. Supervisory staff at all levels must ensure that staff using this PGD act within their own level of competence.

The lead author is responsible for the review of this PGD and for ensuring the PGD is updated in line with any changes in clinical practice, relevant guidelines, or new research evidence.


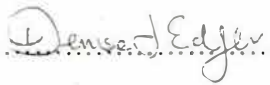
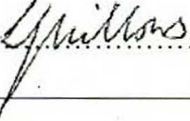

Review date: The review date for a PGD needs to be decided on a case-by-case basis in the interest of safety. The expiry date should not be more than 3 years, unless a change in national policy or update is required.

Document: Drafted: December 2020
 Completed: May 2021
 Approved: June 2021 (published – June 2021)
 Amended:

Organisational Authorisations

This PGD is not legally valid until it has had the relevant organisational authorisation.

PGD Developed/Reviewed by;

<p>Medical practitioner</p>	<p>Name: Dr Carol Brunton Title: Consultant Nephrologist Contact email: carol.brunton@nhs.scot Signature: </p>
<p>Senior representative of the professional group who will provide care under the direction</p>	<p>Name: Denise Edgar Title: Senior Charge Nurse, Ward 404/405, ARI Contact email: denise.edgar@nhs.scot Signature: </p>
<p>Lead author</p>	<p>Name: Linda Willows Title : Renal Sister Contact email: linda.willows@nhs.scot Signature: </p>
<p>Pharmacist</p>	<p>Name: Brian Porteous Title : Renal Pharmacist, ARI Contact email: brian.porteous@nhs.scot Signature: </p>

Approved and authorised for use within NHSG by;

Medicines Guidelines and Policies Group Chair	Signature	Date Signed
Lesley Coyle		June 2021

Management and Monitoring of Patient Group Direction

PGD Consultative Group

The consultative group is legally required to include a medical practitioner, a pharmacist and a representative of the professional group who will provide care under the direction.

Linda Willows

Dr Carol Brunton

Brian Porteous

Denise Edgar

Lead Author: Senior Charge Nurse Banff and Buchan Renal Units

Medical Professional: Consultant Nephrologist

Pharmacist: Clinical Pharmacist, ARI

Staff Group Representative: Senior Charge Nurse, Renal Unit,
Aberdeen Royal Infirmary

Patient Group Direction For The Administration Of Sodium Chloride 0.9% Intravenous Infusion By Haemodialysis Staff Nurses Working Within NHS Grampian

Clinical indication to which this PGD applies

<p>Definition of situation/Condition</p>	<p>This Patient Group Direction (PGD) will authorise haemodialysis staff nurses in NHS Grampian to administer sodium chloride 0.9% infusion to individuals aged 16 years or over who require haemodialysis treatment.</p> <p>This PGD should be used in conjunction with the recommendations in the current British National Formulary (BNF), British National Formulary for Children (BNFC) and the individual Summary of Product Characteristics (SmPC).</p>
<p>Inclusion criteria</p>	<p>All patients aged 16 years and over undergoing haemodialysis treatment.</p> <p>Prime and wash back of lines</p> <ul style="list-style-type: none"> Where there is a problem with the machine and the automatic option to prime and wash back are not available then sodium chloride 0.9% infusion can be used. <p>Intravenous infusion/intravenous flush when the bolus of dialysate function is not available then then sodium chloride 0.9% infusion can be used</p> <ul style="list-style-type: none"> Patients who become hypotensive during the haemodialysis treatment. Patients who are dehydrated. To prevent clotting of the extra-corporeal circuit. <p>Prior to the administration of the medicine, valid consent to receiving treatment under this PGD must be obtained. Consent must be in line with current NHSG consent policy.</p>
<p>Exclusion criteria</p>	<ul style="list-style-type: none"> Individuals under 16 years of age Individuals who are hypernatraemic (sodium equal to or greater than 150mmol/L) Individuals who are suffering from hyperchloraemia Where there is no valid consent.
<p>Precautions and special warnings</p>	<p>Sodium chloride 0.9% intravenous infusion should be used with caution in patients receiving corticosteroids or corticotropin, because of potential sodium retention.</p> <p>Sodium chloride 0.9% intravenous infusion should be used with particular caution, if at all, in patients with or at risk for hyperchloraemia, hypervolemia and conditions that may</p>

	cause sodium retention, fluid overload and oedema (central and peripheral).
Action if excluded from treatment	<p>Medical advice must be sought – refer to relevant medical practitioner.</p> <p>Document the reason for exclusion under the PGD and any action taken in the individual’s appropriate clinical records.</p>
Action if treatment is declined	<p>Inform/refer to the relevant medical practitioner if individual declines treatment.</p> <p>Document that the administration was declined, the reason and advice given in appropriate clinical records.</p>

