

## Self-Administration of Coagulation Factor

<b>Policy Number</b>	1.361
<b>Policy Function</b>	Continuum of Care
<b>Issue Date</b>	22 September 2017 ( <i>minor eMeds update 19 July 2022</i> )
<b>Summary</b>	This policy provides continuity of care to patients with severe Haemophilia detained in Correctional and Juvenile Justice Centres by supervising the self-administration of the coagulation factor.
<b>Responsible Officer</b>	Executive Director Clinical Operations
<b>Applicable Sites</b>	<input type="checkbox"/> Administration Centres <input type="checkbox"/> Community Sites (e.g. Court Liaison Service, Community Integration Team, etc.) <input checked="" type="checkbox"/> Health Centres (Adult Correctional Centres or Police Cells) <input checked="" type="checkbox"/> Health Centres (Youth Justice Centres) <input checked="" type="checkbox"/> Long Bay Hospital <input type="checkbox"/> Forensic Hospital
<b>Previous Issue(s)</b>	Policy 1.361 (Mar 2014, Aug 2011)
<b>Change Summary</b>	<ul style="list-style-type: none"><li>• Update to terminology.</li><li>• The consent for self-administration form has been updated.</li><li>• Supervision procedure moved to the appendix.</li></ul>
<b>TRIM Reference</b>	POLJH/1361
<b>Authorised by</b>	Chief Executive, Justice Health and Forensic Mental Health Network

## 1. Preface

A small percentage of Justice Health and Forensic Mental Health Network (the Network) patients are diagnosed with Haemophilia. Haemophilia is a bleeding disorder that impairs the body's ability to control blood clotting, or coagulation. Haemophilia A is the most common form and is due to the deficiency of Factor VIII. Haemophilia B is due to the deficiency of Factor IX. Haemophilia is almost always inherited and affects predominately males.

Severe forms of Haemophilia A and B require prophylactic infusion of the coagulation factors as determined by Haematologists. Children and adolescents are priority groups for prophylactic treatment and generally require administration of the coagulation therapy intravenously every two to three days. Some adult patients also require regular infusions to prevent serious bleeding, or require transfusions of coagulation factor prior to dental procedures and surgery.

## 2. Policy Content

### 2.1 Mandatory Requirements

To facilitate ongoing management of the Network patients with severe Haemophilia A or B, Network staff will organise and supervise the self-administration of the coagulation therapy in Health Centres and Inpatient Facilities. All clinical staff involved in the process must firstly complete the eLearning program *Bloodsafe: Clinical Transfusion Practice* available through the NSW Health Learning Management System (LMS).

In the community, the coagulation therapy is usually self-administered at home by the patient.

All patients in NSW with haemophilia or a related bleeding disorder (regardless of whether or not they require treatment) must be registered with a Haemophilia Treatment Centre (HTC) and the Australian Bleeding Disorders Registry. The HTC will have details on the patient's current treatment orders. A list of HTC's can be found here: <https://www.haemophilia.org.au/foundationsandservices/treatment-services>.

### 2.2 Implementation - Roles & Responsibilities

**Nursing Unit Managers (NUM)** are responsible for ensuring that all nursing staff comply with this policy.

**All clinical staff** are responsible for compliance with the procedures set out in this policy.

## 3. Procedure Content

Patients with Haemophilia A or B are given prophylactic coagulation factors every two to three days (dependent on recommendations by the HTC) which is usually self-administered. Young people with mild to moderate Haemophilia A or B, von Willebrand's Disorder and other more rare forms of clotting disorders may only require treatment for injuries, dental extractions and surgery. Most adults with coagulation disorders only require treatment for injuries, dental extractions, surgery and menorrhagia.

Network staff who have completed the eLearning program *Bloodsafe: Clinical Transfusion Practice* can co-ordinate and supervise this treatment.

