

Cast Application and Subsequent Care Policy

V2.1

November 2019

Summary

This policy states the responsibilities of the Medical and Para-Medical team in the management of adults and children who require application of a cast in order to provide the most appropriate treatment dictated by the Medical Team in partnership with the patient or patient's guardian/ carers.

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1. Introduction

1.1. This policy has been developed to support all Trust staff in the appropriate application of a plaster cast or synthetic cast in adults and children.

1.2. This version supersedes any previous versions of this document.

1.3. Data Protection Act 2018 (General Data Protection Regulation – GDPR) Legislation

The Trust has a duty under the DPA18 to ensure that there is a valid legal basis to process personal and sensitive data. The legal basis for processing must be identified and documented before the processing begins. In many cases we may need consent; this must be explicit, informed and documented. We can't rely on Opt out, it must be Opt in.

DPA18 is applicable to all staff; this includes those working as contractors and providers of services.

For more information about your obligations under the DPA18 please see the 'information use framework policy', or contact the Information Governance Team rch-tr.infogov@nhs.net

2. Purpose of this Policy/Procedure

2.1. The purpose of this document is to outline the Trust policy for the appropriate selection and application of a cast in all patients. It contains the responsibilities, procedures and documentation required to carry out the process. The policy becomes effective from the date of ratification.

2.2. To ensure that consideration is given to the appropriate selection and application of a cast in all patients, adults and young people, carers, children and their parents are entitled to expect to be fully involved in the planning of these procedures including an explanation of the process.

2.3. To ensure that any information collected from the patient follows a standardised format which is agreed by the multidisciplinary team.

3. Scope

This procedure applies to all staff working within the Royal Cornwall Hospital Trust. The purpose of the document is to ensure the safe and appropriate selection of casting material and equipment required for the safe and correct application of a cast as indicated by clinical treating teams and also includes the subsequent care of the cast up to its removal.

4. Definitions / Glossary

- PPE - personal protective equipment

5. Ownership and Responsibilities

5.1. Staff involved in the selection and application of a cast are required to follow the policy and be clear with regard to their individual roles and responsibilities within the process. A hard copy of this policy should be available in all areas where casts may be applied or are cared for in order for staff to refer to it and sign to say that they have read and understood it. The policy will also be on the Document Library.

5.2. Role of the Managers

Line managers are responsible for:

- Ensuring staff have training to implement the policy
- Ensuring equipment is available.
- Ensuring sufficient resource to deal with any plaster problems that arise
- Sufficient plaster technician resource

5.3. Role of the Consultant Medical Staff and Medical Team (including plaster technicians)

The consultant staff and those to whom they delegate duties are responsible for:

- Discussing with the patient, child and guardian/ carer the reason for their cast, the treatment involved and likely outcome including discharge and expected length of stay and length of treatment and any interventions, including the chance of failure of conservative treatment requiring operative intervention where appropriate.
- Seeking and recording the views of all patients.
- Ensuring that the patient requiring a cast has appropriate review and the management plan is updated, if anything changes.
- Seeing any patient urgently that is reporting a problem or arrange for their urgent/emergent review in a fracture clinic.
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5.4. Role of Nursing Staff

Nursing Staff involved in the care or application of a cast in adults and children are responsible for:

- Collecting and clearly documenting accurate information and ensuring plaster cast care plan is correctly filled in.
- Liaising with medical staff and plaster technicians and following instructions according to the individual needs of the patient.

- Ensuring that observations are carried out and documented in accordance with instructions from the medical team/ plaster technician.
- Ensuring that any high risk areas of skin/ other conditions are communicated to the individual applying the cast.
- Ensuring that any cast/ plaster problems are documented and communicated urgently to the appropriate individual.

5.5. Role of Casting Advisory Group

This group will be made up of Consultant Orthopaedic surgeon, Tissue viability lead nurse, Trauma Co Ordinator, Orthopaedic Matron, Senior Staff Nurse in Fracture Clinic, ED Consultant, ED Matron, and Plaster Technician Representative.

- This group will have responsibility for this policy, its review and updating in accordance with direction from the Medical Director and will be able to liaise with practitioners as required.

6. Standards and Practice

6.1. A cast to support a limb or treat a fracture or other condition can be applied in a variety of ways using different materials. Casting can be used as a first aid measure, as a support after a surgical intervention to protect a limb and as treatment. Rarely, they may be used to protect a limb from external damage.

6.2. Casts are not to be re-used once removed from the limb unless they have been specifically designed for that purpose. It is a consultant decision to re-use a cast and should be documented as such within the medical notes.