Description of treatment available under the PGD

Name form and strength of medicine	Sodium chloride 0.9% intravenous infusion is available in infusion bags containing 100mL, 250mL, 500mL and 1000mL. Each mL contains 9mg sodium chloride.
Legal status	Sodium chloride 0.9% intravenous infusion is a Prescription-only Medicine (POM).
Dosage/Maximum total dose	<p>When the option to use dialysate is not available then priming lines 1000mL of sodium chloride 0.9% is used to prime the dialysis circuit prior to dialysis. If an individual has had a presumed membrane reaction on a previous dialysis, 2000mL sodium chloride 0.9% may be used.</p> <p>The maximum quantity of sodium chloride 0.9% that can be used to prime lines prior to dialysis is 2000mLs.</p> <p>Hypotension 100mL to 500mL sodium chloride 0.9% is used to correct hypotension as required during haemodialysis.</p> <p>The maximum quantity of sodium chloride 0.9% that can be given to correct hypotension during dialysis, before the need to contact medical staff, is 500mL.</p> <p>The maximum quantity of sodium Chloride 0.9% that can be administered to correct dehydration is 500mL.</p> <p>Prevention of Clotting Where anti coagulation isn’t appropriate, sodium chloride 0.9% can be given as 25mL to 100mL flushes every 15 to 30</p>

	<p>minutes during dialysis or as a slow infusion at a rate of 100mL/hour throughout the dialysis to prevent clotting of the extra-corporeal circuit.</p> <p>The maximum quantity of sodium chloride 0.9% that can be given as a slow infusion during dialysis to prevent clotting is 500mL.</p> <p>Wash Back 300mL to 500mL sodium chloride 0.9% is used to wash back blood in the dialysis circuit at termination.</p> <p>The maximum quantity of sodium chloride 0.9% can be given for wash back upon completion of treatment is 500mL.</p>
Frequency of dose/Duration of treatment	See Dosage/Maximum total dose section above.
Maximum or minimum treatment period	N/A
Route/Method of administration	<p>Intravenous infusion or flush.</p> <p>It is the responsibility of the nurse to check the strength, the expiry date and to record the batch numbers of the solution on the dialysis documentation.</p>
Quantity to be administered	See Dosage/Maximum total dose section above.
Storage requirements	<p>100mL bags: Do not store above 30°C.</p> <p>250mL, 500mL and 1000mL bags: This medicinal product does not require any special storage conditions.</p>
Follow-up (if applicable)	Individuals should not leave if they are feeling unwell without speaking to the healthcare professional who administered the medicine first. If necessary a doctor or the individuals GP should be contacted for advice.
Advice (Verbal)	<p>Advise individual what to expect and what to do for minor and major reactions.</p> <p>If serious adverse or persistent effects occur, the individual should be advised to contact their GP/Accident and Emergency department/NHS24.</p>

<p>Advice (Written)</p>	<p>The Patient Information Leaflet (PIL) contained in the medicine(s) should be made available to the individual. Where this is unavailable, or unsuitable, sufficient information should be given in a language that they can understand.</p>
<p>Identifying and managing possible adverse reactions</p>	<p>Caution is advised in patients treated with lithium. Renal sodium and lithium clearance may be increased during administration of sodium chloride 0.9% intravenous Infusion, therefore intravenous infusion may result in decreased lithium levels.</p> <p>Corticosteroids and carbenoxolone, are associated with the retention of sodium and water (with oedema and hypertension).</p> <p>This list is not exhaustive. Please also refer to current BNF and manufacturers SmPC for details of all potential adverse reactions.</p> <p>BNF: BNF British National Formulary - NICE</p> <p>SmPC/PIL/Risk Minimisation Material: Home - electronic medicines compendium (emc) MHRA Products Home RMM Directory - medicines starting with A - (emc)</p> <p>If an adverse reaction does occur give immediate treatment and inform relevant medical practitioner as soon as possible.</p> <p>Report any severe reactions using the Yellow Card System. Yellow Card Scheme - MHRA</p>
<p>Facilities and supplies required</p>	<p>The following are to be available at sites where the medicine is to be administered:</p> <ul style="list-style-type: none"> • Appropriate storage facilities • An acceptable level of privacy to respect individual’s right to confidentiality and safety • Basic airway resuscitation equipment (e.g. pocket mask, bag valve mask, supraglottic airway) • Immediate access to Epinephrine (Adrenaline) 1 in 1000 injection • Access to a working telephone • Another competent adult, who can summon urgent emergency support if required should ideally be present • Access to medical support (this may be via the telephone) • Approved equipment for the disposal of used materials • Clean and tidy work areas, including access to hand washing facilities or alcohol hand gel

	<ul style="list-style-type: none"> • A copy of this current PGD in print or electronically.
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Characteristics of staff authorised to administer medicine(s) under PGD