### 3.1 Clinical Assessment of Bleeding Disorders

The following must occur for patients who have been diagnosed with Haemophilia or any other bleeding disorder, regardless of severity:

- The patient's HTC and/or Treating Team must be alerted to the patient being in custody. The patient must be put on the Medical Officer's (MO) PAS waiting list with category "Urgent", and the relevant Clinical Director should be made aware of the patient.
- The clinical alert "Risk of Bleeding" must be placed on PAS specifying the risk of serious bleeding with minor trauma.
- For adults, a *Health Problem Notification Form* JUS005.001 (HPNF) or a *Health Problem Notification and Escort Form* JUS005.002 (HPNEF) for adolescents must be completed on PAS, printed and given to the appropriate Corrective Services NSW (CSNSW)/private operator/Youth Justice NSW (YJNSW)/Department of Education (DoE) representatives. The form must include the requirement for the patient to be excluded from any sport or high risk activity (until assessed by a MO), and provide instructions to contact the Network immediately with any concerns regarding bleeding, pain, drowsiness, headache, joint pain or swelling. Refer to JHFMHN Policy [1.231](#) *Health Problem Notification Form (Adults)* or JHFMHN Policy [1.235](#) *Health Problem Notification and Escort Form (Adolescents)* for more information.
- The patient's vaccination status must be reviewed. It is recommended that patients with coagulation disorders and who currently receive, or may require, blood products should be vaccinated for Hepatitis B and A if non-immune<sup>1</sup>. Vaccinations should be arranged in consultation with the HTC and/or Treating Team.
- An external appointment to the local HTC may need to be arranged, but this should not delay the patient's treatment/regular clotting factor infusions. Refer to JHFMHN Policy [1.264](#) *Medical Appointments (External and Internal) – Referrals, Bookings and Cancellations* for information on medical appointments.
- In consultation with the local HTC, each patient must have a documented management plan and telephone orders for their factor infusions, if required. This plan should include requirements for regular review by the HTC or the Treating Team if appropriate.

### 3.2. Injury, Bleeding, Elective Surgery and Dental Extractions

In addition to regular prophylactic infusions, some patients with a bleeding disorder may require specialised treatment and infusions for instances of injury, bleeding, emergency or elective surgery and dental extractions. These should be discussed with the HTC and Treating Team.

#### 3.2.1 Patients with Mild to Moderate Forms of Coagulation Disorders

Patients who present with mild and moderate coagulation disorders including mild Haemophilia A or B, von Willebrand's Disorder and other rare coagulant disorders, who do not require regular infusions of coagulation therapy, may require prompt treatment for injuries which may cause bleeding.

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<sup>1</sup> The Australian Health Minister's Advisory Council Evidence-based Clinical Practice Guidelines for the Use of Recombinant and Plasma-derived Factor VIII and Factor IX Products (2006)

In the instance of injury, bleeding or suspicion of a bleed (joint pain or swelling, headache, drowsiness, or complaints of pain), immediate review by a nurse is required. If necessary, the nurse will administer first aid. If a nurse is not on duty, the After Hours Nurse Manager (AHNM) should be contacted and the patient must be transferred to the local Hospital Emergency Department for assessment and appropriate treatment. Refer to Network Policy [1.252 Access to Local Public Health Services](#).

A HTC assessment is required prior to elective surgery, dental extraction, and in conjunction with pre-natal care. Elective surgery and dental extractions are only to be performed in a HTC as per [PD2013 027 Management of Haemophilia and Related Bleeding Disorders](#).

### **3.2.2 Patients with Severe Haemophilia A or B**

Network patients with severe Haemophilia A or B who sustain an injury require urgent attention as the injury may cause bleeding to the joint, central nervous system or muscle and can be life-threatening. Symptoms of injury categorised by body region are as follows:

- Head/Intracranial: Nausea, vomiting, headache, drowsiness, confusion, visual changes, loss of consciousness.
- Neck and Throat: Pain, swelling, difficulty breathing/swallowing.
- Abdominal/Gastrointestinal: Pain, tenderness, swelling, blood in stool.
- Iliopsoas Muscle: Back pain, abdominal pain, thigh tingling/numbness, decreased hip range of motion.