6.3. Prior to application of any cast a full and thorough assessment of the individual patient and their injury must be made. A thorough assessment of relevant physical or medical conditions that may be a risk factor for possible skin breakdown or other complication must be conducted and recorded. (It should be noted that a fracture itself or surgery can cause variable limb swelling and is automatically a risk factor for soft tissue problems.

6.4. In the presence of high risk or pre-existing skin compromise or damage, Tissue Viability and a Plaster technician should be informed at the earliest appropriate opportunity and where possible the cast application in this situation should be carried out/ led by a plaster technician.

6.5. Explain the procedure to the patient and their carer/ guardian where appropriate in order to give safety information and gain informed consent

6.6. Ensure the patient is comfortable by giving pain relief as prescribed in order to minimise discomfort during the procedure. (If applying a cast in the operating theatre for elective or trauma surgery, ensure the anaesthetic team is aware of the need for a cast)

6.7. Ensure that a plaster request form has been completed by the prescribing team. (This is not required in the operating theatre suite).

6.8. Prepare equipment by selecting the most appropriate casting material as indicated by the treating team/ plaster request form. It is anticipated that in the majority of acute situations and in theatre, plaster of paris would be the most appropriate material. Synthetic casting material is only to be used by the plaster technicians or by the treating surgeon- this should be documented in the medical notes along with the reasoning.

6.9. If using a synthetic material or applying a cast in difficult circumstances, the help and advice of a plaster technician should be sought including requesting their help in the operating theatre.

6.10. Measure the limb/ body region and cut stockinette, padding and plaster to the appropriate length to ensure that the correct size of cast is prepared to immobilise only the necessary number of unaffected joints. Cut stockinette to allow for digits as appropriate and add 5cm to allow for finishing the edges of the plaster cast.

6.11. Any wounds, including those requiring a vacuum dressing should be dressed by a registered practitioner and recorded in the medical notes to ensure continuity of care and compliance with RCHT standards for records and record keeping.

6.12. Use appropriate personal protective equipment (PPE) to minimise the risk of infection and to protect the patient. Drape the working surface- bed or trolley and the patient with protective sheeting to protect the patient, equipment and environment from the casting material which may stick to the skin, cause skin irritation or stain clothing.

6.13. Position the limb/body region correctly throughout the procedure to ensure the correct position of the plaster site to cast to maximise healing. (This may require assistance from members of the team including the play team for children).

6.14. Apply stockinette to limb/body region allowing trimming holes for digits (if appropriate) to prevent the plaster from sticking to the patient's body hair and aiding comfort of the cast.

6.15. Apply padding smoothly to limb/body region with extra over bony prominences, ensuring there are no ridges or folds to aid comfort and to prevent damage to skin from pressure or rubbing from the cast.

6.16. Soak the casting material in the tepid water for the prescribed length of time according to manufacturer instructions to impregnate the material with water and to allow the required chemical reaction to take place to allow the cast material to harden.

6.17. Apply the casting material commencing distally, working proximally, smoothing during the process to ensure snug fitting to limb/ body region accurately to ensure a smooth and tension free application which will minimise the risk of injury at pressure points and prevent venous congestion.

6.18. Fold Stockinette and padding over the ends of the casting material and secure with the last 'round' of the casting material to ensure tidy and smooth ends of cast to aid patient comfort and prevent rubbing of the cast and potential skin damage.

6.19. Elevate the limb/ body region where appropriate to above heart level to assist reduction of swelling by aiding venous return.

6.20. It is the responsibility of the nursing/ ward team to contact the treating team/ on-call team urgently if there is a problem with any cast. In the post-operative situation, if the medical team/ senior clinicians are unavoidably detained, the nurse in charge should consider emergent splitting of the back slab, using dressing scissors.

6.21. Record Patient identification details, type of material used, region applied to and any abnormalities/ concerns within the patient's notes. Ensure the treatment plan has been properly documented. If applied post-operatively, ensure there are adequate instructions with the post-operative note including need for neuro-vascular observations and length of time the patient needs to be observed prior to discharge if they are being discharged the same day.

6.22. Every Patient or their guardian/carer must be given RCHT plaster advice sheet (leaflet RCH 045) including the RCHT Advice on Driving where appropriate. The patient or their guardian/care must be given verbal information about their cast, its on-going care and what to do and who to contact if they have any concerns. This information may also be given to the patient by a sticker or tape applied to the cast in a safe manner with the QR code for access to online advice with the appropriate mobile device with QR code reader installed and the relevant phone numbers for contact in the event of any problem or concerns.

6.23. If a cast is applied prior to discharge ensure that an out-patient/ fracture clinic appointment is in place prior to discharge and that this is recorded within the medical notes. ALL casts must be checked by one of the medical team prior to discharge.

