Clinical Advice Directorate
Guidance notes for the provision of Clinical Advice

Introduction

One of the key roles of the Ombudsman's Clinical Adviser is to help our lay caseworkers to understand the clinical issues raised in a complaint and ultimately, whether clinical care and treatment was reasonable.

We are in the process of changing some of our approach to the investigation of complaints, therefore the way clinical advice is requested is also likely to develop in the coming months. What this means for you as an Adviser is that the type of questions you may have been used to seeing might begin to look somewhat different.

The key message is to answer what it is you are being asked as clearly as you can and to ask for guidance from our Quality Assurance team (details below), or the Caseworker if you have any queries.

The following points will guide you in structuring your advice (please also refer to the anonymised case sample we have sent you. The sample consists of two different types of advice to give you an idea that the way questions are posed may be different from the case in front of you:

Template
Please ensure that you only write your advice into the specific template that was emailed to you by our Clinical Advice Support Team (CAST) for this case. We use different templates within the English and other UK countries offices and these may change

Explaining your suitability to advise on this case
When completing this section, we don't need a full CV-style outline. What we are after is really what it is about this specific case that is relevant to your particular clinical expertise. Please start with your current role.

Key documents
The first thing to read is the *Clinical Advice Request* document, which will be at, or near the top of the first file. This ensures that you are very clear about what you are being asked to do. In this request, the Caseworker will direct you to other key documents which will include their summary of the case (entitled '*Assessment Plan', 'Investigation Summary or Plan)*

Answering the questions
The way the questions are posed to you will differ depending on the stage the case is at, or indeed the country. You may be asked simply to tell the caseworker whether the response from the Body is reasonable and why. Or you may be asked to give an outline of the clinical care and treatment (*what happened, what should have happened, and the impact*). Please respond just to the specific questions asked of you and lay them out clearly in your advice.

Whatever your responses may be, check you have provided sufficient rationale to support what you have said. Clinical care and treatment will be familiar to you, but not to our lay Caseworkers.

Chronology/background

Unless you have been specifically asked to do so by the Caseworker, you do not need to produce a detailed chronology. For the early (Trust response) type of investigation, just a short paragraph outlining the clinical events is sufficient. For more detailed Investigations, a similar introduction is helpful.

Standards and Guidance

It is essential that your advice is supported by reference to recognisable, relevant professional standards where they existed at the time of the events complained about. Where none exist, please outline what would have been considered to have been '*Established good practice'*, which might consist of a *range* rather than an absolute.

If you have not made reference to any guidance we are likely to have to ask you to present further advice.

Use of language

Remember you are writing your advice to a the Caseworker (who has no clinical background). It is also possible that the Complainant will see all, or part of your advice. Therefore please avoid speculation or personalisation in your advice and any language which may be distressing or inflammatory.

Summarising your advice

Please provide a brief summary of your advice at the end. You should not be introducing any new information here. A short conclusion is a good way of ensuring that you have answered all the Caseworker's questions

Recommendations

Unless you have been specifically asked to do so by the Caseworker, please do not make any recommendations. In particular it is not appropriate to make recommendations about future clinical management as this is not the role of the Ombudsman.

Queries

If you have any queries about the questions you are being asked, please contact the Caseworker. Their number will be at the bottom of the *Clinical Advice Request*. If you are unclear about the structure of your advice, please contact a member of the Quality Assurance team (our details are at the bottom of this guidance)

Finally, please proof-read your advice. If nothing else, it will minimise delay to the case if we have to ask you to re-present your advice.

CASE SAMPLES

Enclosed are two examples of Requests for Clinical Advice, together with the advice itself.

The examples give you an idea of the different approaches our Caseworkers may use to seek your advice.

You may be asked a mixture of questions about the quality/reasonableness of the Body's response and more substantive comment on clinical issues. For more complex investigations (sample 2), you may be asked to provide more detail about the specifics of clinical care (what happened) against relevant guidance and standards or established good practice (what should have happened).

The important thing to answer what you are asked and not to stray outside of that.

Please do ask if you are unsure what is being requested of you

Clinical Advice Case Sample 1

Clinical Advice

Part 1: Request for clinical advice

Case reference: HS-XXX	History Item Number 0061

Advice sought on the following clinical issues:

Type of Clinical Adviser requested: Consultant Physician. Care provided on respiratory ward to a patient with a history of COPD.