In the instance of bleeding or suspicion of a bleed (joint pain or swelling, headache, drowsiness, or complaints of pain), the patient must be transferred immediately to the local Hospital Emergency Department for assessment and appropriate treatment of the bleed.

The patient should be discussed with the HTC, but this must not delay the urgent transfer of the patient to the local Hospital Emergency Department. In some instances of minor bleeding, the HTC may instruct that the patient is required to self-infuse coagulation factor in the Network health centre or inpatient facility prior to being transferred out. In all instances of bleeds, first aid must be administered. This includes treating the bleed with compression and ice, and resting and elevating the injured area. Refer to the *Emergency Response Guidelines (Adult or Adolescent)* for information on how to treat severe bleeds/penetrating trauma/hypovolaemia. Patients must be excluded from transfer to remote sites.

Consultation with the HTC is required pre-elective surgery, dental extraction, and in conjunction with prenatal care. Elective surgery and dental extractions must only be performed in a HTC as per NSW Health policy [PD2013 027 Management of Haemophilia and Related Bleeding Disorders](#).

## **3.3 Self-Administration of Coagulation Therapy**

Most patients with severe Haemophilia A or B require prophylactic coagulant therapy every two to three days to prevent bleeding. This takes the form of intravenous administration of the coagulant therapy which is self-administered. Network staff, in consultation with the relevant Clinical Director and HTC must establish that the patient is competent in the self-administration of the therapy, and must organise and supervise the administration of this product. Each health centre or inpatient facility that supervises the self-administration of the coagulation therapy is advised to download the resource entitled '*Flippin blood – a Bloodsafe flip chart to help make transfusion straight forward*'. This resource can be downloaded from <http://resources.transfusion.com.au>

### 3.3.1 Risk Assessment and Management

A number of risk factors need to be controlled for the safe administration of coagulation process. There is a risk of needle stick injury, exposure to blood borne viruses, risk of litigation and danger that the equipment (e.g. needle) may be used as a weapon. Each Health Centre must ensure that a *Safe Work Practice* is in place prior to initiating the self-administration of the coagulation therapy. Safe work practices (SWP) are written instructions that detail how a particular task is to be completed in a safe manner. A SWP does not replace training or supervision, if required.

Staff must undertake a *Work Health and Safety Risk Management Form (EMP148)* on each patient to identify any risks prior to commencing the self-administration process. Patients who have risk factors including (but not limited to) a history of violence or verbal aggression towards staff are to be supervised by a CSNSW/private operator/YJNSW Officer (officer in doorway) during the self-administration process. In the event that there is deterioration in any patient's behaviour during the process, or if the staff member feels threatened or unsafe, they should activate their personal duress alarm or the fixed duress alarm to enable CSNSW/private operator/YJNSW Officers to respond quickly to the emerging situation. It is essential that the nurse should withdraw from the escalating situation.

For further information, refer to the JH&FMHN Policy [5.110 Work Health and Safety](#).

### 3.3.2 Consent

Informed consent must be obtained from the patient prior to organisation of the self-administration of coagulation therapy treatment. As part of the informed consent process, patients must be given a clear explanation of the potential risks and benefits of the coagulation therapy.

Consent is to be given once at the start of the treatment and again at such a time that there is a material change in circumstance or condition so as to warrant re-assessment of the risks/benefits of this therapy. For information on consent, refer to JHFMHN Policy [1.085 Consent To Medical Treatment – Patient Information](#) and MoH Policy [PD2005 406 Consent to Medical Treatment Patient Information](#).

### 3.3.3 Prescription and Ordering

JHFMHN does not directly order the appropriate coagulant therapy. Prescription and ordering of the patient's coagulant therapy is initially negotiated with the treating HTC. This order will go directly to the relevant pharmaceutical company and/or the Australian Red Cross and be delivered to the Network Pharmacy Department.

The MO at the health centre, Clinical Director Primary Care, or Clinical Director Adolescent Health must contact the Network Pharmacy Department with the order details of the coagulant therapy required, complete the Medication Chart. Refer to Network Policy [1.020 Medication Management](#) and the [Network Medication Guidelines](#) for further information.

