Delayed and Omitted Doses of Medicines Procedure

V3.0

March 2019

Summary.

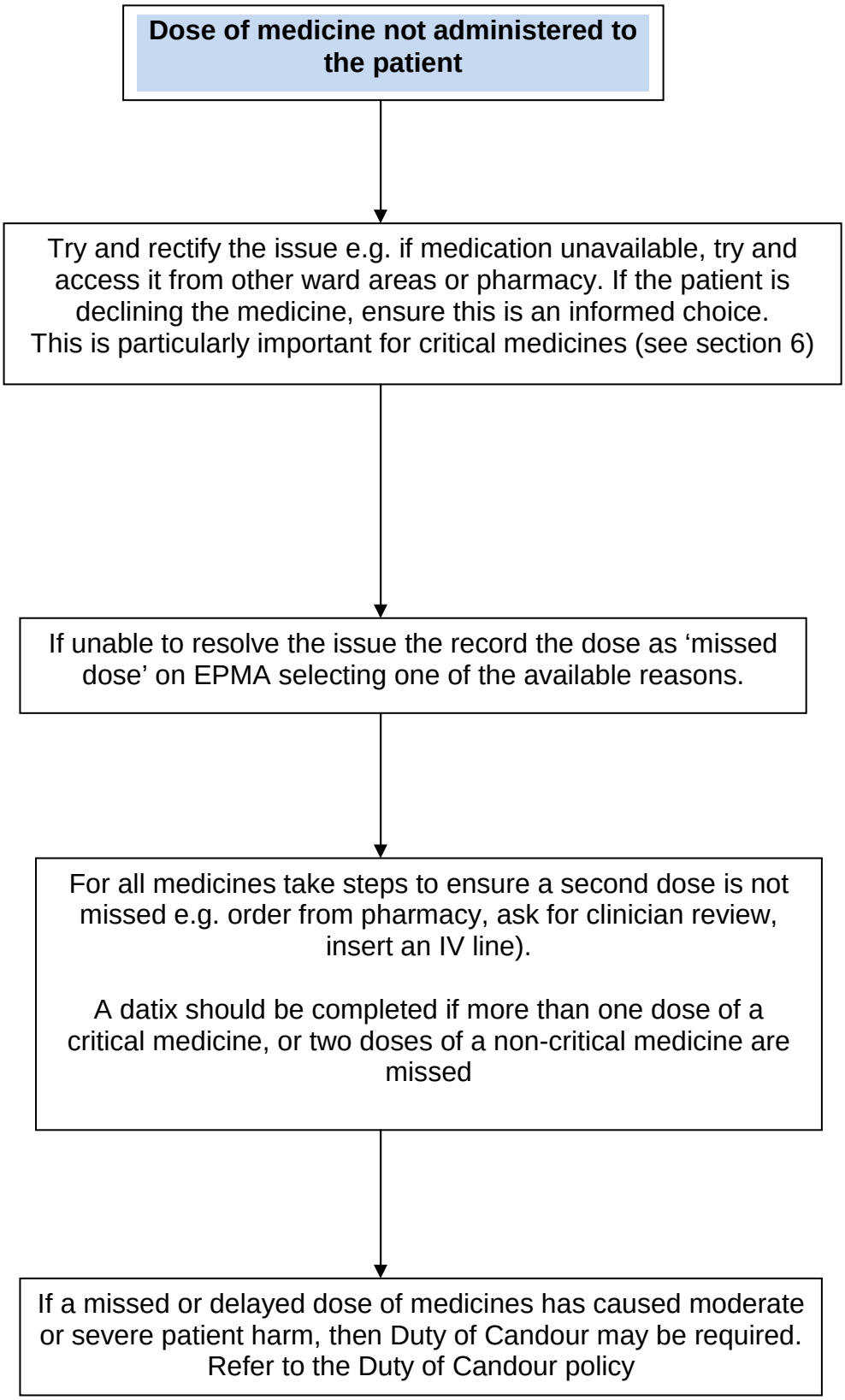
Dose of medicine not administered to the patient
Try and rectify the issue e.g. if medication unavailable, try and access it from other ward areas or pharmacy. If the patient is declining the medicine, ensure this is an informed choice. This is particularly important for critical medicines (see section 6)
If unable to resolve the issue the record the dose as 'missed dose' on EPMA selecting one of the available reasons.
For all medicines take steps to ensure a second dose is not missed e.g. order from pharmacy, ask for clinician review, insert an IV line).
A datix should be completed if more than one dose of a critical medicine, or two doses of a non-critical medicine are missed
If a missed or delayed dose of medicines has caused moderate or severe patient harm, then Duty of Candour may be required. Refer to the Duty of Candour policy

Table of Contents

1. Introduction

1.1 Delayed and omitted doses of medicines pose a threat to the wellbeing of patients and should be avoided wherever possible. The NPSA published the alert 'Reducing the harm from delayed and omitted medicines in hospital' (NPSA/2010/RRR009) in February 2010 and implementation of this procedure forms part of the Trusts' response. This procedure is developed on behalf of the Medication Practice committee

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.