Generalist

General Medicine	☒	General Psychiatrist	☐
General Surgery	☐	General Nurse	☐
GP	☐	Mental Health Nurse	☐
		General Dentistry	☐

OR

Specialist ☐ **Type:**

Request for specialist advice agreed by:

In what form would you like to receive the advice?	**Case discussion**	☐
	Written advice	☒

Are you requesting more than one piece of clinical advice? **Yes** ☐ **No** ☒

Questions for Clinical Adviser

1. There was a nine hour delay in administering the IV antibiotic, Tazocin, between 1pm and 10pm on 8 June. **Does the clinical adviser consider that the Trust have reasonably explained that this delay did not contribute to Mrs A's deterioration?**

2. No repeat blood gas tests were carried out before Mrs A was transferred to the respiratory ward. The Trust said that blood gas test results were fine and within Mrs A's lung condition and suggested that there was no reason to repeat the test before she was transferred to that ward. Miss B has concerns that blood gas tests were not done often enough. **Does the clinical adviser consider that the Trust have reasonably explained why there was lack of blood gas testing prior to Mrs A's transfer to the respiratory ward on 8 June, or does the clinical adviser agree with Miss B that blood gas tests should have been repeated more often?**

3. It would seem that the first blood gas test done on the respiratory ward was only carried out after Mrs A arrested. Dr C said he could not explain the rationale for not doing a blood gas test sooner because documentation had not been completed. **Does the clinical adviser believe that a blood gas test should have been carried out sooner than it was after Mrs A was transferred to the respiratory ward on 8 June?**

4. Oramorph and Lorazepam were prescribed together. The Trust said these drugs were not contraindicated and suggested that they were commonly used on patients with chronic chest problems. **Does the clinical adviser consider the Trust's response to this issue to be reasonable?**

5. On two occasions, nursing staff on the respiratory ward did not operate the Bipap equipment competently. They also failed to record and report these incidents. Miss A feels that these two incidents may have comprised her mother's breathing and contributed to her deterioration. **Does the clinical adviser consider that the Trust has reasonably explained that the failure to competently use the Bipap equipment did not contribute to Mrs A's deterioration?**

6. **Should a review by a senior member of the medical team have taken place soon after Mrs A arrested on the respiratory ward and was her care compromised by the delay in having a senior review?**

7. A GTN infusion was recommended by a senior clinician at 11.20am on 9 June but was not administered by the House Officer because of '*today's events*'. Miss B said that the decision not to issue a GTN infusion should not have been taken without a review by a senior medical doctor. The Trust have not said much about this issue, other than to say they did not know the rationale for not administering the GTN infusion because it was not documented. **Does the clinical adviser agree with Miss B that the decision not to provide the GTN infusion should not have been made without senior approval, or in the circumstances was it reasonable to withhold this treatment?**

8. The Trust have acknowledged some failings but have suggested that Mrs A's deterioration had nothing to do with the administration of Oramorph and Lorazepam, the delay in administering antibiotics or the timing of a GTN infusion. Instead, they have suggested that Mrs A's raised Troponin level meant she had suffered a heart attack or PE. **Does the clinical adviser agree with the Trust's views?**

9. In her complaint to PHSO, Miss B said that when her mother was put on a nebuliser she was given high flow oxygen which affected her hypoxic drive. She said that her mother should have been on air driven nebulisers instead but the prescribing doctor just wrote her up for nebuliser and did not confirm the type. This has not been specifically put to the Trust but given the seriousness of the allegation made, **I would like the clinical adviser to comment on this matter. Is there evidence to support Miss B's view that her mother was given high flow oxygen rather than air driven nebulisers? If so, did this compromise her care?**

10. I consider that the Trust have reasonably explained why they moved Mrs A to an outlying non-medical ward late on 7 June (because she was being prepared for an early discharge). I also believe that the Trust have reasonably explained why Mrs A was not transferred to the respiratory ward sooner (because of pressure on bed spaces). **Does the clinical adviser agree with my views?**

Please refer to the following tagged items on the file

(***list removed for case sample***).

Please contact me as soon as possible if you require any clarification or if there are any difficulties with progressing the advice.

Many thanks,

XX
Team: A
Location: Manchester
Tel: 0300 061 xxxx
Email: xx.xx@ombudsman.org.uk

Part 1a: Clinical advice

Clinical Adviser's name: X X

Qualifications: MB BS MD FRCP

Please state how your qualifications and/or experience equip you to provide Assessment advice on the clinical issues raised in this case

I am a consultant in respiratory medicine. The medical care of patients with exacerbations of COPD is part of my usual practice.

I confirm that I have no conflict of interest **Yes /** ☐

Evidence considered when providing advice

I confirm that I have reviewed all of the evidence and extracts referred to by the caseworker in their questions above.