### 3.3.4 Storage

In accordance with section 5.12 of the [Network Medication Guidelines](#), the coagulant therapy should be stored in a refrigerator between 2°C to 8°C. It should be noted however, that the product information of the coagulant therapy may indicate other storage options, and this information should primarily be referred to.

### 3.3.5 Education

Prior to supervising the self-administration of coagulation therapy, the clinician must have completed the eLearning program *Bloodsafe: Clinical Transfusion Practice* available through the NSW Health My Health Learning.

Nursing staff supervising administration are required to have completed and maintain Network Venepuncture accreditation. Nurses must submit relevant documentation supporting their maintenance of venepuncture skills annually via the local assessor to the Education and Training Centre. Refer to Network Policy [1.425 Venepuncture and Peripheral Cannulation](#) for further information.

As part of the auditing requirements for mandatory training, the Nurse Unit Manager (NUM) must maintain a local process for tracking compliance of staff with the Blood Safe education and Venepuncture training.

### **3.3.6 Supervision**

The patient must be supervised by a nurse or GP during the self-administration of the coagulation therapy. For further guidance, refer to the self-administration supervision procedure set-out in [Appendix 1](#).

As per the *Business Process - Targeted Training Strategy: BloodSafe: Clinical Transfusion Practice eLearning* (DG61942/16), if the nursing staff have not undertaken the training when a patient is admitted to custody requiring self-administration, an accredited Clinical Nurse Educator (CNE) if present, can initiate the treatment.

If a patient presents after hours and no venepuncture accredited staff are on duty, the Registered Nurse (RN) must contact the AHNM and advise of the patient's condition and required treatment. Any RN onsite who has completed the *Bloodsafe: Clinical Transfusion Practice program* and has JH&FMHN Venepuncture Accreditation can assist the patient in the self-administration process. Consultation with the on-call pharmacist will need to occur.

If there is no venepuncture accredited nurse onsite or if the patient presents to the police cells, the patient must be transferred to the local hospital for treatment. The AHNM should be notified of transfer to hospital.

The flowchart in [Appendix 2](#) has been developed to further support and guide the training requirements of staff where a patient presents requiring coagulation factor treatment.

## **4. Definitions**

### **Blood Component**

Any product derived from human whole blood or plasma donations, including red cells, platelets, plasma, cryoprecipitate, coagulation factors, albumin and immunoglobulins.

### **Must**

Indicates a mandatory action to be complied with.

### **Should**

Indicates a recommended action to be complied with unless there are sound reasons for taking a different course of action.

### **Medication Chart**

Refers to a paper-based (Long Stay Medication Chart, National Inpatient Medication Chart) or electronic medication order.



**Patient Health Record**

A hybrid record of paper-based and electronic information pertaining to the health of the patient.

## 5. Acronyms

CIMS: Client Information Management Systems

INR: International Normalised Ratio

MIN: Master Index Number

MRN: Medical Record Number

NUM: Nurse Unit Manager

PAS: Patient Administration System

## 6. Legislation and Related Documents

JH&FMHN Policies and Procedures	<a href="#">1.020</a> <i>Medication Management</i> <a href="#">1.085</a> <i>Consent to Medical treatment – Patient Information</i> <a href="#">1.231</a> <i>Health Problem Notification Form (Adult)</i> <a href="#">1.235</a> <i>Health Problem Notification and Escort Form (Adolescent)</i> <a href="#">1.264</a> <i>Medical Appointments (External and Internal) – Referrals, Bookings and Cancellations</i> <a href="#">1.330</a> <i>Access to Local Public Health Services</i> <a href="#">1.425</a> <i>Venepuncture and Peripheral Cannulation</i> <a href="#">5.070</a> <i>Infection Prevention and Control</i> <a href="#">5.110</a> <i>Work Health and Safety</i> <i>Emergency Response Guidelines (<a href="#">Adult</a> or <a href="#">Adolescent</a>)</i> <a href="#">Guidelines for the Management of Patients on Anticoagulation</a> <a href="#">Network Medication Guidelines</a> <a href="#">Waste Management Procedure Manual</a>
JH&FMHN Forms	<i>JUS005.001 Health Problem Notification Form (for adults)</i> <i>JUS005.002 Health Problem Notification and Escort Form (for adolescents)</i> <i>JUS020.001 Consent for Self-Administration of Coagulation Therapy Long Stay Medication Chart</i>
NSW MoH Policy Directives, and Guidelines	<a href="#">PD2005_157</a> <i>Emergency Paediatric Referrals</i> <a href="#">PD2013_027</a> <i>Management of Haemophilia and Related Bleeding Disorders</i> <a href="#">PD2012_016</a> <i>Blood - Management of Fresh Blood Components</i> <a href="#">PD2014_036</a> <i>Clinical Procedure Safety</i> <a href="#">PD2005_406</a> <i>Consent to Medical Treatment – Patient Information</i>



