Stockport Miss

NHS Foundation Trust

requested from arrive 11/

Stepping Hill Hospital Poplar Grove

Stockport SK2 7JE

198/2014

Telephone: 0161 483 1010

Coroner's Court Mount Tabor Mottram Street Stockport SK1 3PA

Your ref. JK//KA/1574-2012

8th July 2014

Dear Mr Pollard

Re: Gary Bradshaw 15/03/1965 (Deceased)

Our ref. AB/RF/CM/PR-letter to HM Coroner GBradshaw

Thank you for your letter, of the  $15^{\text{th}}$  May 2014 , concerning the inquest of the above named. As always, I am grateful to you for highlighting your concerns on the Regulation 28 'Report to prevent future deaths' and for providing me with an opportunity to respond.

I shall address each of your concerns in the order in which you raised them:

1. There was a considerable delay in the initial diagnosis that he was suffering with kidney stones, between May 2011 and March 2012.

The report of the Ultrasound Scan, undertaken on 15th July 2011, stated that there were:

"several echogenic foci in the lower pole of the right kidney. Two of these exhibit shadowing and are likely to represent renal stones. The right kidney is otherwise normal. There is no hydronephrosis. There is no scarring."

As these stones were not causing any obstruction they were deemed to be 'incidental findings' and were not responsible for his groin pain. It was felt important to follow up the stones but by leaving a period of time between the Ultrasound Scan and follow up, this would assist in determining whether there was any significant change in the size of the stones which would influence their management.

In order to try and prevent further problems, such as Mr Bradshaw experienced, there is a policy in place to undertake a calcium and urate blood test as soon as possible following a new diagnosis of kidney stones. If it has been discovered, whilst the patient is in hospital, that they have stones and their calcium and urate levels are normal and the plan has been explained to the patient already, then they will be seen in the outpatients' department at 6 months; however, if it was an incidental finding and the patient does not know they have stones and the bloods have not been done, an early outpatient appointment will be made to explain the presence of stones, give advice to minimise problems, check their bloods and explain the follow up.

At the consultation in March 2012 both blood and urine tests were ordered but apparently only the urine tests were done and/or reported, thus his hypercalciuria was seen but not his hypercalceamia

At Mr Bradshaw's clinic attendance on 19th March 2012, requested staff to take blood for serum urate and calcium levels; for an unknown reason the serum calcium was not requested at the time the electronic order was made and so after it was printed, a member of staff added '+CA' (plus calcium) in handwritten format next to 'clinical information' on the printed request form. Investigation of the case subsequently determined that, when the request form was received in the laboratory, the

staff there mistook the handwritten addition to mean 'plus cancer' (as it was written next to the clinical information and not in the request column) and so the serum calcium was not determined.

There are some tests that have not been set up on the electronic ordering system due to there being such a high number of possible tests available. We have the frequently requested tests on the system and also some infrequently requested ones and continue to add on a regular basis. Technology advances also increase the variety of tests becoming available; therefore it has been accepted practice that such tests can be added to electronic requests in handwritten format. However calcium and urate tests are on the system in their own right and as profiles.

All staff have been reminded that, where the parameter exists for a blood test to be ordered electronically, it must be ordered in that way. Only in exceptional circumstances should a blood test request, from within the Trust, be hand written. Exceptional circumstances are those such as an emergency, when electronic ordering is not readily available, or when the blood test to be requested is not available to choose in electronic format. If a blood test must be requested in hand written form, then the test required should be written out in full and not abbreviated. All requests must be made in the requests box within the form and not in the clinical details section.

3.	The above blood tests were ordered but the patient was prescribed and administered
	Bendroflumathiazide before the results were known, something which the expert witness
	described as contraindicated

accepted at inquest that he should not have prescribed Bendrofluamathiazide without knowing the serum calcium results and will not do so in the future. He had expected to review the results within a week and review his decision but unfortunately that did not happen as he expected.