Yes / ☐
No ☐

I have also considered the following additional evidence (if none say none): None

Response to Questions:

The clinical context is that Mrs A, dob x.x.xx, was known to have Chronic Obstructive Pulmonary Disease (COPD), was very limited by breathlessness in her activities, and was on nebulised bronchodilator and long-term Oxygen treatment at home. On 4 June xxxx she attended the emergency department with increased breathlessness and admitted to hospital with a diagnosis of exacerbation of COPD.

Blood gases showed compensated type 2 respiratory failure (low Oxygen and high Carbon Dioxide levels but acidosis compensated fully by high bicarbonate level). Blood tests showed a low Potassium level and evidence of infection. She received conventional treatment with controlled Oxygen, nebulised bronchodilators, steroids and antibiotics; and Potassium replacement.

Mrs A was transferred to the Acute Medical Unit, and consultant review on 5 June planned early discharge once the Potassium level was normal. She was looked after temporarily on the gynaecology ward. On 8 June her observations deteriorated (MEWS score 5) and anxiety was treated with sedation. She deteriorated further, and became unresponsive. Blood gases showed severe type 2 respiratory failure with acidosis (decompensated). Intensive Care opinion was that mechanical ventilation would not be in her interests. Mrs A was transferred to the respiratory ward and commenced on bi-phasic positive airway pressure (BIPAP) non-invasive ventilator support. There was transient improvement but she relapsed again on 10 June 2010, and sadly died that day.

The complaint raises a number of concerns about her medical care.

Relevant national standards in this case are:

1. NICE clinical guideline 101, Chronic Obstructive Pulmonary Disease, 2010 (updating CG 12, 2004).
2. British Thoracic Society (BTS) guideline for emergency Oxygen use in adult patients, Thorax 2008; 63 supplement V: v1 – v68.
3. BTS guideline on non-invasive ventilation in acute respiratory failure, Thorax 2002; 57: 192 – 211
4. The "sepsis six" – www.survivesepsis.org

My responses to the specific issues put for medical advice are:

1. ***There was a nine hour delay in administering the IV antibiotic, Tazocin, between 1pm and 10pm on 8 June. Does the clinical adviser consider that the Trust have reasonably explained that this delay did not contribute to Mrs A's deterioration?***

   The delay in administering intravenous tazocin on 8 June was 9 hours. In pneumonia, delay in antibiotic treatment reduces survival hour on hour. Guidelines for severe sepsis state that antibiotics should be given within one hour. This delay represented care substantially below a level reasonably to be expected. That said in this case Mrs A's co-morbidity was so severe that by 8 June her chances of survival with any treatment were certainly much worse than 50%, and it is not clear that she died of pneumonia. The concern is that if such a shortcoming was a systemic failing then the potential risks for other patients would be very great. The action to ensure that first dose of antibiotics is administered *"stat"* (immediately) is a reasonable mitigation. It would be more robust if this was subject to clinical audit.

2. ***Does the clinical adviser consider that the Trust have reasonably explained why there was lack of blood gas testing prior to Mrs A's transfer to the respiratory ward on 8 June, or does the clinical adviser agree with Miss B that blood gas tests should have been repeated more often?***

   It is a misapprehension to state that the blood gas results taken in the emergency department were "fine and within Mrs A's lung condition". They showed severe but stable respiratory failure, with the implication that she had no physiological respiratory reserve and was at risk of deterioration. The BTS emergency Oxygen guideline includes guidance for blood gas analysis – this should be done if a patient with hypercapnoea (high Carbon dioxide level) shows any signs of deterioration. So it was reasonable not to repeat the blood gas test (which can be very uncomfortable) while she was stable and just awaiting confirmation that her Potassium levels had returned to normal. But this test should have been done as soon as she deteriorated on 8 June before concluding that her symptoms were due to anxiety. The failure to do that was an important breach of national guidance.

3. ***Does the clinical adviser believe that a blood gas test should have been carried out sooner than it was after Mrs A was transferred to the respiratory ward on 8 June?***

   Please see (2) above.

4. ***Oramorph and Lorazepam were prescribed together. The Trust said these drugs were not contraindicated and suggested that they were commonly used on patients with chronic chest problems. Does the clinical adviser consider the Trust's response to this issue to be reasonable?***

   The first objective for symptom control in COPD is to treat to improve respiratory function. When such treatment is ineffective, and nothing can be done about any co-morbid conditions which may be contributing, then it is appropriate to use opiates and tranquilisers for the relief of distressing breathlessness. That is supported by NICE CG 101 (and CG 12 before it) – for relevant recommendations see page 332 of CG 101. I am not critical of the trust's response.