Professional qualifications	Registered Nurses as recognised by the Nursing and Midwifery Council (NMC).
Specialist competencies	<p>Approved by the organisation as:</p> <ul style="list-style-type: none"> • Competent to assess the individual’s capacity to understand the nature and purpose of the medicine administration in order to give or refuse consent • Aware of current treatment recommendations and be competent to discuss issues about the medicine with the individual • Having undertaken appropriate training to carry out clinical assessment of individuals identifying that treatment is required according to the indications listed in the PGD • Competent to undertake administration of the medicine • Competent to work under this PGD.
Ongoing training and competency	<p>All professionals working under this PGD must:</p> <ul style="list-style-type: none"> • Have undertaken PGD training as required/set out by NHSG • Have attended basic life support training either face to face or online and updated in-line with Board requirements • Have undertaken NHS e-anaphylaxis training or equivalent which covers all aspects of the identification and management of anaphylaxis in-line with Board requirements • Maintain their skills, knowledge and their own professional level of competence in this area according to their Code of Professional Conduct • Have knowledge and familiarity of the following; <ul style="list-style-type: none"> ○ SmPC for the medicine(s) to be administered in accordance with this PGD.
Responsibilities of professional manager(s)	<p>Professional manager(s) will be responsible for;</p> <p>Ensuring that the current PGD is available to all staff providing care under this direction.</p> <p>Ensuring that staff have received adequate training in all areas relevant to this PGD and meet the requirements above.</p> <p>Maintain up to date record of all staff authorised to administer the medicine(s) specified in this direction.</p>

Documentation

<p>Authorisation of administration</p>	<p>Nurses working in Haemodialysis Units within NHS Grampian can be authorised to administer the drug specified in this PGD by their Clinical Manager or Consultant.</p> <p>All authorised staff are required to read the PGD and sign the Agreement to Administer Medicines Under PGD (Appendix 1).</p> <p>A Certificate of Authorisation (Appendix 2) signed by the authorising professional/manager should be supplied. This should be held in the individual health professional's records, or as agreed locally.</p>
<p>Record of administration</p>	<p>An electronic or paper record for recording the screening of individuals and the subsequent administration, or not of the medicine(s) specified in this PGD must be completed in order to allow audit of practice. This should include as a minimum:</p> <ul style="list-style-type: none"> • Date and time of administration • Individuals name and CHI • Exclusion criteria, record why the medicine was not administered (if applicable) • Record that valid consent to treatment under this PGD was obtained • The name, dose, form, route (batch number, expiry date and site where appropriate for injectable medicines) of the medicine administered Advice given, including advice given if excluded or declined treatment under this PGD • Signature and name in capital letters of the healthcare professional who administered the medicine • Record of any adverse effects (advise individuals GP/relevant medical practitioner). <p>Depending on the clinical setting where administration is undertaken, the information should be recorded manually or electronically, in one (or more) of the following systems, as appropriate:</p> <ul style="list-style-type: none"> • Secondary Care Medical Notes • Individual service specific systems.
<p>Audit</p>	<p>All records of the medicine specified in this PGD will be filed with the normal records of medicines in each practice/service. A designated person within each practice/service where the PGD will be used will be responsible for annual audit to ensure a system of recording medicines administered under a PGD.</p>
<p>References</p>	<p>Electronic Medicines Compendium</p>

	<p>http://www.medicines.org.uk Sodium Chloride 0.9% Intravenous Infusion BP – Date of revision of text December 2018, accessed 6/4/21.</p> <p>British National Formulary https://about.medicinescomplete.com/ accessed 6/4/2021.</p>
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Appendix 1

Healthcare Professional Agreement to Administer Medicine(s) Under Patient Group Direction

I: _____ (Insert name)

Working within: _____ e.g. Area, Practice

Agree to administer the medicine(s) contained within the following Patient Group Direction:

Patient Group Direction For The Administration Of Sodium Chloride 0.9% Intravenous Infusion By Haemodialysis Staff Nurses Working Within NHS Grampian

I have completed the appropriate training to my professional standards enabling me to administer the medicine(s) under the above direction. I agree not to act beyond my professional competence, nor out with the recommendations of the direction.

Signed: _____

Print Name: _____

Date: _____

Profession: _____

Professional Registration number/PIN _____

Appendix 2

Healthcare Professionals Authorisation to Administer Medicine(s) Under Patient Group Direction

The Lead manager/Professional of each clinical area is responsible for maintaining records of all clinical areas where this PGD is in use, and to whom it has been disseminated.

The Senior Nurse/Professional who approves a healthcare professional to administer the medicine(s) under this PGD is responsible for ensuring that he or she is competent, qualified and trained to do so, and for maintaining an up-to-date record of such approved persons.

The Healthcare Professional that is approved to administer the medicine(s) under this PGD is responsible for ensuring that he or she understands and is qualified, trained and competent to undertake the duties required. The approved person is also responsible for ensuring that administration is carried out within the terms of the direction, and according to his or her individual code of professional practice and conduct.

Patient Group Direction For The Administration Of Sodium Chloride 0.9% Intravenous Infusion By Haemodialysis Staff Nurses Working Within NHS Grampian

Local clinical area(s) where the listed healthcare professionals will operate under this PGD:

Name of Healthcare Professional	Signature	Date	Name of Manager	Signature	Date

**Patient Group Direction For The Administration Of Sodium Chloride 0.9%
Intravenous Infusion By Haemodialysis Staff Nurses Working Within NHS
Grampian**

Name of Healthcare Professional	Signature	Date	Name of Manager	Signature	Date