We now have systems in place to allow to electronically check all tests done in his name in the outpatients department.

## 4. There was a misunderstanding or misreporting of the results to the GP as to whether the results related to blood or urine tests

On 14th June 2012 the pre-operative assessment nurse reviewed the bloods that had been ordered by on 8th June 2012; however she only reviewed those bloods that fell within her remit at that time. These included Mr Bradshaw's Complete Blood Count, Liver Profile and Urea and Electrolytes; the nurse then wrote to Mr Bradshaw's GP that same day, enclosing copies of the results, advising him that Mr Bradshaw had a low platelet count and that some of his liver functions were also deranged. Although the nurse did not specifically mention the results pertaining to serum calcium in her letter, these results, titled 'total serum calcium 3.25 - range 2.20 - 2.60' were at the very top of the report that the nurse enclosed with her letter to the GP; it was clear that these results related to blood and not urine tests.

## Action

All consultants have been given clear instruction that it is their responsibility to ensure that they follow up, or ensure that they have systems in place to follow up, any blood tests or any other investigation that they order.

5. Mr Bradshaw was discharged from the hospital on the 27<sup>th</sup> June rather than being retained as an inpatient whilst full investigations were carried out; again a practice which the expert witness felt to be inappropriate.

Mr Bradshaw presented to the ED with renal colic and worsening of his kidney function; therefore the plan for that emergency admission was to control his pain and rule out urinary tract obstruction secondary to the known kidney stones as a cause of worsening of his kidney function. Mr Bradshaw had an urgent US scan of the urinary tract on the 26/6 and this showed the previously known kidney stones with no evidence of hydronephrosis. The renal colic was controlled and Mr Bradshaw became symptomatically better; a management plan for the kidney stones had been made. The serum creatinine level was slightly elevated but he was known to be diabetic and the US scan did not show any evidence of obstruction to his kidneys. Mr Bradshaw's blood sugar was elevated on admission;

however he was a known diabetic on regular medications and his blood sugar continued to drop spontaneously and it was at its lowest level on the day of his discharge.

Mr Bradshaw's fitness for discharge was assessed by the fact that his pain was controlled, he was not septic, there was no evidence of urinary tract obstruction necessitating urgent intervention and he had a management plan in place for his kidney stones; however it has been accepted that this was a missed opportunity for further diagnosis and treatment.

6. During the subsequent admission on the 29<sup>th</sup> June no consideration was given to referring Mr Bradshaw to an endocrine surgeon.

has reviewed this question and states that all of his actions in the care of Mr Bradshaw were to prepare him for Surgery. Our Endocrine/ Parathyroid Surgeon is at Manchester Royal had not discussed urgent surgery with as he was well aware that Mr Bradshaw would not be able to have a general anaesthetic until a myocardial infarction had been definitively excluded (we were awaiting an echocardiogram). The had considered possible treatment with Cinacalcet which was also mentioned by the external expert, but he had dismissed this option due to previous experience with a patient with worsening of kidney injury secondary to vomiting precipitated by this medication.

However in light of this case the trust guidance has been changed to indicate that with acute severe hypercalcaemia, the investigation and referral pathway should be completed within 72 hours.

Fluid balance charts were not kept, or kept properly on various occasions during the inpatient stays.

A conversation has been held with the ward manager of A11 with regard to the poor documentation on the fluid balance charts. The ward manager has reiterated with her staff the importance of contemporaneous record keeping and the importance of documenting each event as it happens, i.e. each time a patient has completed / consumed a drink, IV fluids are completed or changed or a patient has passed urine.

To monitor this and ensure compliance, fluid balance charts are now reviewed by the staff on a two hourly basis at each intentional rounding event (Intentional rounding is where a nurse will visit every patient on the ward to ensure they have their nurse call buzzer within reach, they have all they need in front and in reach of them and asks them if there is anything else they require)

The fluid balance charts are now also checked again just prior to handover from one shift to the next to ensure they are up to date for the next shift / team of staff.