5. ***On two occasions, nursing staff on the respiratory ward did not operate the Bipap equipment competently. They also failed to record and report these incidents. Miss A feels that these two incidents may have comprised her mother's breathing and contributed to her deterioration. Does the clinical adviser consider that the Trust has reasonably explained that the failure to competently use the Bipap equipment did not contribute to Mrs A's deterioration?***

Such difficulties might well increase the anxiety of the patient and relatives present at the time. The incident when the supplementary Oxygen was not switched on was certainly a basic failing. There is insufficient information in the record about the time and duration of these difficulties, and the changes in observations (particularly respiratory rate, pulse rate and Oxygen saturation) to form a view on any impact on outcome. But in the context of a patient with end-stage COPD who was about to be deemed not a suitable candidate for mechanical ventilation it is not likely that there was any adverse influence on the sad outcome.

6. ***Should a review by a senior member of the medical team have taken place soon after Mrs A arrested on the respiratory ward and was her care compromised by the delay in having a senior review?***

   There was relevant consultant involvement very soon after her collapse in that documented discussions took place with the ITU consultant, who saw her soon afterwards. The clinical decision that she was not suitable for mechanical ventilation was within the limits of acceptable practice, though there is substantial variance in clinical practice on this issue.

   What is lacking in the medical record is clear documentation by the physician in charge of a plan for what should happen if Mrs A deteriorated on BIPAP (which was very likely given that she had had a respiratory arrest), what the criteria for failure would be and what should then be done in the way of palliative care. Such contingent decisions would have avoided the need for a further round of discussions, with the attendant delay, when she deteriorated on 20 June. Such contingent decision making would also have been the opportunity to communicate realistically with the family.

7. ***Does the clinical adviser agree with Miss B that the decision not to provide the GTN infusion should not have been made without senior approval, or in the circumstances was it reasonable to withhold this treatment?***

   GTN infusions are given for unstable angina or left ventricular failure, and there was no definite evidence for either of these. While it was the junior doctor who put this treatment on hold initially after Mrs A's collapse, that view was supported by the Intensive Care consultant soon afterwards (see my green tag on the nursing record). I am not critical of the junior doctor's actions in this regard.

8. ***The Trust have acknowledged some failings but have suggested that Mrs A's deterioration had nothing to do with the administration of Oramorph and Lorazepam, the delay in administering antibiotics or the timing of a GTN infusion. Instead, they have suggested that Mrs A's raised Troponin level meant she had suffered a heart attack or PE. Does the clinical adviser agree with the Trust's views?***

In fact the consultant stated in his statement that because the troponin level rise myocardial infarction and pulmonary embolism were possible causes of Mrs A's sudden deterioration, and that is certainly the case. Troponin rise indicates damage to heart muscle. But there are a number of other clinical situations apart from these two diagnoses where troponin can rise, including COPD with severe hypoxia. It may just be that she became exhausted by her severe COPD. I cannot rule out the possibility that the morphine and lorazepam contributed, but not to have given those would have left her even more distressed by breathlessness when effectively nothing more could be done to extend her life. It is not likely that the GTN infusion would have made a difference. Unfortunately we will never be able to give the complainant any certainty on that in the absence of a post-mortem examination.

9. ***In her complaint to PHSO, Miss B said that when her mother was put on a nebuliser she was given high flow oxygen which affected her hypoxic drive. She said that her mother should have been on air driven nebulisers instead but the prescribing doctor just wrote her up for nebuliser and did not confirm the type. This has not been specifically put to the Trust but given the seriousness of the allegation made, I would like the clinical adviser to comment on this matter. Is there evidence to support Miss B's view that her mother was given high flow oxygen rather than air driven nebulisers? If so, did this compromise her care?***

   The BTS Oxygen guideline is clear about the need for controlled Oxygen for patients with hypercapnoea, or risk of that. That includes the use of compressed Oxygen to drive the nebuliser. This was poor care and in breach of national guidance. But in this case I could not say that it had any impact on the outcome.

10. ***I consider that the Trust have reasonably explained why they moved Mrs A to an outlying non-medical ward late on 7 June (because she was being prepared for an early discharge). I also believe that the Trust have reasonably explained why Mrs A was not transferred to the respiratory ward sooner (because of pressure on bed spaces). Does the clinical adviser agree with my views?***

    The number of occasions when the demand for acute medical beds exceeds available capacity is increasing. Managers then have difficult decisions to make in balancing the conflicting interests of patients already within the hospital and those needing to come in. In this case with the information available at the time the trust's position is reasonable.