## Appendix 1: Self-Administration Supervision Procedure

### Pre-Administration Checklist

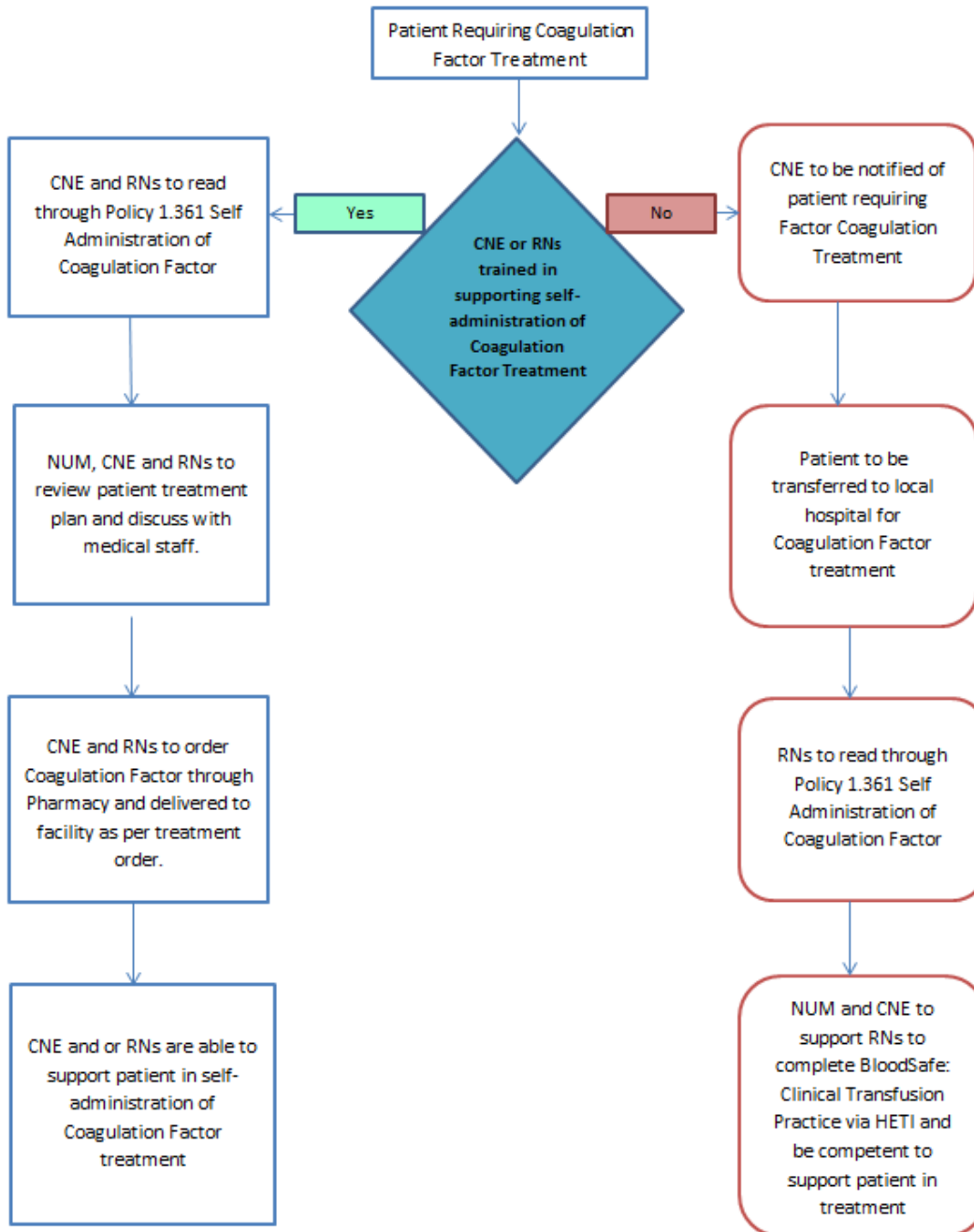
1. Check patient name, MIN/CIMS/MRN, date of birth and allergies
2. Work Health and Safety Risk Management Form (EMP148) to be completed for each patient to identify any risks prior to commencing the self-administration process. Refer also to the local Safe Work Practice, if required.
3. Coagulation therapy check: correct patient, MIN/CIMS/MRN, name of coagulant therapy, expiry date, visual inspection to check seal and contents, temperature check of refrigerator.