The DPA18 covers how the Trust obtains, hold, record, use and store all personal and special category (e.g. Health) information in a secure and confidential manner. This Act covers all data and information whether held electronically or on paper and extends to databases, videos and other automated media about living individuals including but not limited to Human Resources and payroll records, medical records, other manual files, microfilm/fiche, pathology results, images and other sensitive data.

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 To ensure that missed and delayed doses of medication are accurately recorded in the clinical record.

2.2 Clearly state the expected response to a missed of medicines and appropriate escalation and duty of candour

3. Scope

This procedure applies to all healthcare staff involved in the prescribing, supply and administration of medicines to patients at the Royal Cornwall Hospitals NHS Trust.

4. Definitions / Glossary

- A 'Missed Dose' is a dose of scheduled dose of a medication that a patient does not receive
- A delayed dose is a dose of a medication given in excess of 2 hours of the scheduled time

5. Ownership and Responsibilities

5.1. Role of the Managers

Line managers are responsible for:

- Ensuring that all staff administering medicines comply with this policy.
- Keeping staff informed about their practice with respect to Delayed and Omitted Doses of medicines
- *Ensure Duty of Candour is undertaken where moderate or severe harm has taken place*

5.2. Role of the Medication Practice Committee

The Medicines Practice Committee is responsible for:

- Approving and updating this policy.
- Mandating changes to practice as a result of the implementation of this policy

5.3. Role of the Medication Safety Group

The Medication Safety Group is responsible for:

- Monitoring rates and trends of missed doses and clinical incidents being reported which involve Delayed and Omitted doses of medicines
- Recommending changes in practices as a result of Missed Dose monitoring

5.4. Role of Individual Staff

All staff members are responsible for:

- Recording Delayed and Omitted Doses of medicines in accordance with this policy
- Reporting Patient safety Incidents in accordance with this policy.
- *Undertake Duty of Candour where moderate or severe harm has taken place*

6. Standards and Practice

The following sections describe the actions to be taken where doses of medicines are delayed or omitted.

6.1. The following reasons for non-administration of a medication should be entered into the JAC EPMA system when a dose is not given. Use of some codes requires staff to take certain actions – see below

Reason
Administration unknown
Alternative route used
Contraindicated patient factors
Dose given on paper chart
Drug awaiting medical review
Drug discontinued
Medication unavailable
Not charted prior to discharge

Not required- in recovery
Order suspended
Other reason (record in notes)
Patient “Nil by Mouth” (e.g. before surgery)
Patient absent
Patient asleep
Patient declined dose
Patient on short term leave
Route unavailable/no access (e.g. IV access/NG tube unavailable, swallowing difficulties)
Self administered (See Guidelines for Patient Self Administration of Medicines)
Transferred patient
Unsuitable allergy/intolerance

6.2. **Critical medicines**

Any medicines in the following groups are considered critical medicines and their omission or delay should be considered to be serious and be avoided where it is possible:

Drug Name Or Class	Rationale For Inclusion
Systemic anti-infective (all routes) including: • Antibiotics • Antifungal • Antivirals • Antimalarials •	Potential worsening of systemic infection and deterioration of condition
Emergency/Resus medication • Glucose/glucagon • Naloxone • Flumazenil • IV Acetylcysteine • Anaphylaxis treatment • Resuscitation medication • Plasma expanders (colliods/crystalloids)	Failure to treat medical emergencies with risk of patient harm
Strong opiates (po/transdermal/injectable) • for the management of severe chronic pain. • for the management of post-operative pain	Loss of pain control/Increased need for intermittent analgesic doses. Patient experiences avoidable pain
Anticoagulants - therapeutic • Treatment dose heparin/LMWH • Oral anticoagulants (unless suspended intentionally)	Progression of thrombus and risk of serious embolic episode (stroke/PE)
Anticoagulants - thromboprophylaxis	Risk of thrombus and serious embolic episode
Antiepileptic agents	Loss of seizure control
Anti-Parkinsonian agents	Loss of symptom control. 'Get it on time' campaign
Antiplatelets and thrombolytics for acute coronary events/acute stroke	Increased risk of poor outcomes following MI/stroke Risk of re-stenosis in patients undergoing PCI
Benzodiazepines and parenteral vitamins for the management of acute alcohol withdrawal syndromes	Potentially fatal delirium tremens and or life-long brain damage (Wernickie-Korsakoff syndrome)
Beta-blockers perioperatively	May cause tachyarrhythmias
Blood- GSCF	Prolonged neutropenia with life threatening sepsis.
Calcium resonium, glucose/insulin	Emergency treatment of symptomatic hyperkalaemia
Chemotherapy, including adjunctive therapies	Delay in treatment and disruption of chemotherapy regimen scheduling. Treatment failure
Clozapine - antipsychotic used in treatment resistant schizophrenia.	Rebound psychosis can be sudden and set the individual back by years, missing 48 hours necessitates a re-titration taking 1-2 months
Corticosteroids	Treatment failure in acute conditions. Risk of Addisonian crisis in steroid dependency
Desmopressin - all routes for diabetes insipidus	Life threatening dehydration/hypernatraemia[2]
Insulin	Poor glycaemic control and potential for symptomatic hyperglycaemia
Oral hypoglycaemic agents	Poor glycaemic control and potential for symptomatic hyperglycaemia
IV Proton Pump Inhibitors for patients with GI bleed	Increased likelihood of poor outcome for patient.
Parenteral electrolyte replacement (including potassium, calcium, magnesium, phosphate) for the urgent treatment of symptomatic deficiencies	Deterioration in clinical condition
Immunosuppressants	Increased likelihood of disease flair or transplant rejection

6.3. Actions to take when dose omitted

Certain reasons for omitting doses require actions to be taken

Reason	Action
Patient declined dose	Identify any patterns in refusal. Refer to prescriber immediately for an omitted critical medicine or if two consecutive doses of other medicines. Discuss with the patient alternative routes/ formulations or drug choice. Where Anticoagulants for thromboprophylaxis are declined, ensure the patient is fully informed of the risk and check that TED stockings are prescribed.
Medication unavailable	*Attempt to obtain medicine* 1. Identify if medication available from ward stock. If not: 2. Identify if patient has brought a suitable supply in with them. If not: 3. Order medication from pharmacy during pharmacy opening hours. Mark the request as urgent 4. When the pharmacy is closed attempt to obtain medicines from other ward or the emergency cupboard (using the KWARD function on the JAC system to search for other areas that stock the drug- refer to the Accessing Medicines chapter of the Medicines Policy). If it is a controlled drug, follow the procedure for borrowing controlled drugs. *5.* If a "Critical medicine" is not available during times when the pharmacy is closed the on-call pharmacist should be contacted via the site manager *Inform prescriber responsible for the patient:* 1. After one omitted dose for a critical medicine 2. After two omitted doses for other medicines They should be informed of the progress of attempts to obtain the medicine
Self administered	*Ensure self administration is in line with the Guidelines on Self Administration of Medication.*
Contraindicated due to patient factors	This might occur in situations when a patient's regular medicines are contraindicated due to patient factors (e.g. antihypertensive medication contraindicated when a patient's BP low*)* *Monitor patients condition and give medicines when patient's condition allows* *Refer to Prescriber to review the patient's medication regimen if situation is ongoing for more than two doses or immediately if a dose of a critical medicine is missed.* *The reason for omission should be recorded in the patient record.*
Patient absent	*Ascertain reason (e.g. off ward for investigations or of own free will)* *Remind patient of drug round times and ask them to be present if appropriate* *Give medications when patient returns to ward* *Refer to independent prescriber for review of treatment regimen*
Patient "Nil by Mouth" (e.g. being	*Refer to independent prescriber and/or pharmacist for advice* Consult ward pharmacist or pharmacy Medicines Information for