Signature:

Date:

CASE SAMPLE 2

HS-xxx
History Item Number xxx

Parliamentary and Health Service Ombudsman

Provision of Clinical Advice at Health Investigation Stage

Background Information

Case Identifier (name and number):
HS xxxx
Mrs A B

Caseworker's Name:
C D

Clinical Adviser's Name and Qualifications:
X X
Adv Dip Nursing, BSc(Hons) Nursing, PG cert, MSc Advanced Practitioner

Relevance of qualifications and/or experience to clinical aspects of this case:
As a senior Nurse with 13 years experience of working within the NHS I have medical and surgical experience across secondary care provision. I am a senior nurse within a cardiac unit and I confirm that I am qualified and informed to provide advice.

Conflict of Interest (clarification of any links with Body or clinicians complained about):
I have no conflict of interest in this case.

Clinical Advice

Documentation Reviewed:

I have reviewed the investigation plan, the clinical advice provided by the physician adviser at assessment stage and I have access to all of the care records for this episode of care. I have tabbed relevant clinical records and made reference to these within the text of my advice.

Background:

Mr S was 54 years old when he was admitted to hospital following a referral from his GP. His kidney function had significantly deteriorated on a recent blood test and he arrived by ambulance on 11th February xxxx. On admission Mr S was noted to have been drinking heavily and was noted to be in acute renal failure secondary to rhabdomyolysis (the breakdown of

muscle fibres that leads to the release of muscle fibre contents (myoglobin) into the bloodstream). He was treated with intravenous fluids but on 13th February he became breathless and tachycardic. He was noted to be in significant heart failure and was transferred to the coronary care unit. His condition deteriorated and he died at 5am on 15th February.

Questions and Responses:

Mrs S complains about the care and treatment provided for her son, Mr S, following his admission to XX on 11 February 2012. In particular, she complains that:

- *staff gave her son too much fluid, too quickly;*
- *nurses did not provide adequate personal care for her son while he was on the Liverpool Care Pathway; and*
- *staff broke their promise to arrange for a technician from a neighbouring Trust to deactivate Mr S's implantable cardioverter defibrillator (ICD).*

Answers to your questions:

1. **General nursing care**

What should happen?

It is established good practice for nursing staff to perform a baseline nursing assessment when a patient is admitted to hospital. This assessment should identify any nursing care needs the patient may have and should subsequently lead to the formulation of nursing care plans to direct the care of the patient whilst in hospital. The *NMC (2008) The Code: Standards of conduct, performance and ethics for nurses and midwives* states clearly nurses must:

"*Make the care of people your first concern, treating them as individuals and respecting their dignity*"

"You must listen to the people in your care and respond to their concerns and preferences"

"You must keep clear and accurate records of the discussions you have, the assessments you make, the treatment and medicines you give and how effective these have been".

To enable nursing staff to formulate an appropriate care plan it is expected they make an assessment of the patients past medical history, for example establish whether a patient suffers from any conditions which may affect care delivery. Sometimes on admission to hospital the medical history is not easy to ascertain due to the condition of the patient but every effort should be made to establish a past medical history from medical records, family and relatives with the patient, talismans, recent hospital discharge summaries or GP records.

It is also expected, once a patient presents at hospital that a process of medicines reconciliation commences . "*The aim of medicines reconciliation on hospital admission is to ensure that medicines prescribed on admission correspond to those that the patient was taking before admission. Details to be recorded include the name of the medicine(s), dosage, frequency, and route of administration. Establishing these details may involve*

discussion with the patient and/or carers and the use of records from primary care".(NICE and NPSA Technical patient safety solutions for medicines reconciliation on admission of adults to hospital 2007)

"*All healthcare organisations that admit adult inpatients should put policies in place for medicines reconciliation on admission*".

"*In addition to specifying standardised systems for collecting and documenting information about current medications, policies for medicines reconciliation on admission should ensure that:*
• pharmacists are involved in medicines reconciliation as soon as possible after admission
• the responsibilities of pharmacists and other staff in the medicines reconciliation process are clearly defined; these responsibilities may differ between clinical areas".

The case file does not contain a medicines reconciliation policy however it is widely recognised, nursing staff play a pivotal role in medicines reconciliation particular outside of the working hours of the pharmacist.

Once all information is gathered about the patient and care plans are formulated to support the identified care deficits, nursing care should be delivered as the plan states, evaluated frequently and the care plan should be amended if the condition or situation of the patient changes.

What did happen?