8. The hospital laboratory only "flag up" blood results if the blood calcium levels exceed 3.5mmol/L or more of serum calcium. The expert witness opined that this should occur at levels of 3.0mmol/L and that this should be a national standard

The escalation of serum calcium levels above 3mmol/L was introduced into Trust processes in March 2014.

The system of escalation of patients from the wards to the ITU did not seem to be in place or alternatively did not seem to have worked as it should have done when the ward sister wanted to send the patient to the ITU.

There is a clear process for the escalation of patients from wards who require Intensive Care input / transfer. If a member of staff is concerned regarding a patient's condition and believes that Intensive Care input is required then representation should be made to the clinical team looking after the patient. If it is agreed that such input is required then the team should make the referral in person to the on call Intensive Care team who will discuss and review the patient and make arrangements for transfer as required. During our investigations we were unable to find any evidence that the Ward Sister followed this process.

This issue has been discussed with the Ward Sister, who has confirmed that she is aware of the policy and how to escalate concerns for a patient; she is aware of her error and appropriate action has been

taken to ensure she has learned from this incident. She has also confirmed that her staff are aware of the policy and how to implement it.

10. Hospital notes and especially those in the ED (on the Advantis system) seem to have been less than comprehensive and efficient. The emergency doctor fed the patient's "number" in her statement said that:

"I checked his discharge summary and requested his old hospital notes as I could find nothing on Advantis under his case note number of F\*\*\*\*at that point."

The Advantis system has been checked to try to replicate issues: if the search is his F number Mr Bradshaw's details appear as well as all his records under both the F number and the J number which is his actual patient number. If the search is for the J number then both the J number records and the F number records are shown.

It is known that some patients appear over the years to have been given two hospital numbers (this is a historical issue dating back to pre-electronic recording of notes) and the Trust works hard to ensure that these, when recognised, are linked clearly. The safest way of searching for a patient via the system and the way advocated by the Department of Health is however to use the patient's NHS Number; if the system is searched using Mr Bradshaw's NHS number (which is on the front of his ED records) then both the F number files and the J number files are shown.

11.I was told that a new electronic system of note keeping is being introduced at Stockport and throughout the NHS. I would consider it helpful if the system had a built in flag which highlighted to a doctor that he or she was prescribing drugs before the requested blood/urine test results had been received.

Electronic records have moved on considerably since 2011 for example we now have Advantis ED (The Emergency Department electronic record), EPMA (Electronic prescribing and recording of medication administration) and Advantis Ward (ward electronic records in its pilot stage). It is however not possible at present to create a flag or a rule for the circumstance as described i.e. across disciplines (Laboratory/Medication Administration). It is unlikely to be possible in the vast majority, if not all Trusts in the UK. The kind of advanced Electronic Patient Record the Trust is looking to implement over the next few years may have this level of decision support/configurability; therefore the Trust will include this example when discussing capabilities and requirements with suppliers

2. There seemed to have been a very subjective interpretation of the EWS at the hospital by using the manual assessment method. I was told that an electronic version is being rolled out. I would hope that this can be sooner rather than later as it will give a far better and more objective assessment of the Early Warning Scores.

"Patientrack" is the electronic track and trigger system purchased by the Trust and this system generates an urgent alert to Doctors and other clinicians of unwell and deteriorating patients. This system has been piloted and evaluated on one ward in the Trust and is due to be rolled out across the Trust. Phase one of the rollout, which will focus on the input of vital signs only, has commenced and is being introduced on a ward by ward basis, with the alert functionality activated in phase two, planned to commence in January 2015.

pe that this response answers your concerns and provides you with the assurance that the Trust is mitted to improving the quality of care we give to all our patients.

Please do not hesitate to contact me if you have any further questions regarding this matter.

Yours sincerely

Ann Barnes

Chief Executive

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