6.24. Ongoing Care of a Cast

6.24.1. Prior to discharge the patient or their guardian/carer must have plaster care discussed with them and it should be checked to make sure that they have understood.

6.24.2. Patients, their Guardians or carers must be instructed to contact the plaster room/fracture clinic if they have any concerns during working hours.

6.24.3. Outside of normal working hours, any patient with concerns must be instructed to attend the Emergency Department

6.24.4. All cast problems must be discussed with and reviewed by the Orthopaedic Registrar on call or Consultant-on-call as soon as practicable.

6.24.5. Any cast problem or potential cast problem must be taken seriously and addressed urgently and it is mandatory to remove the case where and when safe to do so and with the appropriate expertise in place. (It is recognised that rarely some patients present on multiple occasions requesting a change of cast for social reasons or perceived problems- any concern in this situation must be addressed by an Orthopaedic Surgeon)

6.24.6. In the situation, where it is reported that or there are concerns that a foreign body may be trapped between the cast and skin, the cast must be urgently changed when safe to do so and with the appropriate expertise in place to allow inspection of the skin, cast and removal of any foreign body.

6.24.7. Any evidence of any tissue damage related to a cast or a change in degree of risk must be recorded within the medical notes and discussed with the Orthopaedic Consultant in charge of the patient's care and the Tissue Viability team, regardless of patient location

6.24.8. Any soft tissue damage graded III or IV (EPUA Panel official grading) MUST be recorded as a clinical incident and investigated accordingly.

7. Dissemination and Implementation

7.1. This document will be published on the RCHT intranet site and will be available to all trust staff. Where appropriate additional paper copies will be made available to personnel without ready access to the intranet.

7.2. Ongoing training and self-directed learning packs involving casting will make reference to the updated policy.

8. Monitoring compliance and effectiveness

Element to be monitored	Decision to cast and type of cast is recorded in the notes. Patients/ Patients Carers are in receipt of plaster care documentation Patients leaving the hospital have had their treatment explained to them and they have understood Patients reporting plaster problems are dealt with promptly and seriously.
Lead	The lead for monitoring and compliance will be the Governance lead for Orthopaedics, Rory Middleton.
Tool	Audit of medical notes and patient experience, to ensure compliance Use of Datix
Frequency	This will be audited 3 /12 after release of the document and then on an annual basis
Reporting arrangements	Audits will be reported via the Divisional Audit and Guidelines meeting in the Directorate. Any serious concerns will be escalated to the senior nursing team and the Medical Director

Acting on recommendations and Lead(s)	Reports should be discussed at the appropriate Operational Board and any high risk areas highlighted and action plans developed to address any gaps identified.
Change in practice and lessons to be shared	Lessons will be shared with all relevant stakeholders by presentation at departmental audit and to the MIU's via the Emergency Department. Following liaison with relevant stakeholders, any required changes to practice will be discussed prior to being reflected in this policy and implementation clinically.

9. Updating and Review

9.1. The policy author is responsible for ensuring the policy is kept up to date, with reviews being carried out at least once every three years, reflecting changes in legislation where necessary.

9.2. Any revision activity is to be recorded in the Version Control Table as part of the document control process.

10. Equality and Diversity

10.1. This document complies with the Royal Cornwall Hospitals NHS Trust service Equality and Diversity statement which can be found in the ['Equality, Inclusion & Human Rights Policy'](#) or the [Equality and Diversity website](#).

10.2. Equality Impact Assessment

The Initial Equality Impact Assessment Screening Form is at Appendix 2.

Appendix 1. Governance Information

Document Title	Cast Application and Subsequent Care Policy V2.1		
Date Issued/Approved:	21 st November 2019		
Date Valid From:	November 2019		
Date Valid To:	6 th February 2022		
Directorate / Department responsible (author/owner):	Mr M Butler, Consultant Orthopaedic Surgeon		
Contact details:	01872 253432		
Brief summary of contents	Guidance to staff managing the care of any patient requiring a cast.		
Suggested Keywords:	Plaster Cast Cast Application Plaster of Paris Fibre Glass cast Plaster, Problem		
Target Audience	RCHT ✓	CFT	KCCG
Executive Director responsible for Policy:	Medical Director		
Date revised:	November 2018		
This document replaces (exact title of previous version):	Cast Application and Subsequent Care Policy V2.0		
Approval route (names of committees)/consultation:	Orthopaedic Governance meeting Divisional Governance meeting ED Governance Meeting		
Care Group General Manager confirming approval processes	Jo Floyd		
Name and Post Title of additional signatories	Not Required		
Name and Signature of Care Group/Directorate Governance Lead confirming approval by specialty and care group management meetings	{Original Copy Signed}		
	Name: Paul Evangelista		
Signature of Executive Director giving approval	{Original Copy Signed}		
Publication Location (refer to Policy on Policies – Approvals and Ratification):	Internet & Intranet	✓	Intranet Only