starved before surgery)	information on giving medicines prior to surgery Refer to appendices 10 and 11 in www.rcht.nhs.uk/DocumentsLibrary/RoyalCornwallHospitalsTrust/Clinical/Anaesthetics/PreOperativeAssessmentGuidelines.pdf Be aware that most medicines can be given orally when nil by mouth for pre-op. Medications likely to be withheld include anticoagulants, clopidogrel and diabetes medications.
Route unavailable/no access (e.g. IV access/NG tube unavailable, swallowing difficulties)	*Swallowing difficulties* Immediately - Refer for SALT review if patient has not already had Immediately - Refer to independent prescriber/pharmacist for review to find alternative route for medicines, alternative drugs or alternative formulations *IV Access unavailable* Immediately - Refer to Independent prescriber for replacement of IV access or prescribing via alternative route *NG/NJ/PEG/PEJ Tube unavailable* Immediately - Refer to Independent prescriber for replacement of tube or prescribing of medicines via alternative route
Patient asleep	*For critical medicines awaken the patient and give medicine. Get independent prescriber to review timing of dose and alter if appropriate.* *For non-critical medicines omit the dose and refer to independent prescriber for a review of need for medicine or for alternative medicine/timing.*
Unsuitable allergy/intolerance	*If allergy status unknown attempt to ascertain allergy status. If unable to do so contact independent prescriber and discuss risks/benefits of giving drugs* *If patient has a documented allergy to the prescribed drug refer to independent prescriber immediately and record as a patient safety incident via Datix*
Drug awaiting medical review	*Refer to independent prescriber immediately* *two consecutive doses delayed or omitted for this reason should be reported immediately as a patient safety incident. Record this in the patient record.*
Other reason	(e.g. Not given for patient reason (antihypertensive not given as BP low) *Record reason in the patient's nursing notes and on the back of the drug chart and refer to independent prescriber for review, if appropriate*

6.4 Reporting Delayed or Omitted doses as Patient Safety Incidents (via Datix)

6.4.1 A delayed or omitted dose (as defined above) should be reported as a patient safety incident via Datix if:

- Two doses of a critical medicine (as defined above) are omitted
- Four doses of another medicine are omitted
- Where a delayed or omitted dose has caused harm to the patient

6.4.2 This information will be used to identify issues where actions can be taken to prevent similar such incidents in the future.

6.5 Missed Stat doses of Medicines

6.5.1 If stat doses are not able to be given it is important that the issue is resolved rather than simply entering a reason for non-administration on the system.

6.5.2 Once a reason for non-administration for a stat dose is given it is no longer available to administer against and therefore a significant risk that a patient may not get a timely dose of a critical medicine

6.5.3 For example, if a patient is prescribed a stat dose of an antibiotic for immediate IV administration but has no IV access, do not record 'route unavailable'. Instead, try and resolve the IV access issue and then give the stat dose as soon as possible. If IV access is not possible, a discussion with the prescriber is required and an alternative treatment plan decided before a reason for non-administration of a stat dose is recorded.

6.6 Reducing Delayed Doses of Medicines

6.6.1 For particular critical medicines, such as IV antibiotics in sepsis, fast treatment is essential and can be life-saving.

6.6.2 Prescribers MUST be aware when prescribing on the EPMA system, when the first dose will be administered. If required a STAT dose should be prescribed to ensure the patient gets treatment quickly.

6.6.3 In situations such as sepsis, it is recommended the prescriber also gives the first dose.

6.6.4 It is good practice for prescribers to verbally inform the nurse caring for the patient when a stat dose or a new drug has been prescribed.

6.7 Duty of Candour

6.7.1 Missed or delayed doses of medicines can cause harm to a patient e.g. a missed dose of anti-epileptic leading to a seizure.

6.7.2 Where moderate or serious harm has been caused, please refer to the Trust's 'Being Open and Duty of Candour Policy & Procedure' available on the Documents Library for further information of what process needs to be followed to ensure we carry out our Duty of Candour responsibility.

7. Dissemination and Implementation

7.1 The document will be hosted on the document library and the previous version archived in the pharmacy department records.

7.2 The policy has is already implemented and is part of the mandatory medicines optimisation training and Trust induction.

8. Monitoring compliance and effectiveness

Element to be monitored	Rates of missed doses of medications and the reasons
Lead	The Medication Safety Officer
Tool	EPMA Reports produced by the EPMA information analysts
Frequency	Rates will be monitored monthly. A yearly reports will be completed as part of the Chief Pharmacist Medication Strategy Review
Reporting	This will be reported to the Medication Safety Group which reports

arrangements	to the Medication Practice Committee
Acting on recommendations and Lead(s)	Medication Practice Committee
Change in practice and lessons to be shared	Required changes to practice will be identified and actioned within 3 months. A lead member of the team will be identified to take each change forward where appropriate. Lessons will be shared with all the relevant stakeholders

9. Updating and Review

This procedure will be updated as necessary in response to any future publications, NPSA alerts, patient safety incidents or by the review date. It will also be updated as required during the pilot and deployment of EPMA where updates to practice are shown to be necessary