Mr S was admitted to hospital via the medical assessment unit at 01.30 on Saturday 11th February xxxx. At this time a very brief nursing assessment was completed. The assessment included, airway, breathing, circulation, pain, skin integrity, nutrition and fluids. On the assessment form (tabbed pink assessment form) there is not a space for the nurse to enter information regarding past medical history or medication history however on page 9 of the same document the medical assessment begins.

As part of the medical assessment an unknown clinician has documented in the 'history of complaint' section; "Excessive alcohol (70 units per week) has defibrillator insitu, was firing shocks several times recently. Was supposed to go to his GP but was frightened to go as defib might fire. GP came to see him and diagnosed ARF (acute renal failure)….". The extent of Mr S's cardiac history is not documented by the hospital clinicians. The only reference to his cardiac history is the original referral from the GP which states "LVSD (left ventricular systolic dysfuncion-*Left Ventricular Systolic Dysfunction (LVSD) is a term to describe when there is evidence that the pumping effect of the heart is reduced. "Left" refers to the side of the heart that is affected. The word "Ventricular" refers to the chamber of the heart that is affected. "Systolic" refers to the phase of the heart beat where the blood is being pumped maximally from the heart. "Dysfunction" simply means that the heart is not working optimally*) and IHD (ischaemic heart disease)"

The records contain a secondary nursing assessment which is very superficial and again makes no reference to Mr S's medical history. There are no care plans in the case file only a 'daily assessment record' which appear to make reference to 'care standard numbers'. I am unsure

of the meaning of this. It is not until the 13th February that heart failure is added to the daily assessment record. Therefore throughout the initial period of Mr S's admission, from 11th February to 13th February, I am not sure whether the nursing or medical staff were aware of Mr S's extensive cardiac history and as such this lack of essential information may have impacted on the care Mr S received initially.

On page 10 of the medical assessment there is a space for the drug history to be documented. The physician adviser at assessment stage makes reference to the drug history being completed by the doctor on admission but on closer inspection it seems the drug history was completed by a pharmacist on 14th February (3 days following admission). On review of the medication chart, it seems none of his usual cardiac medications were prescribed whilst he was in hospital and therefore nursing staff did not administer them. Ensuring medications are prescribed is an essential part of medicines reconciliation practices and out of working hours, medicines reconciliation should be performed by the medical and nursing team caring for the patient. This does not appear to have happened in Mr S's case.

What was the impact of that difference?

The impact to S of nursing staff not performing a robust assessment and the failure to formulate robust care plans led to a lack of recognition Mr S had significant LVSD and subsequently received large volumes of fluid over a relatively short period of time. Mr S was not administered his usual medications due to poor medicines reconciliation practices therefore this could have led to an increased heart rate and an increase in workload for the heart. More detailed impact advice would be beneficial from a cardiology adviser.

2. **Administration of intravenous fluids and Physiological observations**

What should happen?

The *NMC Standards for Medicines Management (2007)(pg7)*
"As a registrant, in exercising your professional accountability in the best interests of your patients:

- *You must know the therapeutic uses of the medicine to be administered, its normal dosage, side effects, precautions and contra-indications*
- *You must be aware of the patient's plan of care (care plan or pathway)*
- *You must administer or withhold in the context of the patient's condition.*
- *You must contact the prescriber or another authorised prescriber without delay where contra-indications to the prescribed medicine are discovered, where the patient develops a reaction to the medicine, or where assessment of the patient indicates that the medicine is no longer suitable.*
- *You must make a clear, accurate and immediate record of all medicine administered, intentionally withheld or refused by the patient, ensuring the signature is clear and legible".*

Prior to the administration of intravenous fluids to Mr S, nursing staff should have been aware of his plan of care and if they had concerns about the amount of fluid being administered to him, they have a duty to withhold the fluids and contact the prescriber to raise those concerns. During the administration of intravenous fluids:

"The nurse should review the prescription for appropriateness for the patient's age and condition, access device, dose, route of administration and rate of infusion/speed of the bolus injection" *(RCN Standards for Infusion therapy 2010 pg45)*

"The nurse administering medications and solutions should have knowledge of indications for therapy, side-effects and potential adverse reactions, and appropriate interventions" (RCN Infusion therapy 2010 pg45)

Intravenous fluid should be administered with caution to patients with LVSD. The administration of fluids would be best delivered to Mr S in a clinical area that could provide continuous cardiac monitoring and frequent physiological observations. The nursing staff caring for Mr S should be competent in assessing for symptoms of heart failure, in monitoring close fluid balance and interpreting the physiological observations in light of Mr S's complex care needs. In some circumstances invasive pressure monitoring should be considered for patients with persistent heart failure and low blood pressure *(European Society of Cardiology Guidelines for the diagnosis and treatment of acute and chronic heart failure 2012 pg 1831).*