Document Library Folder/Sub Folder	Clinical / Major Trauma
Links to key external standards	None
Related Documents:	<ul style="list-style-type: none"> • RCHT Patient Identification Policy • RCHT Consent to Treatment/Examination • RCHT Standards of Record keeping • RCHT Infection Control • RCHT Anticoagulant Policy • Paediatric Orthopaedic Self Directed Learning Pack • Neurovascular Observations Chart
Training Need Identified?	Yes

Version Control Table

Date	Version No	Summary of Changes	Changes Made by (Name and Job Title)
10.Jun.10	V1.1	Initial Issue	Michael Butler, consultant Orthopaedic Surgeon
22.04.15	V1.2	Multiple amendments from consultation. comments from Orthopaedic Consultant and Tissue Viability consultant Nurse	Michael Butler, consultant Orthopaedic Surgeon
14.05.15	V1.3	Amendments to Governance template. Formatting etc.	Kevin Wright, Divisional Nurse Surgery
January 2019	V2.0	Change to 6.22	Michael Butler, consultant Orthopaedic Surgeon
21.11.19	V2.1	Partial Update – 6.24 6 as a result of SI learning	Michael Butler, consultant Orthopaedic Surgeon

All or part of this document can be released under the Freedom of Information Act 2000

This document is to be retained for 10 years from the date of expiry.

This document is only valid on the day of printing

Controlled Document

This document has been created following the Royal Cornwall Hospitals NHS Trust Policy on Document Production. It should not be altered in any way without the express permission of the author or their Line Manager.

Appendix 2. Initial Equality Impact Assessment Form

Name of the strategy / policy / proposal / service function to be assessed Cast Application and Subsequent Care Policy V2.1						
Directorate and service area: Urgent, Emergency and Trauma Medicine/ED			New or existing document: Existing			
Name of individual completing assessment: Mike Butler			Telephone: 01872 253432			
1. <i>Policy Aim*</i> <i>Who is the strategy / policy / proposal / service function aimed at?</i>		Safe application of a cast and its subsequent care				
2. <i>Policy Objectives*</i>		Safe application of a cast and its subsequent care				
3. <i>Policy – intended Outcomes*</i>		Safe Application of a Cast and its subsequent care, reduction in SI's/ patients reporting plaster problems				
4. <i>*How will you measure the outcome?</i>		Record keeping DATIX Audit tool				
5. Who is intended to benefit from the <i>policy</i> ?		All patients requiring cast.				
6a Who did you consult with		Workforce	Patients	Local groups	External organisations	Other
		X				
b). Please identify the groups who have been consulted about this procedure.		Please record specific names of groups All consultant Surgeons, Registered Nurses and Plaster Technicians. Tissue Viability Nurse Consultant, Emergency Department Governance				
What was the outcome of the consultation?		Ratified				

7. The Impact					
Please complete the following table. If you are unsure/don't know if there is a negative impact you need to repeat the consultation step.					
Are there concerns that the policy could have differential impact on:					
Equality Strands:	Yes	No	Unsure	Rationale for Assessment / Existing Evidence	
Age		X			
Sex (male, female, trans-gender / gender reassignment)		X			

Race / Ethnic communities /groups		X					
Disability - Learning disability, physical impairment, sensory impairment, mental health conditions and some long term health conditions.		X					
Religion / other beliefs		X					
Marriage and Civil partnership		X					
Pregnancy and maternity		X					
Sexual Orientation, Bisexual, Gay, heterosexual, Lesbian		X					
<p>You will need to continue to a full Equality Impact Assessment if the following have been highlighted:</p> <ul style="list-style-type: none"> You have ticked “Yes” in any column above and No consultation or evidence of there being consultation- this <u>excludes</u> any <i>policies</i> which have been identified as not requiring consultation. or Major this relates to service redesign or development 							
8. Please indicate if a full equality analysis is recommended.				Yes		No	X
9. If you are not recommending a Full Impact assessment please explain why.							
'Not indicated'							
Date of completion and submission	21.11.19		Members approving screening assessment		Policy Review Group (PRG) 'APPROVED'		

This EIA will not be uploaded to the Trust website without the approval of the Policy Review Group.

A summary of the results will be published on the Trust's web site.