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	Delayed and Omitted Doses of Medicines Procedure V3.0			
Date Issued/Approved:	December 2018			
Date Valid From:	March 2019			
Date Valid To:	March 2022			
Directorate / Department responsible (author/owner):	Iain Davidson- Chief Pharmacist. Pharmacy			
Contact details:	01872 252593			
Brief summary of contents	Provides clear actions that need to be taken by nursing and medical staff when a dose of medication is delayed or omitted to ensure the requirements of the NPSA RRR009 – Reducing the harm from delayed and omitted medicines in hospital are complied with			
Suggested Keywords:	Missed, Doses, Medicines, Delayed, Omitted, EPMA			
Target Audience	RCHT	CFT	KCCG	
	✓			
Executive Director responsible for Policy:	Medical Director			
Date revised:	November 2018			
This document replaces (exact title of previous version):	Version 2.0			
Approval route (names of committees)/consultation:	Medication Practice Committee, Clinical Support Care Grp Governance Meeting			
Divisional Manager confirming approval processes	Karen Jarvill			
Name and Post Title of additional signatories	Not required			
Name and Signature of Divisional/Directorate Governance Lead confirming approval by specialty and divisional management meetings	{Original Copy Signed}			
	Name: Kevin Wright			
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
Links to key external standards	
Related Documents:	Medicines Policy
Training Need Identified?	No

Version Control Table

Date	Version No	Summary of Changes	Changes Made by *(Name and Job Title)*
November 2010	V1.0	Final amendments approved; EIA Completed; document published	Ian Nicholls, Medication Safety Lead Pharmacist
November 2015	V2.0	Amendment of Governance coversheet to include 'Suggested Keywords', 'Training Need' and 'Publication Location'.	Ian Nicholls, Lead Pharmacist Governance and Electronic Prescribing
November 2018	V3.0	Expanded the list of critical medicines. Included reference for the requirement of Duty of Candour where missed and delayed doses cause moderate to severe harm.	Iain Davidson Chief Pharmacist

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

<table>
<tr><td colspan="6">Name of Name of the strategy / policy /proposal / service function to be assessed
Delayed and Omitted Doses of Medicines Procedure V3.0</td></tr>
<tr><td colspan="3">Directorate and service area:
All Areas</td><td colspan="3">Is this a new or existing Policy:
Existing</td></tr>
<tr><td colspan="3">Name of individual completing assessment:

Iain Davidson</td><td colspan="3">Telephone:

01872 252593</td></tr>
<tr><td>1. Policy Aim*

Who is the strategy / policy / proposal / service function aimed at?</td><td colspan="5">Reduce patient harm from missed doses of medicines</td></tr>
<tr><td>2. Policy Objectives*</td><td colspan="5">To provide clear actions that need to be taken by nursing and medical staff when a dose of medication is delayed or omitted
To ensure RCHT complies with the requirements of the NPSA RRR009
Reducing the harm from delayed and omitted medicines in hospital and to ensure patient harm from missed doses is minimised
Reduction in the amount of delayed and omitted doses of medication, increase in reporting of missed doses as patient safety incidents and therefore to overall reduce the harm from delayed and omitted doses of medicines
Ongoing missed dose monitoring</td></tr>
<tr><td>3. Policy – intended Outcomes*</td><td colspan="5">Reduce patient harm from missed doses of medicines</td></tr>
<tr><td>4. *How will you measure the outcome?</td><td colspan="5">Daily monitoring of missed doses of medicines</td></tr>
<tr><td>5. Who is intended to benefit from the policy?</td><td colspan="5">All inpatients within the Trust</td></tr>
<tr><td rowspan="3">6a Who did you consult with

b). Please identify the groups who have been consulted about this procedure.</td><td>Workforce</td><td>Patients</td><td>Local groups</td><td>External organisations</td><td>Other</td></tr>
<tr><td>X</td><td></td><td></td><td>X</td><td></td></tr>
<tr><td colspan="5">Please record specific names of groups</td></tr>
<tr><td>What was the outcome of the consultation?</td><td colspan="5">This policy</td></tr>
</table>

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**		

You will need to continue to a full Equality Impact Assessment if the following have been highlighted:

- You have ticked "Yes" in any column above and
- No consultation or evidence of there being consultation- this excludes any *policies* 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.

Signature of policy developer / lead manager / director		Date of completion and submission
Iain Davidson		14/11/18
Names and signatures of members carrying out the Screening Assessment	1. Iain Davidson 2. Policy review group (PRG)	**PRG Approved**

Keep one copy and send a copy to the Human Rights, Equality and Inclusion Lead
c/o Royal Cornwall Hospitals NHS Trust, Human Resources Department, Knowledge Spa, Truro, Cornwall, TR1 3HD

This EIA will not be uploaded to the Trust website without the signature of the Human Rights, Equality & Inclusion Lead.

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

Signed __ Iain Davidson _____

Date ____14/11/18_____