The frequency for monitoring physiological signs should be based on the clinical condition of the patient. *NICE (2007) Acutely ill patients in hospital states:*

"Adult patients in acute hospital settings, including patients in the emergency department for whom a clinical decision to admit has been made, should have:

- *physiological observations recorded at the time of their admission or initial assessment*
- *a clear written monitoring plan that specifies which physiological observations should be recorded and how often. The plan should take account of the:*
    - *patient's diagnosis*
    - *presence of comorbidities*
    - *agreed treatment plan.*

"Physiological observations should be recorded and acted upon by staff who have been trained to undertake these procedures and understand their clinical relevance".

"Physiological track and trigger systems should be used to monitor all adult patients in acute
hospital settings.

- *Physiological observations should be monitored at least every 12 hours, unless a decision has been made at a senior level to increase or decrease this frequency for an individual patient.*
- *The frequency of monitoring should increase if abnormal physiology is detected, as outlined in the recommendation on graded response strategy".*

"Monitor:

- *heart rate*
- *respiratory rate*
- *systolic blood pressure*
- *level of consciousness*
- *oxygen saturation*

- *temperature.*

Consider monitoring:
- *biochemistry (for example, lactate, blood glucose, base deficit, arterial pH)*
- *hourly urine output*
- *pain."*

Trusts have specific escalation plans for patient who trigger on the early warning system. A copy of the observation charts and escalation plan is tabbed pink (obs).

Early Warning Score (EWS) of 1-2:
- Alert nurse in charge and increase observations to 4 hourly.
- Document in action plan.

EWS 3-4:
- Alert home team (registrar)
- Response within 60 minutes
- Increase observations hourly by senior nurse
- document action plan (management)

EWS above 5:
- Urgent review-home team registrar/consultant
- Response within 20 minutes
- Medical/surgical management plan.

What did happen?

Mr S was prescribed 500mls Volplex (colloid fluid) and 6 litres of normal saline on 11th February. From the administration record it is difficult to ascertain how much fluid was administered on 11th February due to the lack of documented administration times on the fluid prescription sheet (tabbed orange M5) and also the lack of fluid balance record charts (tabbed orange-fluid balance). At least one litre was administered on 12th February.

The fluid balance charts in the case file are dated 12th February and 13th February. The other chart in the case file is undated. All charts are completed sporadically and clearly do not reflect the amount of fluid which had been administered to Mr S as recorded on the fluid prescription sheet.

As stated above, it is reasonable to expect Mr S to have had his physiological observations recorded frequently (hourly) if not continuously whilst receiving the intravenous fluid but his observations were recorded as thus:

11th February- 7 occasions
12th February- 5 occasions
13th February- 10 occasions in full and 12 occasions only the blood pressure was recorded.

The EWS was calculated between 3 (medium score) and 10 (high score) during the admission. As stated above, the recorded observations should have triggered at least hourly recording of physiological observations and as stated by the Trusts own documentation, concerns should have been escalated to the relevant medical team each time the EWS triggered. The only record pertaining to concerns regarding EWS were escalated at 03.00 on 13th February but

the review at this time was by an FY1 junior doctor and not the registrar or consultant which should have happened. No action was taken at this time.

At 18.20 on 12th February Mr S's EWS was recorded as 10 due to a heart rate between 130 and 140 (Normal 60 to 100 beats per minute beats per minute), oxygen saturation of 92% (normal >94%), respirations between 20 and 25 per minute (normal 12-16) and blood pressure of 84/57mmHg (the usual reading for patients with LVSD is usually below normal textbook readings therefore this could be Mr S's usual blood pressure). A score of 10 should prompt an urgent review by the patients registrar or consultant but there is no evidence in the records that concerns were raised by the nursing team and the patient was not seen by the medical team. This is the point when Mr S's condition began to significantly deteriorate and an opportunity was missed to treat Mr S at this time.

It is also noted, some of the physiological observations appear to have been taken by non-registered nursing staff. The evidence for this is on the front of the observation chart where 'actions taken should be noted', there are 2 entries which state "EWS 4- low BP, low Sats, informed nurse" and another which states "nurse informed low BP, high resps".The level of training the non-registered staff undertake at the Trust in relation to EWS and physiological observations is not available to me but as NICE guidance states, all staff involved in the recording of observations should be trained and competent.