### Set-Up and Administration

1. Patient attends the Health Centre/Inpatient Facility. Morning is the optimal time.
2. Patient identifies self to nurse/MO: name, MIN/CIMS/MRN, date of birth and allergies.
3. Patient checks coagulant therapy with nurse/MO against order on the patient's Medication Chart.
4. Nurse/MO and patient perform hand hygiene using liquid neutral soap and water and checks the infusion equipment:
  - Prescribed coagulant therapy kit includes alcohol wipe, vials: product and diluents, reconstitution device, 23g scalp vein needle, syringe and adhesive spot dressing
  - Gloves (medical examination) for patient and nurse/MO
  - Tourniquet
  - Cotton ball
  - Under pad
  - Sharps disposal container.
5. Nurse/MO and patient perform hand hygiene again (as indicated above); non sterile examination gloves are donned.
6. Patient prepares the equipment under the direct supervision of the nurse/MO.
7. Patient reconstitutes the coagulant therapy as per individual product information. Reconstitute immediately prior to administration.
8. Patient swabs the appropriate access area, allows skin to air dry.
9. Before insertion, loosen off screw cap; patient inserts the 23g scalp vein needle.
10. Patient attaches syringe to the end of scalp vein.
11. Patient delivers bolus dose of coagulant product.
12. Network nurse/MO to continue constant visual observation; observe for signs of an adverse reaction and tissue infiltration for the duration of the infusion and for 5 to 10 minutes post infusion.
13. Symptoms of adverse reaction may include: skin rash, itching, tightness in throat or chest, shortness of breath, chest pain or wheezing.
14. If a reaction does occur - stop administration immediately, assess vital signs, provide emergency care as per the *Emergency Response Guidelines* ([Adult](#) or [Adolescent](#)) and notify the MO. Inform the HTC and the Transfusion Service provider.

15. On completion of administration, patient to remove scalp vein and immediately dispose of needle into sharps container; patient to apply pressure to site until bleeding has completely resolved.
16. Patient to apply adhesive spot dressing to puncture site.
17. Gloves are removed and hand hygiene is performed (as indicated above)
18. Nurse/MO ensures that all equipment is accounted for.
19. Nurse/MO to discard equipment as per the [JH&FMHN Waste Management Procedure Manual](#), and JHFMHN Policy [5.070 Infection Prevention and Control](#).
20. Nurse/MO documents on Medication Chart - include name, batch number and expiry date of coagulant therapy (most vials have a peel off label).
21. Nurse/MO records self-administration by using the grouping of Self Administration within the Medication Chart and books an appointment on PAS for next routine infusion.

## Appendix 2: Flowchart - Targeted Training Strategy



Ref. Business Process for BloodSafe eLearning HETI (DG61942/16)