Another factor to consider is the use of urine output as a trigger to calculate the EWS. The EWS asks the user to score urine output in that, below 30 mls per hour scores 3 and above and 30mls per hour scores 0. I have reviewed the charts and I can see urine measurements recorded each time the observations are recorded however; I cannot correlate the urine measurements with those documented on the fluid balance chart. The accuracy of the urine EWS score is questionable as it is not substantiated by Mr S's additional records.

What was the impact of that difference?

There is a significant difference between what should happen and what did happen. Mr S had intravenous fluids administered to him without the appropriate level of monitoring and physiological observations were not recorded at the correct frequency. His fluid intake and output were not recorded adequately and despite staff calculating the EWS, concerns about his EWS and observations were not escalated to an appropriate member of the medical team in a timely manner. The failure to monitor and record observations may have been due to nursing staff not being aware of his diagnosis of LVSD but not being aware of the patient past medical history is a failing in itself.

The impact of these failings appears to have led to missed opportunities to treat Mr S's deteriorating condition but the physician and/or cardiology adviser would be better placed to advise on whether Mr S's death was avoidable.

3. Deactivation of the Internal Cardioverter Defibrillator (ICD)

What should happen?

The deactivation of an internal cardioverter defibrillator (ICD) should be carried out once the

decision is made to not resuscitate in the event of a cardiac arrest or if a patient is progressing towards an end of life pathway. Once the decision is made an appropriately qualified cardiac physiologist is able to deactivate the device. Deactivation is non-invasive and requires a specialist device to be placed over the ICD whilst it is reprogrammed. If a cardiac physiologist is not available in the hospital, contact should be made to the implanting specialist centre or if out of working hours, to the cardiology on call team.

What did happen?

The only record pertaining to ICD deactivation is by the cardiac physiologist who deactivated the device on 14th February at 09.55. It is not clear from the records whether the physiologist was employed by this or the neighbouring Trust. How the deactivation was arranged and by whom is not clear from the records.

What was the impact of that difference?

There was no impact on Mr S regarding how and by whom the ICD was deactivated by. The device needed to be deactivated and this was done.

4. **Personal care whilst on the Liverpool Care Pathway (LCP)**

What should happen?

What is the Liverpool Care Pathway for the dying (LCP) (Marie Curie Palliative care institute Liverpool 2010) states:

"The LCP enables health care professionals to focus on care in the last few hours or days of life. This provides high quality care tailored to the patient's individual needs, when their death is expected".

"If a goal on the LCP is not achieved this should be coded as a variance. This is not a negative process but demonstrates the individual nature of the patient's condition based on their particular needs, your clinical judgement and the needs of the relative or carer".

The DH (2008) End of Life Care Strategy: Promoting high quality care for all adults at the end of life states:

"The LCP provides guidance on different aspects of care including:

- *Comfort measures;*
- *Anticipatory prescribing of medicines; Discontinuation of inappropriate interventions, such as DNAR, and reviewing treatment regimes;*
- *Psychological and spiritual care; and Care of the family (both before and after the death of the patient)".*

A generic LCP document (tabbed blue- Liverpool care pathway) was in use throughout the country at that time, which promotes a standard approach to care in the end stages of life. Members of the multi-disciplinary team should be trained in its use. The initial assessment should be completed by the clinicians (senior doctor and nurse) caring for the patient and the ongoing assessment is completed by the nursing team providing direct care to the patient,

usually at a frequency of every 4 hours. The LCP recommends a multi-disciplinary assessment to be carried out every 3 days to review progress and variances to the pathway.

What did happen?

Mr S was commenced on the LCP at 15.30 on 13th February by Dr T (unknown status). From the initial assessment there is evidence the LCP was completed every 4 hours. Variances recorded in the pathway (tabbed yellow-LCP Variances) relate to Mr S being agitated and breathless. There are recorded actions taken to alleviate these problems which are reasonable actions. The records indicate Mr S's personal and oral hygiene needs were met on a 4 hourly basis.

What was the impact of that difference?

There is no difference between what should happen and what did happen therefore there was no impact on Mr S.

Conclusions:

Mr S was admitted with renal failure secondary to rhabdomyolysis and was administered large volumes of intravenous fluids. Mr S did not receive his usual cardiac medications whilst in hospital and nursing staff did not appear to appreciate the extent of his cardiac problems.

Intravenous fluids were administered as prescribed but fluid monitoring was not to the standard expected. During the administration, physiological observations were taken and recorded but abnormalities were not reported to the medical team and the frequency of observations were not as expected for a patient at risk of acute heart failure.

Mr S's ICD was deactivated appropriately and care was delivered on the LCP to the expected standard.

Signature:

Date: